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Firm's Internationalization and CSR Disclosure: Does Context Matter?

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Abstract:
The paper explores the relationship between internationalization of Russian companies and the disclosure of the information about their CSR initiatives. It hypothesizes the positive relationships between the level of internationalization of Russian companies and the level of their CSR disclosure, including environment-oriented, community-oriented, workplace, and marketplace CSR initiatives. Moreover, the paper states the specificity of internationalization paths of Russian companies and hypothesizes the effect of geographical focus of internationalization of Russian companies on the relationships under investigation. The paper uses the panel data on 221 large Russian companies for the period of 2014 and 2015 and tests the empirical models. The results confirm the positive and significant effect of internationalization on CSR disclosure for the companies that choose their internationalization destinations in non-CIS countries.

Keywords: *CSR, CIS, Disclosure, Internationalization, Russia*

Introduction

Corporate social responsibility (CSR) initiatives are known to be largely undertaken by companies from developed countries with strong economies. On the other hand, in recent years companies from emerging markets (EM) also become engaged in CSR practices. Despite the significant lag of EM companies in terms of the diversity and scale of CSR initiatives, these aspects of their activities worth studying and analysis.

Previous research investigated different factors that may drive implementation of CSR practices by the firms from developed economies. Country-specific factors, governmental regulations, cultural aspects and behavioral patterns of certain nations seem to be important determinants of CSR in these countries (Miska et al., 2016). The effect of internationalization on CSR was found to be positive and significant (Symeou et al., 2018). However, when it comes to EM companies, the results and relationships are less univocal. Internationalization tends to largely affect CSR, yet the impact of local and foreign authorities as well as the impact of within-country beliefs is far more pronounced in emerging markets (Li et al., 2010). While a number of papers focus on the analysis of CSR and internationalization in Chinese markets (Miska et al., 2016), the research on Russian context is absolutely insufficient. However, such research might provide some new insights to CSR and IB literature focusing on emerging markets, due to the specificity of a particular context.

Theory and Hypotheses Development

As companies from emerging markets start to operate abroad, they may find it difficult to design CSR strategies and to follow local standards, thus, they enhance their CSR reporting. According to Marano and Kostova (2016), it can be challenging for multinational companies from emerging markets to follow home-country regulations as well as to adapt to the pressure from foreign markets. Particularly, it is hard for these companies to develop CSR practices if they are mostly dependent economically on a certain country; and it is more common to enhance CSR practices

if companies operate in countries where majority of competitors and partners follow high social well-being standards.

Based on the critical review of existing studies, we developed and tested a set of hypotheses on the relationships between internationalization and CSR performance and disclosure for Russian companies. CSR disclosure can be considered as a mechanism that helps companies to become legitimate in host markets as they internationalize (Marano et al., 2017). MNEs tend to take into account expectations of foreign communities, customers, legislative institutions and adjust their actions accordingly (Detomasi, 2007). As companies tend to align their actions with regard to expectations of foreign investors and business partners, they strategically invest into CSR-related activities (Kacperczyk, 2009). Hence, we propose that:

H1: Internationalization of Russian companies is positively related to their CSR disclosure.

According to Kang (2013), internationalization is positively linked to the corporate social performance of MNEs. Moreover, due to the fact that companies' revenues come from several regions rather than from one home-country region, managers of these companies are more likely to pay attention to environmental and social issues as stakeholders pressure them less due to diversity of income-providing regions. Based on these arguments, we propose that:

H1a: Internationalization of Russian companies is positively related to their environment-oriented CSR disclosure.

H1b: Internationalization of Russian companies is positively related to their community-oriented CSR disclosure.

As companies internationalize, their home-country and host-country employees also experience shift in orientation, there is a need for flexibility in their work and integration of various management initiatives (Birkinshaw et al., 2000). With regard to home-country characteristics that affect CSR, political and labor systems along with education program tend to affect implementation and, thus, disclosure of CSR activities of companies (Ioannou & Serafeim, 2012). Therefore, we propose that:

H1c: Internationalization of Russian companies is positively related to the workplace and marketplace aspects of CSR disclosure.

The specificity of Russian institutional context has determined a particular geographical focus of internationalization of many Russian companies, in particular, their preference for internationalization to the neighboring markets of the CIS and Eastern European countries. These countries are characterized not only by geographic proximity, but also common history, culture and language, the factors that make host institutional environment quite familiar for Russian companies. Thus, we propose that:

H2: The impact of internationalization of Russian companies on CSR disclosure is larger for the companies operating globally than for the companies operating predominantly in the CIS countries.

Data, Measures and Method

The data was manually collected from the secondary sources. 221 largest Russian companies from Expert list were included in the sample. The data on the CSR disclosure were collected from the companies' CSR reports for 2014 and 2015. The data on internationalization were gained from companies' annual reports. The data related to financial and organizational characteristics were taken from the database on Russian companies SPARK.

Results and Conclusions

The results of our empirical analysis didn't confirm positive relationships between internationalization and CSR as the relationships were found insignificant; however, when differentiating between the Russian firms that prefer CIS markets and non-CIS markets, positive and significant relationships between internationalization and CSR disclosure were confirmed. This funding can be explained by the fact that CIS markets are very similar to the Russian one where business partners and regulators, as well as other institutional agents, are very undemanding for the CSR activities. On the other hand, for those companies that are operating on non-CIS markets the pressure from institutional agents on host markets is more tangible. The

more dependent they are in terms of the revenues gained on these markets, the more stimulated to implement CSR initiatives they are.

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Building Circular Business Models in Digital Age: Teething Troubles as Shown by the 'Loop' Circular Delivery Service

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Abstract:
"Circular economy receives increasing attention as a sustainable development economic model contributive to achievement of the most of UN SDGs. Meanwhile, profitability and scalability of circular business models poses a question mark while their profound focus on environmental issues leaves social aspects of sustainability and UN SDGs largely non-addressed.
This paper examines the first online waste-free delivery service in the FMCG sector (Project 'Loop') as a circular business model that adopts and propagates circular economy principles as formulated in strategic self-regulatory frameworks available both on national, supranational, sectoral and cross-sectoral levels.
The paper also reviews strategic management tools that have or have not been leveraged to ensure the 'Loop' Project scalability and profitability, and provides recommendations regarding the shifts in regulatory framework required for a positive discrimination of circular business models vs regular, linear ones."

Keywords: *Circular Business Model, Circular Economy, Corporate Sustainability, Strategic Management, Sustainable Development, UN Sustainability Development Goals (UN SDGs)*

1. Introduction.

In contrast to the linear economy based on a traditional 'take-make-waste' (or 'produce-use-dispose') model of production, a *circular economy* refers to an economic system designed to be restorative and generative, maintaining the value of products, materials, and resources in the economy for as long as possible, with minimized generation of waste.

In the context of the UN Sustainable Development Goals (UN SDGs), the **circular economy approach** has drawn attention recently as a step towards a more sustainable economic model capable to contribute positively to the achievement of UN SDGs 2, 3, 6, 7, 9, 11, 12, 13, 14, 15 and 17.

Scalability of circular business models across developed and emerging markets, even in digital age, poses, however, a question mark. More research is required to substantiate a view that circular business models can be as profitable as linear models without compromising on the quality and variety of products and services.

2. Background.

2.1. An emergence of the circular economy strategic and regulatory framework: national and supranational, organizational and sectoral levels

The national *circular economy* frameworks are being adopted since mid-1990s. The supranational frameworks like e.g. EU Circular Economy Package (2016) stimulated emergence of self-regulatory frameworks in a number of economic sectors, e.g. in packaging; food; electrical and electronic equipment; transport; furniture; textiles; construction; and chemical

products. Multi-industry platforms like Project MainStream (2014) or Platform for Accelerating the Circular Economy (PACE) (2018) are another way for organizations to engage in circular business modelling. To provide a flexible strategic management framework to organizations implementing *circular economy* strategies, the British Standards Institution (BSI) developed and launched the first *circular economy* standard "BS 8001:2017".

2.2.Circular economy framework operationalization by the means of strategic management.

The aim of the *circular economy* is not necessarily seen as a shift behind the profit-maximizing paradigm of businesses. Rather, this concept suggests an alternative way of thinking how to attain a *sustained competitive advantage* (SCA), while addressing the environmental and socio-economic concerns of the 21st century.

Since moving away from a linear operational model requires a total rethinking of the value chain, strategic management allows organizations to carefully evaluate all the ideas, risks, challenges and opportunities at a level of corporate or overall business strategy. A strategic decision-making process behind the *circular economy* first described by Tonelli and Cristoni (2018) covers the phases of analysis, formulation, and planning. It is argued that all standard strategic management tools can and should be calibrated and applied to circular business models.

3. 'Loop' Circular Delivery Service as a Circular Business Model for FMCG Sector

3.1.Actualization of a zero-waste delivery model in FMCG sector

While some progress is seen in eliminating unnecessary and problematic plastics, and in innovating towards reuse models in FMCG sector, more needs to be done to address chronic issues of linear economic models associated with waste generation. A pilot called 'Loop' Project has been launched in January 2019 by a global recycling organization TerraCycle as a new online circular delivery service for consumers.

3.2. 'Loop' zero waste delivery for fast moving consumer goods: a business model at a glance.

The coalition of FMCG manufacturers and a delivery provider behind this reusable and returnable system includes Danone, Mondelez International, Nestlé, PepsiCo, Procter & Gamble, Unilever, and UPS. It has been piloted for Paris and New York and scaled up for France via Carrefour and for the US via Tesco.

3.2.1. Product (portfolio).

The platform operates through a limited product assortment amounting up to 41 consumer goods brand and 81 SKUs in three major categories ranging from grocery to personal care and to household care.

3.2.2. Packaging.

Any ordinary single-use packaging for any branded good supplied via 'Loop' must be replaced with durable, reusable or fully recyclable primary packaging with secondary (sales) and tertiary (transportation) packaging also designed with circularity in mind.

3.2.3. Subscription.

Consumers subscribe and order products in durable packaging that get delivered by UPS in a specially designed shipping tote. The empty packaging sent back to the system automatically triggers a reorder of a cleaned and filled one.

3.2.4. Deposit.

At the initial order of any item, a consumer is charged an extra amount of cash ('a deposit') for the durable packaging varying between 10 to 160 per cent from the retail price of the item and refundable.

3.2.5. Pricing.

Online retail price per each item is set up at par with the same in competitive linear retail channels.

3.3.'Loop' circular delivery service: problems of operationalization and barriers for scalability.

3.3.1 Production.

Supplying consumer products for 'Loop' in a specially designed durable packaging requires extra R&D investment, more localization and manpower and not easily scalable and replicable with a risk of leaving the global supply chain outside the circular business model.

3.3.2. Delivery (Retail).

Scalability of the circular delivery service will require as much localization or franchise from the global manufacturers as possible, thus, completely disrupting their existing linear business models and cost structures.

3.3.3. Consumption.

A limited offer of products, an entry barrier of 10 to 160 per cent extra paid as a refundable deposit and a lower consumer base may lead to a potential commoditization of goods sold via such platforms.

4. Conclusion

The first circular delivery service of a relatively significant scale (involving as many as 41 global consumer goods brands, a global delivery supplier and 2 global retailers) and international footprint (the US and France) like 'Loop' Project represents a valuable platform to pilot a waste-free online business model in the FMCG sector. The service embeds critical circularity principles as defined in relevant sectoral frameworks and includes initiatives to change people's behavior towards waste-free consumption culture.

A critical role in supporting the system belongs to regulatory framework that has to positively discriminate circular business models vs linear ones.

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The Search for a New Model of Corporate Sustainability: Evidence from the CSR Strategies of Leading Russian Companies

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Abstract:
The study examines the peculiarities of the search for a new model of Corporate Sustainability (CS) through the transformation of the CSR strategies of leading Russian companies. The research is based on the empirical data from the new edition of the leading nation-wide research project in the fields of CSR and sustainability — "Report on Social Investments in Russia —2018". The conclusions are made considering the predominant role of the "Corporate Sustainability 2.0" model with the minor search for the "Corporate Sustainability 3.0" one based on the lack of systemic changes in the very system of Corporate Social Performance as well as on the inadequate cooperation for sustainable development at the industry and cross-sector levels.

Keywords: *Corporate Social Responsibility (CSR), Corporate Sustainability, Corporate Social Performance, Emerging Markets, Russian Business*

1. Purpose. The purpose of this paper is to investigate the peculiarities of the search for a new model of Corporate Sustainability (CS) through the contemporary transformation of the CSR strategies of Russian companies tending to be the national CSR leaders.

The change of the traditional Business in Society paradigm in the Anthropocene epoch has directly affected both the CSR strategy and Corporate Sustainability model. This paradigm demands that all the market agents should clarify their roles in sustainable development reaching UN Sustainability Development Goals (SDGs). Companies are embedding sustainability ideas and approaches into their CSR strategies and the very systems of Corporate Social Performance (principles–processes–results). In general, they are transforming themselves through the commonly shared model of "Corporate Sustainability 2.0" towards the advanced "Corporate Sustainability 3.0" [Sardá and Pogutz, 2019] or, in another interpretation towards "Business Sustainability 3.0: Truly Sustainable Business" [Dyllick and Muff, 2016]. These advanced companies are not only searching for immediate "win-win" solutions, being prepared for achieving shared triple bottom line value creation [Tate and Bals, 2018], but are prepared for "lose-win" ones in favor of sustainable development [De los Reyes at al., 2017]. Nevertheless, the real involvement of the Russian companies into reaching SDGs is just started to be analyzed**.**

2. Data and sample. The research is based on the empirical data from the leading continuous nation-wide research project in the fields of CSR and sustainability — "Report on Social Investments in Russia" (45 leading Russian companies in the 2018 edition vs. 60 in 2014) [Report on social investments in Russia, 2014, 2018]. The approaches to integrating the UN Sustainable Development Goals into corporate strategy were preliminary analyzed through the semi-structured interviews [Blagov, Petrova-Savchenko, 2018].

3. Empirical results and conclusions. The data analysis has been leading to the particular conclusions:

1. The "Corporate Sustainability 2.0" model is going to be predominant and supported by the "win-win" orientation of CSR strategies (both as a part and as a core of corporate strategy) and by the very system of Corporate Social Performance (dominance of the

traditional interpretation of “sustainable development” concept/CSV approach; use of customized ethical codes rather than UN Global Compact; GRI/3BL-oriented non-financial reporting among others).

2. The search for the “Corporate Sustainability 3.0” model is mainly hampered by the relatively low level of cooperation for sustainable development at the industry and cross-sector levels which is supported by the companies’ UN SDGs “matching” with the existing Corporate Social Performance and traditional charity-focused approach to CSR.

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An Asset-Assurance Perspective of International Acquisitions: Evidence from Chinese Privately Controlled Firms

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Abstract:
Prior studies suggest that firms pursue international acquisitions to access competitive foreign resources. We propose that firms controlled by owner-managers engage in international acquisitions to transfer resources abroad when faced with disruptive political events at home. Our asset-assurance perspective argues that disruptive political events give rise to greater risks of asset depreciation and expropriation, which lead owner-manager-controlled firms to make international acquisitions so that the firms' assets and owners' property can be safeguarded at a time of political uncertainty. We find support for the asset-assurance perspective of international acquisitions from data analyses on a sample of Chinese privately controlled firms which were confronted by unprecedented political uncertainty in the wake of the national Anti-Corruption Campaign launched in 2012. By revealing the circumstances under which firms utilize international acquisitions to transfer resources abroad strategically, our study sheds light on the complex drivers of international acquisitions and on an unintended consequence of governments' anti-corruption efforts. It also highlights international acquisitions as a market response to a non-market environmental shock.

Keywords: *International Acquisitions, Asset-Assurance, Disruptive Political Events, Anti-Corruption Campaign, China*

1. Introduction

Do firms undertake international acquisitions to access competitive foreign resources or to transfer their own resources abroad? The prevailing perspective sees such acquisitions as a way to strengthen a firm's competitiveness (e.g., Luo & Tung, 2007), relegating the outbound flow of its resources to a "by-product" rather than a purposeful strategy. However, in the face of a radical deterioration in the firm's domestic environment, such as during a disruptive political event, we posit that transferring resources aboard may account for international acquisition patterns.

By "disruptive political events" we refer to rare and radical shifts in a nation's political institutions that originate from the dismantling and resturcturing of the established political order, such as the Arab Spring that occurred in Libya (Darendeli & Hill, 2016), the regime change that removed Suharto in Indonesia (Leuz & Oberholzer-Gee, 2006), and the Anti-Corruption Campaign launched in China in 2012 which exposed countless corrupt officials (Lin, et al., 2016).

Taking an asset-assurance perspective on international acquisitions, we argue that disruptive political events result in heightened risks of asset depreciation and expropriation for firms and their owner-managers, who consequently look to international acquisitions to protect both the firm's assets and the owner's property from domestic turmoil.

We test our arguments in the context of the Anti-Corruption Campaign launched in 2012. Consistent with the asset-assurance perspective, we found that privately controlled firms were

more likely to make international acquisitions – and to make *larger* international acquisitions – in the post-campaign period. Moreover, the likelihood and magnitude of international acquisitions was stronger for firms that were more vulnerable to domestic political uncertainty, such as those located in provinces where a large number of officials were arrested, firms operating in politically embedded industries, as well as firms that underperformed on corporate social responsibility.

This study contributes to three literatures. First, it develops and tests an asset-assurance perspective which illuminates the circumstances under which firms pursue international acquisitions to transfer resources abroad (Witt & Lewin, 2007). Second, we underline an unintended consequence of government efforts to curb corruption: an increasing resource outflow in the form of international acquisitions. Finally, we outline the political circumstances under which firms resort to market strategies such as international acquisitions in response to a deterioration in the non-market environment, rather than staying put and attempting to influence the political process to their advantage.

2. An Asset-Assurance Perspective of International Acquisitions

As the previously taken-for-granted corporate political interactions come under the spotlight in the wake of a disruptive political event, firms can no longer secure the governmental resources that have been crucial for their business operations. Such dismal business prospects inevitably disrupt business operations, induce negative stock valuations, and thus the depreciation of the firm's assets and owner's wealth. As their past rent-seeking activities come under investigation by anti-corruption authorities, they are also exposed to a heightened risk of asset expropriation. In our research context, it was stipulated by the (criminal) law in China that people who bribed government officials risked life imprisonment and the confiscation of their personal property.

Since it is beyond the owner-managers' ability to foresee the scope and depth of political disruption, they are inevitably driven to avoid the unfavorable domestic environment to safeguard their assets. The incentive is strengthened, moreover, by the prevailing lack of coordination among national governments which allows firms to leverage other institutional contexts for tax evasion and even corruptive purposes (Webb, 2005; De Broe, 2008). By pursuing international acquisitions, owner-managers preserve the firm's and their own resources by transferring them abroad in a substantive and timely manner (Anderson & Gatignon, 1986; Shimizu et al., 2004). Hence,

> *Hypothesis 1: The likelihood and size of Chinese privately controlled firms' international acquisitions will increase in the period after China's anti-corruption campaign.*

Provinces where a larger number of officials are arrested not only endure more profound political restructuring but also severe disruption of coporate political interactions. Accordingly, firms and owner-managers from those regions will be more driven to undertake international acquisitions to transfer their assets abroad. Hence,

> *Hypothesis 2: The likelihood and size of international acquisitions will increase more for the firms that are headquartered in provinces where a larger number of officials are arrested in the post-Campaign period.*

Firms in "politically embedded" industries are particularly dependent on relationships with government officials who control the allocation of critical resources (e.g., Frynas, et al., 2006). Accordingly, these firms are likely to face a heightened risk of asset expropriation and depreciation amidst a disruptive political event, and thus more driven to undertake international acquisitions to transfer their resources abroad. Hence,

Hypothesis 3: The likelihood and size of international acquisitions will increase more for the firms operating in politically embedded industries in the post-Campaign period.

Given the value of corporate social performance as a buffer against the consequences of negative events (Godfrey et al., 2009; Darendeli & Hill, 2016), firms whose CSR record is poor will be more susceptible to scrutiny and sanction at times of political disruption. Hence,

Hypothesis 4: The likelihood and size of international acquisitions will increase more for the firms that lack a record of corporate social responsibility in the post-Campaign period.

3. Data and sample

3.1. Sample

Our sample consists of all the Chinese A-share privately controlled companies listed on the Shanghai and Shenzhen Stock Exchanges from 2008 to 2016. Our data covers four years (2008-2011) before the Anti-Corruption Campaign was launched in 2012, and another four years after (2013-2016). We obtain our data from CSMAR database. We have 849 unique firms and 5,549 firm-year observations for our main tests.

3.2. Variables

Dependent variable

Likelihood and size of international acquisition: We use a dummy variable (*DFMA*) to measure the likelihood of international acquisitions, and a continuous variable (*FMA*) – a firm's annual foreign acquisitions scaled by total assets – to measure the size of international acquisitions.

Independent variable

It is a dummy variable (*POST)* which equals one if the fiscal year is after 2012, and zero if before 2012. We exclude the first campaign year of 2012 because firms may need time to adjust their investment decisions as a reaction to the campaign.

Moderating variables

Number of arrested officials in the firm's headquarter province (ARREST) is calculated as the natural logarithm of the total number of government officials arrested because of corruption in a province for a specific year.

To measure Politically embedded Industries (PEIND), we first identify a firm's primary industry of operation, and then code *PEIND* as 'one' if its primary industry has seen any executives under corruption investigation for a specific year.

We measure *Corporate Social Performance (DCSR)* by an indicator variable, which takes the value of 'one' if the firm discloses a social responsibility report in the year, and 'zero' otherwise.

Control variables

We control for several other variables that may affect firms' international acquisitions (details can be found below Table 1).

3.3. Estimation

We employed probit models (Model 1-6) to estimate the effects of explanatory variables on the likelihood of international acquisitions and tobit models (Model 7-12) to estimate those on the magnitude of international acquisitions.

4. Empirical results and conclusions

4.1. Main results

Tables 1 displays the descriptive statistics and correlation coefficients for the variables in our study. Table 2 presents the results of testing our hypotheses. Results predicting the likelihood of

international acquisitions are presented in Model 1-6, while those predicting the size of international acquisitions are presented in Model 7-12. Model 1 and 7 include all control variables, and Model 2 and 8 include our independent variable—*POST*, and the results support H1. As shown in Model 3 & Model 9 of Table 2, H2 is supported. As shown in Model 4 & Model 10 of Table 2, H3 is supported. As shown in Model 5 and Model 11 of Table 2, H4 is supported.

4.2. Supplementary Analyses (results available upon request)

Managerial Ownership: We assume that firms controlled by private owners are particularly prone to asset-assurance international acquisitions, therefore we expect the main effect in H1 to be stronger when top managers have a larger proportion of ownership in the focal firm. We find supportive evidence for this reasoning.

Location of international acquisitions: We find that after the launch of the Campaign privately controlled firms did not increase international acquisitions in code-law countries, but they did so in common-law countries where better protection of property rights is provided (La Porta et al., 2000). We also find that privately controlled firms did not increase international acquisitions in the countries related to the Belt and Road Initiative (BRI), but they did so in non-BRI-related countries, which is consistent with the observation that the overseas investment spurred by the BRI were primarily carried out by state-owned enterprises.

4.3. Conclusion

Using the disruption caused by China's Anti-Corruption Campaign launched in 2012 as our setting, and taking an asset-assurance perspective of international acquisitions, our study illuminates why a campaign that aimed to improve the political environment for domestic business activities in fact drove businesses to make international acquisitions. Highlighting the risk of asset depreciation and expropriation induced by the Campaign, we found that firms were more likely to pursue international acquisitions in response if they were particularly vulnerable to political uncertainty, notably as a result of being headquartered in provinces where a large number of officials were arrested, operating in politically embedded industries, or underperforming on corporate social responsibilities.

Pioneering Sustainable Female Entrepreneurship in Russia – the Case of Bio Food Lab

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Abstract:
Unhealthy lifestyles became a serious problem in in the Western world caused by irresponsible businesses on the supply side and unconscious overconsumption on the demand side. This paper presents the case of Elena Shifrina, founder of Bio Food Lab, a healthy snacks company. Shifrina has been successful in creating innovative healthy lifestyle solutions on the Russian market and has implemented a number of societally and environmentally resilient activities that can inspire other business leaders, especially women in post-communist countries transitioning to market economy, to engage in more sustainable business practices. The paper provides an account of the background of Shifrina's health consciousness and vegan lifestyle that makes her and her business a role model of business as a force for good.

Keywords: *Entrepreneurship, Sustainability, Sustainable Development Goals, Healthy Lifestyle, Russian Federation*

Introduction and theoretical background

Even though entrepreneurship has been in the focus of organization studies for decades, researchers still did not produce an overarching theory of entrepreneur and continue to debate what constitutes entrepreneurship. The seminal work of Weber (1930) points out the crucial importance of protestant ethics for the spreading of entrepreneurship in Europe and gives many insights about understanding of entrepreneurship and development of capitalism in the industrialization era (Kalberg, 2002). The most fascinating and promising theory of entrepreneurship is produced by the Austrian scientist Schumpeter (1934 (2008)), who considered entrepreneurs as people capable of initiating innovative actions and creative destructions for the emerging economic systems.

Organization scholars are primarily seeking answers to three set of research questions about entrepreneurship: "(1) why, when, and how opportunities for the creation of goods and services come into existence; (2) why, when, and how some people and not others discover and exploit these opportunities; and (3) why, when, and how different modes of action are used to exploit entrepreneurial opportunities" (Shane & Venkataraman, 2000, p. 218). Being a context-dependent social phenomenon (Ireland, Hitt, Camp, & Sexton, 2001), entrepreneurship is defined as exploitation of previously unexploited opportunities (Hitt, Ireland, Camp, & Sexton, 2001). The role of psychological, cultural, political and institutional context for the development of entrepreneurial alertness is examined by Harper (2003). Modern entrepreneurship actively evolved in the West, where individualism is an important component of culture. In the collectivist societies, such as Russia, the level of entrepreneurship is low in comparison with Anglo-Saxon countries. Nevertheless, through history (Dalgaard & Supphellen, 2011) and nowadays (Ims, 2019) there are many cases depicting non-conformists as prosperous entrepreneurs, which show how under the right circumstances one person can pioneer landmark changes at a societal level.

In this paper the unit of analysis is not the function of entrepreneurship as it is typically done in social sciences for the reasons of simplification (Harper, 2003), but the individual entrepreneur. We live in the time of "Anthropocene" that requires revisiting business models to explicitly address the challenge of the size of the economy relative to the capacity of Earth's resources (Schumacher,

1973). Through crossing ethical and ecological limits, business become one of the major triggers of the materialism and overconsumption in the modern societies (Ims, 2019). "The less is more" approach instead of the mainstream "bigger is better" ideology calls for more responsible production and consumption patterns. Since business is a crucial component of modern economic systems, its activities have a major impact on the flourishing of current societies, future generations and nature. Psychological theory of entrepreneurship explores the question of whether entrepreneurs behave differently from their non-peers in various circumstances. This line of literature uses self-efficacy as a construct that shows individual's expectations on the degree of ability to create outcomes (internal locus of control) and exercise power over own life (Boyd & Vozikis, 1994). Harper argues that when "an agent's locus of control is internal and he or she has the knowledge and capabilities to carry out the tasks, the more acute and sustained will be his or her alertness to opportunities" (2003, p. 37).

This paper concentrates on Elena Shifrina, a health-conscious entrepreneur. Shifrina became a self-made founder of a startup in her adult life and has created a private, profitable healthy snacks company based upon manufacturing innovative vegan products available on the Russian market and currently exported to 15 countries. The company, operating under the global brand name Bio Food Lab, manufactures a range of healthy snack bars, which include a line of Bite bars with 11 flavors, a Slim Bite line of low-calorie bars and marmalades, and a Bitey line of children's healthy snacks. All products are made in Moscow with degree of localization of over 80%. The business idea is that healthy snack products should be accessible to everyone from adults to kids. In 2019, Bio Food Lab employs more than 100 people with an expected turnover of $22 million, and each year company sponsors dozens of healthy lifestyle initiatives. Bio Food Lab has made a number of health-conscious initiatives that became a source of inspiration for other entrepreneurs. Their philosophy is to be a product-driven company with a vision to make healthy life-style a new norm in the XXI century.

Methodology and data

This paper applies the case-study method for data collection and interpretation (Ragin & Becker, 1992; Stake, 1995; Yin, 1994). Qualitative inquiry in organizational studies is traditionally marginalized, but researchers using case-study method call for the re-assessment of its undervalued positioning in social sciences (Flyvberg, 2006). For the advancement of management science it has always been of crucial importance to study the classic all-time cases that stand out from a general mass. Such examples are necessary for the disciplinary development and potential inspiration for the followers to learn from them. That is why it is important to select a prototypical case that shows business as a part of a solution to the problem of health and well-being, and not only as a biggest trigger of unhealthy life-styles. Making such a choice among the health-conscious companies is not easy, but researchers must use their experience and rely on their intuition for a paradigmatic case to be selected (Flyvberg, 2006). According to the preliminary knowledge and expectations about the content related to Bio Food Lab and its founder Elena Shifrina, it looks like an appropriate case to examine. In order for a case to be considered as a rigorous, it should be based on a thick narrative telling a compelling story with focus on a "rich problematic" and not summary of theories and general propositions (Flyvberg, 2006).

Through a choice of Bio Food Lab and its founder for the research, this study aims to shed more light on the phenomenon of health-conscious businesses and increase our understanding of female entrepreneurship. This case also intends to prove that businesses as a force for good exist even in countries in transition and such companies are globally competitive. To be more precise, the unit of analysis in this study is Elena Shifrina as a personality, her entrepreneurial nature, her activities and the socio-cultural context in which she runs business. This paper makes an argument that Bio Food Lab can be treated as a paradigmatic case of how doing business is compatible with care for the health and well-being of people. The case shows how Elena Shifrina initially as a startup founder was capable of embedding health conscience into her entrepreneurial mindset and business operations.

This paper also contributes to the research stream on social entrepreneurship that examines specifically various manifestations of care and ethical practices in it (Andre & Pache, 2016). The case of Bio Food Lab clearly shows how care is practiced towards health and well-being of employees, clients and other stakeholders. This study is primarily informed by an appreciative inquiry interview with Elena Shifrina for the AIM2Flourish platform (https://aim2flourish.com/innovations/take-a-bite-for-healthy-living), interviews with Shifrina in Russian and English, official documents from the website of her company (https://biofoodlab.com/en/about/) and other related internet sources (https://www.youtube.com/channel/UCEDQoKxKps-XNfXFOZiRZ-w).

Results and conclusions

The former catwalk model in Paris and London and oil executive in Moscow Elena Shifrina started her company Bio Food Lab in 2011 with her own savings of $120,000. As part of her final project for the MBA program at Skolkovo she put forwards an idea to bridge a gap in the Russian healthy snack bar market inspired by an internship at MIT in Boston. As a young girl, Elena Shifrina brought up in the South of Russia never dreamed of becoming an entrepreneur, she wanted to be a customs officer. But her life circumstances first made her work hard to be able to finance her bachelor degree in business in London, where she worked as a model and studied at the same time. Elena Shifrina became disillusioned with a profession of a model, because of little influence she could exercise in what she was doing. Moreover, she was constantly forced to lose weight and stay on a diet. This was far from her own perceptions of healthy eating habits that her mother was exposing her to in the childhood. Having a grandmother who was an accountant taught Elena to carefully calculate her budget, save money and be conscious about using resources in general. A career switch led her to become a corporate executive in the high paying oil sector that brought Elena in Moscow and allowed her to accumulate savings necessary to launch her own start-up Bio Food Lab.

Elena Shifrina has demonstrated a high level of alertness to opportunities by trying and putting her ideas into life. By taking small carefully calculated steps Elena eventually transformed herself into a successful award winning business lady. She could be considered as a real entrepreneur by carrying out a number of innovations that contribute to health and well-being of people in Russia and abroad. The most remarkable is Shifrina's high level of health-consciousness that is implemented in the products that Bio Food Lab produces and healthy-lifestyle sport activities for kids and adults that company supports. Sustainable business activities of Elena Shifrina's company already became a source of inspiration for imitation by existing and potential entrepreneurs, especially female one.

In contrast to highly abstracted thinking dominated in mainstream social sciences, this paper provides a detailed description of an authentic case of caring sustainable entrepreneur. The form of a narrative allows sharing rich sources of learning experience from a specific context-dependent reality. This paper investigated the visible practices and the underlying mindset of the entrepreneur Elena Shifrina and her company Bio Food Lab. The conclusion drawn from this research is that Bio Food Lab represents an exemplar sustainable business model. Being a mindful entrepreneur Elena Shifrina demonstrates an astonishing innovation skills and genuine care towards well-being and health of other people. Moreover, being a proponent of simplified and healthy lifestyles is reflected in products her company manufactures. What is also worth highlighting, is the impact of experiential learning in business education, that clearly helped Elena Shifrina to fine-tune her health- consciousness and gave her necessary inspiration and tools to realize her dream.

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Business and Society Relationships in the 4th Industrial Revolution Context: Main Challenges

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Abstract:
The paper investigates main challenges in business and society relationships caused by the fourth industrial revolution technologies. Nowadays, the fourth industrial revolution is a popular topic of conversation across many people and organizations worldwide, which is accompanied with an increasing number of sources describing tremendous benefits of the fourth industrial revolution technologies implementation in companies' value chains. The major technologies include additive manufacturing, virtual and augmented realities, artificial intelligence, big data, cloud computing, Internet of things, cryptography and blockchain, and autonomous robots. Despite this, there is a growing concern among international business and governmental leaders on the effects of the fourth industrial revolution on the medium and long-term future of the business and society all over the world. Still there is no systematization of the major risks that new technologies bring into the society's life as well as corresponding challenges caused by them within business and society relationships. The paper addresses this research gap focusing on new relationship challenges that arise between business and its stakeholders due to the fourth industrial revolution. The paper results imply to be used for further management decisions in preventing and resolving potential conflicts, reducing risks, developing relationship assets and creating shared value.

Keywords: *the Fourth Industrial Revolution, Business and Society Relationships, Sustainable Development Goals*

Goal of the research

To identify the major challenges in business and society relationships raised by the fourth industrial revolution technologies.

Research methodology

The authors have used primary data, which includes findings from the surveys conducted among the 45 largest Russian companies in commodity, manufacturing, and service sectors in a research "Social Investments in Russia - 2019", to determine what groups of stakeholders the organizations consider foreground for their successful operations, and in which ways these organizations participate in addressing of the Sustainable Development Goals.

The authors have used secondary data, particularly, academic literature, to examine the consequence of the industrial revolutions throughout the history and how they impacted business, societies, and economies globally. The works of David S. Landes, Robert C. Allen, Alfred D. Chandler, Joseph Finkelstein and David Newman, Andrew McAfee and Erik Brynjolfsson address the mentioned impact. The fourth industrial revolution is "a series of significant shifts in the way that economic, political, and social value is being created, exchanged, and distributed", where the shifts are caused by new technologies that "span the digital, physical, and biological worlds" [Philbeck, T., & Davis, N., 2018].

The chosen concepts reflecting business and society relationships include stakeholder theory, corporate social responsibility, corporate social performance, creating shared value, and sustainable development. The works of Howard R. Bowen, R. Edward Freeman, Theodore Levitt, Milton Friedman, Archie B. Carroll, Ronald K. Mitchell, Bradley R. Agle, Donna J. Wood, Minna Halme, Juha Laurila, Michael E. Porter, Mark R. Kramer, and others. The fourth

industrial revolution technologies implementation should be strictly associated with sustainable development implying “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” [United Nations]. This linkage is enforced by the rapid growth of the multinational corporations, and associated environmental, economic, and social problems, caused by their operations. The set of these problems is being renewed now due to major technologies influence including additive manufacturing, virtual and augmented realities, artificial intelligence, big data, cloud computing, Internet of things, cryptography and blockchain, and autonomous robots. The renewed set of social and ecological problems call for potential review of the 17 Sustainable Development Goals which have been introduced in 2015.

While conducting the research the authors have consulted international consultancy reports prepared by Deloitte, BCG, and McKinsey & Co.; as well as the practices of more than 50 organizations worldwide like Alrosa, Amazon, BP, Facebook, IKEA, Sberbank, and Walmart. The latter have been analyzed in order to identify how the companies use the fourth industrial revolution technologies to increase own efficiency and engage in addressing the UN Sustainable Development Goals.

Authors’ contribution

The authors have made a visual representation of all four industrial revolutions from technological, business, social, and economic perspectives, depicting the evolution of business and society relationships over time. Further, the authors have identified the technologies of the fourth industrial revolution and analyzed each of them based on three criteria: what competitive advantages they bring to business, what challenges of technologies implementation the companies will have to overcome, and to which relationship challenges the business and society will be exposed. The authors have found four major relationship challenges: unemployment; data protection and ownership; physical, psychological, and mental health; technological dominance, which will continue being relevant in the future. However, considering that unemployment and physical health of humans is already covered in regional and international agendas, the authors put great emphasis of the fragility of humans’ mental and psychological health, dominance of the technologies over humans’ lives, and absence of adequate protection of personal data and ownership rights. Further, the authors have assessed the current United Nations Sustainability agenda and offered three new Sustainable Development Goals to address identified relationship challenges. Based on the practices of Russian and foreign companies, the authors have found that almost all the Sustainable Development Goals can be addressed with the help of the fourth industrial revolution technologies, except for one goal related to Gender equality, which lacks any reactions from business.

Consequently, liable responses for businesses, governments, collaborative institutions, non-profit organizations, and civil society to minimize the relationship challenges have been offered.

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Institutionalization of External Environmental Governance of Firms a Microfoundation Study

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Abstract:
This paper introduces a qualitative study that investigates microfoundational processes for external green governance of corporations, societal external governance onto firms for issues associated with the natural environment. The study investigates the agency of professionals working in corporations and eNGOs and the related social structures associated with green governance. We then evaluate, through a series of propositions, how agency and social structures recursively overtime help shape the institutions aimed at governing corporate sustainability. The content analysis of the interviews with 24 senior level professionals in this study offers additional insights to how agency and social structures interface, as institutions evolve into establishing different governing approaches to corporate action with sustainability relevance. The study is relevant to help understand institutionalization processes related to the natural environment, which is a critical aspect to the sustainable growth of economies of emerging markets.

Keywords: *Microprocess, Institutions, Governance, Environmental NGOs, Corporate Sustainability, Comparative Study*

Introduction

If there is a fundamental challenge today for business and societies, it is how firms' activities can promote economic prosperity while concurrently securing environmental sustainability. Those demands are even more critical to emerging markets, as their blossoming economic prosperity also makes them more critical than ever to the sustainability of our planet. Illustrating that we have seen that from 1997 to 2015, China's CO_2 emissions grew from 3.5 to 10.2 billion tons per year, while India grew from 0.9 to 2.3 billion tons per year (CDIAC, 2017).

In this research we contend that societies are still grasping with finding the proper institutional mechanisms to govern business activities vis-à-vis the natural environment. Accordingly, this research aims at contributing to the research around microprocesses of institutionalization, in the area of external governance of firms for issues associated with the natural environment, or *green governance*.

We employed a phenomenological study, collecting data with high ranking professionals working in the sustainability area, from firms and environmental non-governmental organizations (eNGO) in two societies, Western Canada and the Netherlands.

Institutionalizing Green Governance

Westphal and Zajac (2013) introduce an institutional model of understanding corporate governance; one that leans on socially situated and socially constituted agency. That approach is rooted in social structural relationships, institutional processes, and social cognition. Using such a foundation, we investigated the agency of professionals working in the interface of corporations and eNGOs as they recursively establish the institutions governing firms' actions towards the natural environment.

Proposed institutionalization processes

Rooted on the work from Cardinale (2018), we propose five interrelations, in the way actors' agency is associated with firm's green governance, while they engage with structures, as they reproduce and reshape the related social structures. The effect of the recursive relationships between actors and structures is that they will overtime create, maintain or reshape the institutions surrounding green governance; in this research, we focus on actors' agency as they maneuver the governing firm's actions that impact the natural environment.

Propositions

We suggest four propositions:

P1 – Stronger institutional structures will be associated with higher levels of actor's legitimacy across sectors.

P2 – The nexus of practice will be influenced by the complexity of the issues that governing institutions try to address.

P3 – Powerful social position and positive reputation of actors will over time reinforce an actor's influence on new institutional structures.

P4 – Stronger institutional structures will reduce actors' social role conflict.

P5 – Congruent path dependencies will facilitate actor's propensity to converge to similar institutional structures.

Data and sample

We conducted our phenomenological study by conducting interviews with 24 professionals working on green governance. We selected the participants based on their professional roles, in two fronts, corporate professionals whose functions put them in the interface with environmental stewards; and, their counterparts working for eNGOs, as they seek to influence corporate decisions that affect the environment.

The participants were professionals working in corporations with critical environmental impact and the eNGOs surrounding them, in the Canadian and Dutch societies. This is the summary of the profile of the participants

Summary	Participants
Participants	24
Function	
Corporate	11
eNGO	13
Position	
Middle Management	4
Staff	6
Top Management	14
Average years in green governance	18.13

Empirical results and conclusions

We found support for all the propositions suggested above. In an instance of the environmental issues operating under weak institutional practices, one corporate research participant illustrated how much legitimacy came under questioning.

> *During a community consultation section with an NGO, once we became a gas-company employee, we didn't become people anymore. We became sort of a pillar in everything she hated.*

On an issue associated with the challenges associated with GHG, a participant illustrated the implications of the issue at hand on the possibility of crating common social structures.

> *You can't put these partnerships in place on climate change. You can do trivial things. But the bigger picture. Climate change issues don't lend themselves to solutions.*

Another participant clearly illustrated how social power and track record affect the development of shared nexus of practice.

> *I look for a track record, their history, the work they've done. How do they personally do that and how their company deal with corporate responsibility? I'll talk to that captain of and industry and talk honestly openly, not deceitfully.*

As insightful interview, with a respondent in a very strong institutional context, showed how he could navigate apparently conflicting roles with easiness.

> *I always do in my work is to connect to those people that I have worked with, that I trust, and simply discuss the hot potato. So here I call my friend* [Joe], *who is at Shell.*
>
> …
>
> *I don't have really a personal point of view on that, but it's our business. Our vision is that the big fossil companies simply should disappear. They can't change. So, we fight against Shell. We will never cooperate with them.*

Finally, another respondent described the effect of path dependencies in establishing strong institutions guiding the green governance space.

> *But for example, we were working on this whole energy transition for a very long time. In this Polder[1] model type of way, everyone was involved in that, and everyone was riding their own hobbyhorses, and all the strategies just you can think of to slow things down were all in play.*

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[1]The Dutch consensus decision-making. Describes as a pragmatic recognition of pluriformity and cooperation despite differences.

Hypocrisy of Being Climate-Friendly: the Case of Russian Aluminum Giant

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Abstract:
Drawing on the Brunsson's ideas about organized hypocrisy, this paper discusses how corporate environmental irresponsibility can be preserved under the guise of fighting against man-made climate change. While much research on corporate irresponsibility focuses on large-scale accidents like the BP Deepwater Horizon oil accident, this study viewed environmental irresponsibility as an ongoing destructive action that damages and changes ecosystems, communities and world treasures. The empirical part of my research is based on the in-depth case study of a new brand of aluminium that was designed by a Russian aluminium giant RUSAL in an attempt to defeat its Chinese rivals. The company promotes this new brand as climate-friendly since, as it claims, it features a slight carbon footprint. The company also claims that this new brand shows the company's environmental credential. However, the company features multiple adverse environmental impacts. As a result of my study, I develop a process model that explains how an attempt to fit the climate-friendly labelling results in preservation of environmental irresponsibility. The findings of my research largely contribute to the business and society literature and challenge a popular view on the ways by which we should fight against man-made climate change.

Keywords: *Hypocrisy, Climate-Friendly, Climate Hype, Hazardous Legitimacy, Environmental Irresponsibility, RUSAL*

1. Introduction

This story refers to those times when the Russian oligarch Oleg Deripaska chaired his hydropower-to-aluminium empire. I explore how RUSAL and its mother energy-related company En+ constructed and promoted their "climate-friendly" aluminium, the role of both national and international professional associations in these processes and the de facto environmental management and performance. This paper shows how environmental irresponsibility can be preserved under the guise of fighting against climate change. The findings of my research also largely contribute to the business and society literature because they challenge a popular view on the ways by which we should fight against man-made climate change.

2. Theoretical positioning

My research benefits the business and society literature that discusses the issues of human-caused climate change and its mitigation. A large number of studies (Comyns 2016; Dahlmann, Branicki, Brammer 2017; Hahn, Reimsbach, Schiemann 2015) focus on carbon dioxide (CO_2) as one of the main cause of man-made climate change and explore reporting and monitoring of these emissions. There are also attempts to identify strategies that companies use to influence the perceptions of stakeholders, mainly policymakers, regarding corporate efforts to fight against climate change (Talbot, Boiral 2015).

Same time, research has shown that business can masterly translate the fight against climate change into "business as usual" (Wright, Nyberg 2017). This is an interesting and important finding, because apart from CO_2 emissions there are other environmental issues that if left ignored, can also lead to dramatic consequences and catastrophes. Therefore, there is a need to explore a less studied, but urgent question: *How does a firm with numerous negative impacts build an identity of climate-friendly?*

To explore this research question, I call on the ideas about organized hypocrisy. Nils

Brunsson defines hypocrisy as “a way of handling situations” when “what can be said is not limited by what can be done, and vice versa” (Brunsson, 2007; p 124). This approach can treat a corporation as a player that corrupts the meaning of business environmental responsibility.

3. Data

I use multiple sources of documented data, corporate videos and Field notes. Interviews with experts regarding the impacts of hydropower and aluminium production

4. Findings

As a result of my study, I develop a process model that explains how a firm that has numerous negative impacts builds an identity of climate-friendly. A process starts from the need to create a climate-friendly brand, but if its management is based on popular and oversimplified knowledge, four processes are further triggered: *dress up* in a climate-friendly discourse, *polish the look*, *proclaim yourself as a leader* and *oversimplify* corporate environmental responsibility. These processes result in hazardous legitimacy – a situation when a company keeps dealing with a dangerous (hazardous) technology without conscious environmental management but fits the pop knowledge regarding the fight against climate change. It seems to be a combination of damaged environmental management and preserved environmental irresponsibility. The risks for local and global environmental security remain, including climate change-like consequences.

5. Conclusion

The results of my study largely contribute to the business and society literature and add a new light to the idea of corporate irresponsibility. While much research on corporate irresponsibility focuses on large-scale accidents like the BP Deepwater Horizon oil accident, this study viewed environmental irresponsibility as an ongoing destructive action that damages and changes ecosystems, communities and world treasures.

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Challenges for Achieving Sustainable Development: a Social Enterprise Marketing Perspective

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Abstract:
In their quest for addressing the social and environmental challenges and keeping up with sustainable development goals, various efforts have been taken by different organizations. However, the limited success of these initiatives stresses the need for a better-fit model. Social enterprises are designed to overcome these shortcomings by adopting a sustainable business model. Much like any other business organizations, social enterprises rely on marketing activities to compete and survive in the marketplace. However, social enterprises grapple with issues such as inadequate fund, manpower, and planning for executing marketing campaigns. While much is known about these marketing challenges faced by social enterprises, but it is unclear how they overcome them. Through an inductive study of four social enterprises in India, we show that they use cost effective inbound marketing strategies rather than traditional approaches. The results further show that social enterprises appeal to stakeholders with different mandates by having a differential marketing communication approach. Our findings shed lights on how social enterprises deal with the marketing challenges, which can serve as guides for organizations striving for sustainable development.

Keywords: *Social Enterprise Marketing, Sustainable Development, Strategic Marketing, Social and Business Performance*

Introduction

Majority of the discourses on development largely overlooked social and environmental issues and generally centered around infrastructural and financial growth (Frosch & Gallopoulos,1989; Meadows & Randers, 2012). However, recent discussions on sustainable development have begun to move beyond economic growth and include both society and environment under the purview of development (Broman & Robèrt, 2017; Carroll, 1979; Daly & Townsend,1992; Grin, Rotmans, & Schot, 2010; Robert, Parris, & Leiserowitz, 2005). Sustainable development goals are set to tackle the pressing issues exist in both these spaces ranging from natural resource depletion to lack of health and education services (Sachs, Schmidt-Traub, Kroll, Lafortune, Fuller, 2019). Motivated by the urgent need to address these issues, multiple efforts have been taken by both governmental and nongovernmental organizations (Damtoft, Lukasik, Herfort, Sorrentino, & Gartner, 2008; Preuss, 2009; Rahman, 1999). Such approaches are often short-lived and rarely succeed to achieve the desired results as mandated by sustainable development goals (Dale & Newman, 2008; Hall & Vredenburg, 2003). In most of these approaches, business and sustainable (social and environmental) development efforts were looked upon as competing rather than complementary aspects (Friedman, 2007; Hoffman & Ventresca, 1999).

However, more recent discussions have shown that a well-crafted business model can help in doing well in both fronts by striking a balance between different mandates (Bocken, Short, Rana, & Evans, 2014; Michelini & Fiorentino, 2012; Porter & Kramer, 2011; Slaper & Hall, 2011). Compared to the existing efforts, social enterprises (SEs) are seen as better aligned to confront the social and environmental issues and eventually achieve sustainable development (Rahdari, Sepasi, & Moradi, 2016). SEs are the organizations that bring social and business

objectives together in their business model (Mair & Marti, 2006; Santos, 2012; Thompson, Alvy, & Lees, 2000; Zahra & Wright, 2016). For instance, many SEs address environmental issues by upcycling waste into marketable products.

Thus, in an effort to make them financially sustainable, SEs go for business approaches and offer products/services (Jenner, 2016; Madill, Brouard, & Hebb, 2010; Smith, Knapp, Barr, Stevens, & Cannatelli, 2010). In this regard, marketing can help in creating both social and economic values, that together can ensure the continued survival of SEs in the marketplace. Hence, marketing carries great importance as they help SEs to stress the value of their cause and offerings to different stakeholders (Mallin & Finkle, 2007; Srivetbodee, Igel, & Kraisornsuthasinee, 2017).

However, SEs lack the marketing skill and expertise accompanied by the lack of financial and manpower support. This presents a challenge to SEs and resists them from practicing marketing to its full extent (Bull & Crompton, 2006; Peattie & Morley, 2008). Additionally, some social entrepreneurs think marketing activities goes against the values of SEs as they are intrusive and exploitative. This legacy mindset, born out of their previous associations with charitable organizations, often dissuade them from going about marketing activities wholeheartedly (Bull, 2007; Powell & Osborne, 2015). Moreover, the existence of social and business goals in SEs poses challenges when they market their offerings to consumers. Some consumers display higher interest in aspects such as quality, price, and delivery of the products/services rather than the background stories related to social and environmental benefits. Others, tend to favor SEs as they identify with their broader cause. Social entrepreneurs, therefore, find it difficult to decide which aspect to highlight and communicate more to the target audience (Mitchell, Madill, & Chreim, 2016; Roundy, 2017).

These marketing challenges often pose a threat to the continued survival of SEs in the marketplace. Although prior literature adequately captured the issues, what has been ignored, however, is how SEs address these issues. We attempt to fill this gap by documenting how social entrepreneurs in India manage marketing challenges and survive in the marketplace.

Methodology

By following Siggelkow's (2007) suggestion to choose informants with the most knowledge about the phenomenon under study, we interacted with four social entrepreneurs in India. We focused solely on SEs that have revenue or a business model because they actively sell products/services. In-depth interviews ranging from 59-66 mins were conducted and then transcribed verbatim. Archival materials used as supplementary data to triangulate the interview data. Following the collection of the data, key themes were identified by analyzing and interpreting the data.

Findings

Our analysis suggests that social entrepreneurs acknowledge the need for marketing and think that it holds great potential to boost both social and business performance. Almost all the entrepreneurs under the study voiced concerns about the financial and manpower constraints, posing threat to the use of intensive and far-reaching marketing tools. In response, social enterprises rely heavily on consumers to recommend their offerings to others. In addition, SEs experience tension while attending to stakeholders with polarly opposite social and economic needs. We also show that SEs are trying to promote businesses and offerings that are value-driven, which keeps them apart from others in the marketplace. Hence, they attract individuals who identify with the values or look for products with specific and atypical attributes. In this way, SEs survive and thrive through a marketing approach that relies on a network of loyal customers that spread their stories around.

Implications of the Study

Our study contributes to the current discourses on the survival and growth of initiatives aspire to achieve sustainable development goals. Gaining insights into how SEs address the shortcomings in marketing activities may help similar initiatives to prepare and plan their marketing activities better.

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Platform Business Models of the NTI Markets Companies

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Abstract:
The paper describes the results of analysis of the business models of the companies working on the NTI markets and participating in the NTI infrastructure. 67 companies the representatives of which have replied to the questionnaire have been classified by the criterion of a platform element presence in their business models (namely, is the company an owner of a platform, a participant in a platform, or does not take part in any platform business models). The comparison of business model elements (on the basis of the business model canvas instrument as modified in (Yablonsky, 2018) of the companies with different platform element presence allow figuring out specific traits of the business models of such companies (e.g., export or import substitution orientation, type of interaction with clients, value creation drivers and pricing strategy) and potential areas of development, as well as developing recommendations for the companies and for the administration of the NTI supporting programs, e.g., the NTI platform.

Keywords: *National Technology Initiative, Business Models, Multi-Sided Platforms, Platform Business Models, Platform Participants, Platform Owners*

1. Introduction

The platform business models receive a particular interest in the companies working on the markets supported by the National Technology Initiative (Blagov et al., 2018). However, the specificity of the platform business models for these companies, that can be related to lots of factors including, but not limited to, institutional specificities of Russian economy and unstable nature of the NTI markets caused by the early stages of their development, still didn't receive a significant research. This study tries to fill this gap.

2. Theoretical basis of the research

In the research presented on the GSOM Emerging Markets conference of the year 2018 (Blagov et al., 2018) the authors have analyzed the factors influencing the participation in platform business models as such. In this research, platform business models have been decomposed into platform ownership and participating in existing platforms as one of the sides; comparing the other parameters of the business models of the companies with these business model types, the research is oriented on figuring out typical patterns of these types and analyzing the various nature influences on these patterns.

3. Research methods and sample

The questionnaire of the study has been based on the platform business model taxonomy developed in (Yablonsky, 2018) as an extension of the business model canvas instrument presented in (Osterwalder, Pigneur, 2010), and has been asking about 20 key business model dimensions.

The link to the questionnaire that has been uploaded to qualtrics.com service has been sent on April 7-8th, 2019 via the Telegram and WhatsApp chats to the participants of the NTI markets working groups, participants of the NTI-supported intensive educational projects "Ostrov 10-21" and "Ostrov 10-22", and the participants of the NTI Mind Clubs. A total number of participants of the chats into which the link to the questionnaire has been sent is approximately 2000 people; 67 full answers to the questionnaire have been recorded.

4. Results and discussion.

The answers to the questionnaire demonstrate significant difference between companies of various platform element presence in business model in several business model parameters, namely:

- Export or import substitution orientation. It can be clearly said that with increase in "level of platform presence" (from not being a part of a platform business model, through being a platform participant, to being a platform owner) export orientation increases, and volume of exports increase;
- Type of interaction with clients. "Non-platform" companies are more inclined toward personal interaction with clients, while the platform participants and, to a bigger extent, platform owners are more inclined toward cocreation of value with clients and client community creation;
- Value creation drivers. Increase of platform presence level is correlated with decrease in production as a value creation driver, and increase of services and research and development.
- Pricing strategy. The higher the platform presence level, the more companies are inclined toward value-based pricing and less inclined toward cost-based pricing (which is considerably counterintuitive, as one of the main motivations for the companies of entering the platform business models is the minimization of transaction costs).

This counterintuitive result can be a potentially rather fruitful direction of further development of the research; beside that, the results can be a basis of practical recommendations for the companies of the NTI markets (e.g., development of import substitution oriented platform business models for the internal Russian market, or development of cost-economizing elements in platform business models), as well as for the NTI platform and other infrastructure and ecosystem administration (e.g., in supporting the abovedescribed initiatives).

5. Conclusions.

The results of the research allow figuring out specificity of the platform-based (and their difference from non-platform-based) business models of the NTI markets companies, as well as develop recommendations both for companies and for supporting state institutions, including the NTI platform administration. Counterintuitive results regarding the pricing strategy element of the business models create opportunities for potentially fruitful further research.

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International Blockchain Technology and its Implication in the International Finance

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Abstract:
At the modern stage of the international doing business especially on the financial technology business the most relevant is the issue, in fact clashing two positions: on the one hand entreprises and financial institutions are trying to reduce their costs of initial document processing and therefore address to the help of the blockchain algorithm for consolidation of financial statements and for aggregation of other data about company, retrievable from the digital environment, which can be predictor for its future financial dynamics. This dilemma and clash of positions of "code opening" for cost reduction on the one (managerial) hand and of the commercial secret safe from the point from "commercial secrecy" perspective is very relevant nowadays. One of the most important circumstances, making this situation the real issue is the overdevelopment of the blockchain technology on the one markets and in one dimensions (market is currently overfed with cryptocurrencies) and total non- development of its application to the platform screening of financial and other accompanying statements on the level of the preventive evaluation of the applicants for the external financial aid in different forms (i.e., credits, loans, mortgage loans, leasing financing of the deal etc.) (Guo, Liang, 2016).

Keywords: *Digital Economy: Digital Business Models, Digital Ecosystems and Digital Innovations Scoring, Financial Scoring, Financial Diagnostics, Functional Approach, Tools and Mechanisms of Call Scoring, Distributed Leedge Technologies, Blockchain, Smart Contracts*

Introduction

The sphere of legislature of cross- border trade seems to be significantly promising due to the increase of popularity of global trade projects, having the infrastructure in the several jurisdictions.
The challenges and the zone, where the International Law is taking its positions, is today laying in uncertainty of regulation, trust and reputation deficit, incapability of assemblance of different blockchain networks in one chain, synergetic inefficiency and incapability of working in one process and in this extension very weak potential to be expanded and scaled.

Literature review

One of the most important circumstances, making this situation the real issue is the overdevelopment of the blockchain technology on the one markets and in one dimensions (market is currently overfed with cryptocurrencies) and total non- development of its application to the platform screening of financial and other accompanying statements on the level of the preventive evaluation of the applicants for the external financial aid in different forms (i.e., credits, loans, mortgage loans, leasing financing of the deal etc.) (Guo, Liang, 2016).

Firstly, the blockchain today has "umbrella brand" character: blockchain now has found significant place in the registration of assets, registration and matching of identification

documents, in the fixing of different patents and other intellectual property rights, in music and art industries for the same reason and actually many other spheres even up to distributed global governance of the global corporations (Wright & De Filippi, 2015).
At the same time it is clearly stated even in global agenda documents for public use that it is necessary to combine the legislator and technical instruments at the same time (McLean & Deane-Johns, 2016).

Results and Conclusions. Empirical study

The company, issuing the cryptocurrency, has to decide and determine the volume of market of this currency emissions and the volume of crypto transactions, its leverage and volatility
Sometimes the companies are not ready and have no instrument of “code opening” and making the open code the ground for interaction on the field of new market
The next issue is detection of fraud, which is crucial field in the global trade. Startups, during their Initial Cryptocurrency Offerings (ICO) use different combinations of different complex blockchain infrastructures.

Pool of restrictions touches the risk span, appearing within the volatility of the cryptocurrencies and irregularity of the transactions’ technics and their facilitation. It is relevant to state the absence of any legal insurance, security and recourse, as well as the financial safety for losses.

PGP crypting now is the most popular way of coding (the Global Cloud is used for P2P exchange and security of data), having its own legislature and the algorithms of users' authentification, coding, storage location and responsibility of storage companies, and GPG crypting, which is used mainly by the banks, monetary funds, contracts within the attraction several jurisdictions, where the main communication is made in Global- Global communication chain (communication Machine- to- Machine) and for Peer (Person/ company- Partie) is available only the limited sequence of data, which is changing the access key after the temporary session for Partie interference

The most adequate answer for the multilateral and complex issues of bitcoin and of blockchain is the non- recognition of the blockchain as the legal trade and of the bitcoin as the legal tender- average of contribution, which is legislatively recognized, which could be either considered as the debt (with the further detailisation of the period and conditions of payment of either private or public debt as well as the payment schemes and procedures for payment reporting and pool of instruments for creditor's control) or can be recognized as meeting the financial requirements and completing the obligation..

However, one of their significant issues is still left without any sustainable attempt for solution in the field of token issuer: the pool of criteria, the algorithm and procedures and the authorized parties, who have the light to emit the token. And due to this pitfall, there appear many firms, companies and business units, which corporate competence is only the “mining” of bitcoin or of other cryptocurrency. Sometimes these “farms” are very harmful for the surrounding community because of at least living housing's loss of electricity and even of the sudden stops in the global and worldwide stock exchange platforms.

Decentralization and distribution of control and emission is considered as the way of structuration and distribution of spheres of corporate influence, its responsibility and its control as well as way of organization design and production and delivery chain distributions in order to provide the organization th e transparency for investors and for other stakeholders and the sustainability in the operational activity and performance on the sectors of global market and in all of the sectors in the global world economy, which the organization or any of its divisions have strategic focus in.

Under the special zone of focus is the data storage, cloud save and data export institution and the balancing of it within the reality of multibranch scale of exchange. Certain countries construct some zones and special jurisdiction areas on cryptocurrencies trade, investment in them

and the trade on stock exchange platforms. In some countries of Africa and Latin America and in the Asian Countries with the pos-colonial habitus (e.g., Nepal, Pakistan, and Vietnam) blockchain and DLT technologies are banned at all as risky and non- transparent. Bahrain and Qatar ban all of their institutions (both citizen and business units) practise the blockchain transaction inside their countries, but really appreciate and stimulate the blockchain application for the relation with outer counteragents. Some countries (impose some indirect measures to limitate the facilitation of blockchain and cryptotrade. Very few countries facilitate and control the regimes of ICO, which is the bridge from trade in cryptocurrency to the crowdfunding and fundrising- China (both PRC and ROC), Macau and Pakistan.

Some countries (the countries of Eastern Caribbean Central Bank, Marshall Islands, which are thought to be location of the offshore business, Lithuania and Venezuela) are tending to deepen further the intervention of the blockchain and elaborate their own baskets of tradeable and convertible cryptocurrencies.

Digitalization Trends and Benefits for the Russian Hospitality Industry

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Abstract:
Digital technologies are actively entering the current reality changing the environment of the business and the business model elements. The hospitality industry is actively developing now, and its role in business models transformation is sufficient starting from the first multisided platform Arnb to the use of new forms of customers' cooperations in creating a peer-to-peer service. This paper summarises the key digitalization trends that, according to the opinion of specialists will provide value creation in the industry. The first trend represents the increasing importance of digital technologies in the service sector. Even in Russia, the proportion of online services is increasing, but the number of employees is going down. The second trend is the development of the sharing economy model use that works together with the third trend, which is the use of multisided platforms. The hospitality industry itself includes more and more various services provided by companies around the world, totally changing the nature of competition.

Keywords: *Digitalization, Sharing Economy, Hotel Business, Business Models, Peer-To-Peer Platforms, Digital Economy*

Digital technologies are actively entering the new reality, changing it beyond recognition. Online and offline technologies represent the two sides of the new economic model. The hospitality industry traditionally includes the interaction between a large number of participants, which, due to digitalization, varies significantly in quality and speed. New forms of employment are actively developing, changing not only the proportion and the essential responsibilities of different categories of employees, but also relations between employee and employer, generating new business models and modernizing existing ones. The main advantage of the updated business models is the speed of change and decision-making, as well as the interaction of a considerable number of participants. We highlight the main trends that affect the business model in the field of hospitality.

The first trend represents the increasing importance of digital technologies in the service sector. According to the PricewaterhouseCoopers (PwC) experts opinion, the next decades will drastically reduce the need for labour because of transferring the service functions to artificial intelligence [9]. Chatbots and special applications hosted in the cloud would help to book hotels and choose individual service options. Industry reports now confirm this trend. In the period from 2013 to 2018 in the Russian hospitality sector, the average number of employees was equal to 486 thousand people, which is 2.5% of the country employed population. The growth rate shows that there has been a decrease in the number of employees in recent years: from 2016 to 2017th the value decreased by 3%; in 2018 compared to 2017 by the same 3%, despite significant international sports and cultural events in Russia, which attracted millions of tourists to the country (Table 1). There was a similar decrease in the average salary (by 6% annually) and firms' labour cost (by 7% annually). If we compare these indicators to the turnover of the hospitality industry, which has grown by 5% annually in the last six years, we can conclude that the role of employees became less critical in the industry.

At the same time, the number of orders placed and received online as well as the share of sales received from such orders also increased. The proportion of revenue from electronic forms of sales grew at the fastest rate: by 12% annually, the peak growth was in 2017 and amounted to

25%. Further strengthening of the process of reducing industry labour demand and introducing innovations can lead the hospitality to stratification, when several prominent companies will actively use innovations and reduce the number of traditional specialists, replacing them with specialists in digital sales methods, marketing and service. Unused employees can open mini-hotels and hostels, dragging customers into their small, highly specialized niches.

Table 1

The growth rates of the leading hospitality industry indicators in Russia for the period from 2014 to 2018

	The growth rates year to year					
Industry indicators	**2014**	**2015**	**2016**	**2017**	**2018**	**Period average**
Number of employees	0.987	0.998	1.028	0.977	0.970	0.991
Average salary	0.859	0.674	1.000	1.235	1.032	0.941
Labour cost	0.847	0.672	1.028	1.207	1.001	0.933
Sales from electronic forms in per cent of total sales	1.000	1.222	1.091	1.250	1.067	1.122
Online orders placement in per cent of total orders placed	1.029	0.972	0.971	1.059	1.028	1.010
Online orders paid in per cent of the total paid orders	0.944	1.118	1.053	1.050	1.000	1.031
Turnover (sales)	0.914	1.131	1.119	1.045	1.071	1.053

Cities of the future, such as Singapore, Hong Kong and Dubai, are already in their strategic plans paying particular attention to the development of technologies, ensuring the competitiveness of specialists in the global labour market, the openness of the economy and international cooperation. The tourist attractiveness of cities is also mentioned as the most crucial factor. The growth of globalization will increase the need for accommodation. Therefore the role of the hospitality industry will also become more significant.

The second trend is the development of the sharing economy model. In 2011, the Times included it to the list of ten ideas that will change the world and revolutionize consumption systems. The term “sharing economy” has several meanings, ranging from “common ownership economy” to “sharing consumption". The sharing economy is based on the common use of a resource (rent or barter), and not on its ownership: housing, office, car and parking, tools and equipment, technology, innovation, knowledge and skills.

The principle itself is not new, but it reaches a new level with the help of multisided platforms. The sharing economy has achieved significant results (in 2022, the revenue from sharing operations will be $ 40.2 billion [5]) and caused a social response (platforms and P2P relations provide a new type of consumer behaviour and the development of social relations [2]).

The hotel business was one of the first to feel the influence of the new economy: now not only rooms in first-class hotels, but also hostels and even apartments are being booked online, picking up neighbours to live according to the client requirements. A client can also exchange the apartments with another traveller and reduce the accommodation fee. The owner of the apartment becomes a micro-entrepreneur, and even an employer, if he accepts the services of other people [3]. Industry standards are changing, as well as the requirements for the quality and quantity of staff.

The third trend is the use of multisided platforms. Multisided platforms are represented by organizations that have an infrastructure that allows them to unite and coordinate the actions of participants and whose value creation process is directly dependent on the outcome of such interaction[7].

Thus, markets are moving from the traditional classification of business processes in B2B and B2C to P2P (peer-to-peer or “person-to-person”), this also is true regarding Russian hospitality industry, which, according to Eva Hartog [1] is several years behind world leaders, but has excellent potential. According to Rosstat, the number of rooms of Russian hotels for 8 years (from 2011 to 2018) increased by 63% (from 472 thousand to 771 thousand rooms), and the number of hotels and other accommodation units increased by 101%, despite the emergence in the market of platforms allowing to develop other forms of cooperation.

Weak legal bases, the uncertain status of multisided platforms in our country are combined with great enthusiasm of customers, suppliers and business owners. It is indicative that American Airbnb has become the global leader in the world of multisided platforms, works in the field of hospitality. It has opened up new opportunities for thousands of small and medium-sized businesses [6, 8] in many countries, including Russia. The participation of microenterprises and individuals in the work of platforms distinguishes companies of this type from large and medium participants. On the one hand, small companies alone cannot influence the development of those platform functions that would provide them with the most significant market development opportunities, remaining, in fact, in the shadow of large network corporations. On the other hand, these companies being united can attract no fewer customers than their large and medium-sized competitors, using, for example, the "long tail" business model that is attractive to aggregator companies. For them, micro-enterprises with their flexibility and customization can be of considerable interest and change the structure of supply and demand.

The hospitality industry itself includes more and more various services provided by companies around the world: from providing rooms in global hotel chains to renting rooms in the attic; from traditional accommodation with breakfast to the presentation of a book in Goa. New products appear and disappear at lightning speed, bringing millions of profits to those who are faster. The companies need only a few employees, but they are especially valuable for companies, because of reliability and creativity.

The form of competition is changing, if previously hotels created the environment and the client chose from the available offers, now the flow of information from the client to the hotels and back creates customized offers, narrow niches and an individual approach. The constant feedback flow is analyzed with the help of big data and new ways of processing information. Artificial intelligence and the Internet of things become part of the company's business processes, not only serving telephone lines using chatbots but also creating a client profile based on preferences identified and predicting his behavioural patterns. A person has not had time to wish, but the service has already analyzed travel experience, photos in social networks and offers something that the person will definitely like. Dream? New digital reality in the hospitality industry.

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Digital Transformation of Electric Utilities

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Abstract:
This paper is devoted to the analysis of challenges and opportunities that emerge from the process of digital transformation in electric utilities. It presents a part of an ongoing study on asset management in electric utilities. Increasing demand for electricity and technological advancement are one of the main factors stimulating digital transformation both in developing and advanced economies. While digital transformation implies high costs and long-term investments, electric utilities can benefit significantly during this process. We propose a theoretical model of value creation in the process of digital transformation with the use of the Porter's value chain framework. It turns out that generation, transmission and distribution, and retail companies seem to have opportunities to capture significant value form digitalization.

Keywords: *Digital Transformation, Asset Management, Electric Utilities, Smart Grid, Value Chain, Organizational Change*

1. Introduction

Electric utilities are undergoing a period of dramatic change followed by deregulation, increasing competition and digitalization. Companies need to design long-term asset management strategies to achieving higher effectiveness and efficiency. There is empirical evidence in favor of a positive effect of asset management on performance of companies (Maletič, Maletič, Al-Najjar, & Gomišček, 2018).

The link between technological and organizational aspects of asset management is not well-covered in literature, while the interest in this topic is growing both among practitioners and the academia. Digital transformation of asset-intensive businesses primarily deals with infrastructure and engineering assets as they account for up to 85% of the overall asset portfolio of the companies.

We further describe the main digital challenges that power companies face and also outline, where digitalization creates value within the value chain of electric utilities.

2. Industry trends and digital challenges

The transformation of the industry is stimulated by both economic and technological factors.

Electricity accounts for 19% of end-use energy consumption and demand for it increased by 4% in 2018 outpacing overall energy demand. Increasing demand is mainly shaped by electrification, economic and population growth in developing economies. Extending electricity access implies extending the grid and providing an adequate energy supply. At the same time, demand seems to be relatively steady in advanced economies due to increasing energy efficiency, while a moderate increase in future can be attributed to the development of electric vehicles and heating (IEA, 2018).

Innovations in digital and energy technologies lead to more flexible and decentralized energy systems with a mix of various energy sources and energy storage systems. The introduction of energy sources beyond conventional ones is forced by increasing decarbonization pressures through hardening national legislation and international agreements on climate. Another problem is ageing workforce and the urgency to capture experience and convey it to new employees.

The barriers for establishing enterprise asset management differ in both developing and advanced economies (Beitelmal, Molenaar, Javernick-Will, & Pellicer, 2017). In this view asset managers deal with major challenges. They have to ensure higher returns on infrastructure

investments, better outputs from existing assets through new architectures, and identify additional sources of revenue, while balancing the energy mix and ensuring a reliable power supply. New architectures can imply the introduction of Smart grids that allow for bi-directional energy flows and higher transparency of contracts (Hernández-Callejo, 2019). Asset data generated by each component is critical for developing and operating such systems. Asset performance and life-cycle management require higher visibility of asset condition and improved decision-making regarding maintenance, replace and system planning.

3. Creating value through digitalization

However, these challenges also create vast opportunities, especially in the field of asset management. First of all, generation and T&D companies can benefit from introducing real-time and remote-control devices in order to improve maintenance decisions, extend life cycles, increase operating efficiency of assets and infrastructure. Connected assets and smart devices lead to advanced grid monitoring and optimization. For retailers, digitalization implies the emergence of integrated customer services and personalization of customer experience.

Process automation is also associated with greater capital efficiency. Advanced HR-analytics gives more insight on the performance of workforce and allows for better employee engagement and motivation as well as optimization of schedules and tasks.

While digital transformation challenges the whole value chain of electric utilities it also allows for additional value creation as presented in Figure 1.

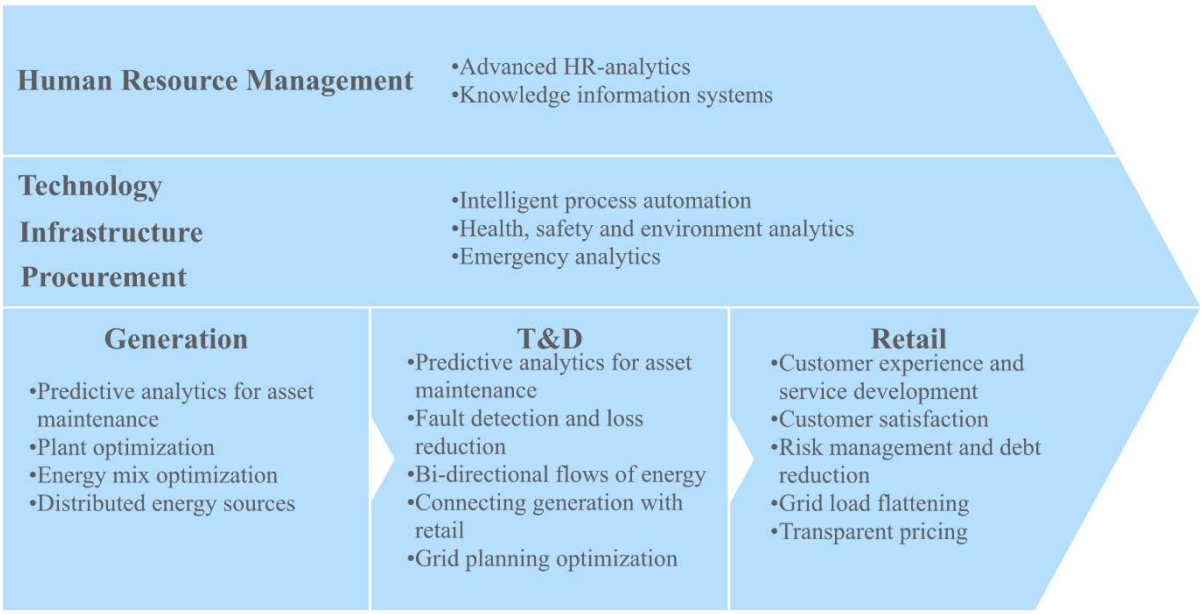

Figure 1 – Creating value through digitalization in electric utilities (with the use of Porter's value chain framework)

Digital transformation of the industry appears to be a complex process with the emergence of new business models and public policies. This transformation requires investments not only in technologies, but in organizational change, as changing mindsets and educating workforce are critical components. Other challenges imply the necessity to establish open standards to ensure interoperability of different devices and systems, while ensuring data privacy and overall system security. Companies have to develop complex data management and knowledge management systems to improve information-based decision-making regarding asset development (Schuelke-Leech, Barry, Muratori, & Yurkovich, 2015).

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Digital Transformation of Business Model of Russian Generating Companies

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Abstract:
The digital transformation of energy market, which is also taking place in Russia, creates a number of challenges for generating companies, which are one of the key players in the industry. In the current conditions, companies need to transform their business model and use new technological solutions to be competitive on the market. The using and applying of new technologies are some kind of competitive advantages for energy companies. The main directions of transformation of generating companies lie in the field of using of renewable energy sources (RES), of development of solutions for distributed generation (since consumers become prosumers) and of solutions for intelligent energy. New financial and demand management technologies allow companies to optimize their own business processes. Digital business transformation is becoming the main source of growth for generating companies.

Keywords: *Digital Business Model, Energy Companies, Energy Technologies, Business Transformation, Distributed Energy*

1. Introduction

Technological innovations taking place in the markets of developed countries are becoming relevant for developing countries, including Russia. If many European companies have been actively used new opportunities in the industry for a long time and adapted to changing external conditions, Russian companies are just beginning to do so. At the same time, with the emergence of active consumers, who may soon become prosumers, generating companies are under the strong pressure. If they do not follow the new market trends, react to new market needs and transform their business, they will not be competitive and will be forced out of the market by more successful players.

Referring to business changes and value creation, the most relevant tool is the business model. It allows transforming the ongoing changes in the market into the company's activity and offering the consumer a new product or service that meets all the needs (Chesbrough & Rosenbloom, 2002). Taking into account the current changes in the Russian electricity market, it is necessary to understand how the business model of generating companies should be transformed under the influence of new technologies and operational solutions. At the same time, the key idea is the changes that are caused by the digital transformation of the energy sector.

2. Data ant methodology

In order to conduct this study, the authors made a comprehensive analysis of available literature and materials. On the one hand, the authors studied the reports on the state and development of energy markets, the reviews of perspective technologies on the Russian electricity market, the experts' forecasts of companies' development in the new environment. On the other hand, the information from official websites of energy companies was considered (annual reports, strategic development documents). Naturally, the paper is also based on the academic papers devoted to the transformation of business models in the energy sector and the prospects for the development of new digital solutions.

3. Digital trends and technologies on Russian energy market

Digital transformation of the Russian energy market is determined by the following trends (Kniahinin&Kholkin, 2017):
- Active transformation of global energy markets. Rapid development of external markets stimulates transformation processes in the Russian market and gives the possibility to use technological solutions.
- Development of distributed generation. Emergence of new technological solutions in this field, development of power storage systems, lower costs in comparison with traditional energy generation promote the growth of consumers' use of this type of energy.
- Cheaper technologies and their spreadng. Technological solutions can reduce the cost of RES-based energy generation, help to store the energy and increase the safety of energy system.
- Development of intelligent energy. Infrastructural technological solutions, smart grids create opportunities for more rapid power system management and peak load control.
- Emergence of new financial technologies. Blockchain technology and smart contracts allow companies to improve their business processes, reduce the time of transactions and increasy their safety.

Thus, different digital trends push the development of technologies which can be used by generating companies to improve their business.

4. Digital changes in business model.

In order to save the market position and competitiveness in the near future, it will be very important for generating companies to transform their business model from a technological perspective. The authors found that the following business model elements will be changed when using new technologies:

1) Key partners
- New type of cooperation with IT-companies, with players of other energy market segments (energy service companies, energy aggregators, electric power distribution companies). Online network of alliances.

2) Key activities
- Using of RES for electricity generation (wind parks, solar energy farms).
- Development of intelligent energy solutions (f.ex., for grid management, energy storage).
- Development of distributed energy solutions.

3) Key Resources
- RES-based power plants.
- Patents and licences.
- R&D department.
- Data on operation of energy system.

4) Value Propositions
- Generation of “green” energy.
- New level of safety, reaction to demand changes.
- Transparent activities for consumers.
- Integrated services for the market.

5) Customer Segments
- Different players of Russian energy market (especially, prosumers).

6) Channels
- Official website with detailed information, with some databases of energy market management.
- New alliances with different energy market players.
- Digital solutions segment of the Russian energy market.

7) Customer Relationships

- Timely response to new needs of customers.
- Individual services for different clients.

8) Cost Structure

- Increase in R&D costs.
- Optimization of operational costs (using of smart contracts, blockchain technology, modernization of power plants).

9) Revenue streams

- Subsidies from government (due to the using of RES).
- Development and sales of different intellectual solutions for energy market.
- Sales of distribution energy solutions.

Thus, these new elements in business model can be used by companies as a benchmark for their transformation.

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Exploring Business Model for Emerging Technologies: a Multiple Case Study of Emotion Recognition Technology Developers

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Abstract:
In this paper we analyze and describe business models of emotion recognition (ER) technology companies using secondary data on 80 firms and primary interview data on five firms. The findings indicate that ER technology business models involve not fully understood value proposition, B2B customer segment, customer relationship through free demos and trials, revenue streams based on SaaS and technology licensing, investors and academia as key partners and R&D as a key activity. Our study contributes to the existing literature on disruptive business models for technological innovations by consolidating existing practices of ER sector and emphasizing on important patterns for emerging technology industries in general.

Keywords: *Innovation, Emerging Technologies, Disruptive Business Models, Artificial Intelligence, Affective Computing*

1. Introduction

Emotion recognition (ER) technologies represent a good example of disruptive technology aiming to reach a value of USD 88.69 billion by 2023 at a CAGR of 32.81% (Research and Markets…). The emerging potential of the ER technologies as a part of affective computing is derived from its ability to deliver greater personalisation and empathy with the user. The current wave of emotion artificial intelligence (AI) systems is being driven by the popularity of virtual personal assistants and other conversational technological systems. As a second wave, AI technology is predicted to focus on customer experience scenarios, including educational software, video games, diagnostic software, athletic and health performance, and the autonomous car (Moore, 2018).

However, the new technology faces several key challenges. As in any emerging industry, early pioneers in affective computing face three major risks: the risk of having to endure a financial chasm or 'death valley', the risk of failing to put together a complete new value network on time, and the risk of rapid technological or business-model obsolescence (Olleros, 2017). Therefore, the notion of a successful business model becomes critical for affective computing practitioners.

Studies emphasise that prospective clients and business partners of emerging tech ventures do not buy into a specific technology or business model, but into the value proposition, resulting from a matching of technology and business model (Chesbrough, 2010). Therefore, a promising new technology should be paired with the right business model for successful deployment. In the absence of a suitable business model, a promising technology offers little value to potential clients and partners (Chesbrough, 2002).

Despite the drastic growth and potential importance of the ER industry, academic literature has rarely investigated the important features of ER-based business models distinguishing them from other technological business models. The goal of this research is to explore the key features of business models of ER technology firms.

2. Related work

Prior research has differentiated traditional and disruptive business models (Christensen, Raynor, 2008). Unlike traditional business models that are typically used to design and plan business performance, disruptive business models are characterized by a high level of uncertainty and risk, typically associated with technological and innovation disruptions. The latest stream of research proposed that technological innovation should always be coupled with business model design to create and capture value due to interrelations between technological innovation and business ecosystem (Adner, Kapoor, 2009). The disruptive business models arise as a response to the innovative firms' cravings for new organizational structures to the products and services offered, which emphasize the proposition of a unique value to the market (Schiavi, Behr, 2018). Thus, the delivery of differentiated value to consumers, competitive advantage, entering new markets and the obsolescence of existing business models are observed characteristics of disruptive business models (Schiavi, Behr, 2018).

Whereas it is difficult for corporations to introduce disruptive business models, new ventures appear to have an advantage in this regard. Recently founded startups have much to gain from disrupting the established order of things and follow lean approaches, praising fast learning cycles and timely adaptations (Ries, 2011). Without any legacy costs or existing agreements, high-tech start-ups are particularly adept at matching innovative technologies with appropriate business models (Blank, 2013).

Emotion recognition represent comparatively novel example of a disruptive technology with high potential. Such technologies involve development of hardware or software for data analytics from various inputs such as a camera or a microphone. Equipped with AI technologies such as natural language processing, speech, facial and gesture recognition, machine learning, big data, automated reasoning and emotion analytics, ER solutions are capable of analysing complex data sets that can interpret human emotions in real time.

However, the emotion recognition technologies as a part of affective computing has rarely been investigated by scholarly research. Some exceptions focused broadly on AI technology companies and highlighted important features of corresponding business models, such as multi-sided platforms in company segments, automated service in customer relationship, social networks in channels, investors in key partners, R&D in key activities, human resources in key resources and Software-as-a-Service in revenue (Metelskaia et al., 2018).

3. Data and sample

In this study we used multiple case study methodology involving secondary and primary data on five ER technology firms. First, we analysed open sources on ER technology firms involving company web-sites, blogs and social media. We extracted available information in a structured manner which resulted in a table with the essential information on business models (value proposition, customer segments, customer relationships, channels, key partners, key activities, key resources, revenue streams, costs), ER technology (recognition channels, recognized emotions) and organization details (industries, size, age, etc.).

Second, we augmented our findings with semi-structured interview data of five companies sampled after the first stage. We interviewed company representatives following predetermined guide implying questions on business models and technologies. Interview data was recorded and transcribed and sent to the interviewee for validation and possible corrections.

We analyzed our data using multiple stage coding. On the first stage we developed the low level codes reflecting the similarities among companies in different components of business models. Then, we mind-mapped the resulted data and classified and matched the initial coding,

moving from lower to higher levels of abstraction, which allowed to come up with meaningful conclusions.

4. Empirical results and conclusions

Overall, we found the following key features of business models of ER technology developers. First, since the emerging technology is just being introduced into the markets, value proposition along with capabilities of the technology is not fully understood by the customers. Moreover, AI ventures in general often start from the technology development itself and face the challenge of adapting their products to customer needs (Metelskaia et al., 2018). Therefore, it is critical for the technology pioneers to, first, identify the real value for the customers and then to explain the fundamentals of the technology as well as its advantages to customers.

Second, the emerging technologies are easier infused into the society through B2B customer segment, as they are more knowledgeable about the latest technology and in turn will educate many end users. For building customer relationships with these clients, ER companies choose a strategy of free demos and trials as well as customization and customer support. The marketing channels do not specifically impact technology acceptance, yet are aligned with those in trend among tech community: websites, social networks, blogs and podcasts.

Third, monetisation of emerging tech companies should be perceived as understandable and fair from a customer perspective. For instance, general AI revenue streams, namely SaaS and technology licensing would be a good choice for new ventures (Metelskaia et al., 2018). In case of ER, Emotion-as-a-Service appears as a new business model within SaaS family, used also for marketing purposes. As for any technology-enhanced solution, major cost items for ER ventures are R&D costs and human resources.

Fourth, key partners impact acceptance of a new technology in a sense that larger tech community becomes interested in the topic. Thus, similar to AI sector, key partners of ER providers include investors and academia, highlighting the importance of open innovation. As a differentiating point, data providers and community play an important role in ER solution development.

Finally, R&D is at the center of key activities for tech providers, which stems from the fact that these companies are often created by IT experts. Key resources help new ventures to differentiate from the rivals. For instance, in ER sector datasets are reported as most significant key resource, whereas proprietary technology becomes a commodity with APIs available to every competitor. IP is mentioned as a key resource and includes both brand and patents.

Coming to the practical usage of business models by emerging tech companies and, in particular, ER providers we saw in our sample that this tool is not yet used frequently. As tech companies are often founded by the tech-professionals, they frequently lack business knowledge, which is an essential ingredient for commercial success. With our model, we aim at closing this gap, by providing an easy guided tool for practitioners to configure the emerging tech company business model.

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Application of the Blockchain Technology in the Banking Area

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Abstract:

In the modern world of digital technologies, the financial function should be flexible, forward-looking and facilitate prompt decision-making. The face of the financial services industry has been experiencing radical changes led by technologies over the past few years and the world of finance is rapidly changing, becoming digital. This research provides an analysis of the use of blockchain technology for managing banks' business processes. In particular, the further hypothesis is being investigated: is it possible to reduce time of the banking processes execution by applying the blockchain technology and, if possible, on which amount?

Key words: *Digitalization, blockchain technology, smart contracts, banking processes, simulation modeling*

1. Introduction

Over the past few years, the pace of the emergence of innovations in the field of financial technologies has gained an incredible turn, prompting a surge of promising new technologies. Process of ubiquitous digitalization has even caused the emergence of new financial service sector, so called, FinTech – financial technology. According to PwC insight (Courbe, et al. 2016), this Fintech industry will drive the new business model and if companies do not want to be out-of-time, they all sooner or later should use new technologies to follow worldwide digitalization trends. Among the new solutions one of the most promising today is the blockchain technology. It is a distributed database that provides a consistent, reliable, and general form of transactions, such as money transfers, ownership records, or other valuable assets between interested parties (Swan, 2015). The unique characteristics of blockchain technology can significantly change various industries and business areas, because this technology makes business processes more transparent, reduces costs and the likelihood of error due to automation.

2. Blockchain in banking

Banks are showing great interest in blockchain technology and are actively implementing this technology: 90% are studying the use of blockchain technology in banking business processes, 30% of banks are already using technology, 17% are at the launch stage (Accenture, 2016). Among the main advantages of using technology in banks are the following: reduction in administrative costs, reduction in the duration of operations, reduction in the probability of errors. According to the Financial Times, there are 5 main ways to use blockchain technology in the banking sector: clearing and settlements, payments, trade financing, KYC, and syndicated

loans (Arnold, 2017). Following the trends of world leading banks, Russian banks are actively implementing blockchain technology for various operations. The first blockchain deal in Russia was the letter of credit transaction of Alfa-Bank and S7 Airlines.

3. Methodology

Many organizations often use simulation techniques so as to predict the effects of business processes redesign (Greasley, 2003; Gregoriades and Sutcliffe, 2008; Barjis and Verbraeck, 2010). So, in order to test the hypothesis of the research, further banking processes were chosen for the modelling: loan syndication, cross-border payment, post trade settlement and clearance and letter of credit. Simulation was used in order to obtain the possible effects of the blockchain implementation. Firstly, the time of process execution was modeled. Each step of the assessed processes is set by a certain period of time, which is a random value from 90% confidence interval distributed by normal law with predefined expected value and standard deviation. These parameters of the distribution as well as number of iterations and probability of ramification of events are parameters of the model. The result of such modeling is the time for the whole process with and without usage of blockchain. Second step was to calculate financial effects of the blockchain implementation. Each of the process has its own cost drivers associated with process, but majority of them depends on the time of the execution and fees to intermediaries. All of them are reduced by the blockchain technology implementation due to automatization and no need to pay to intermediaries.

4. Results

The analysis has shown that the main hypothesis of the research was accepted since duration of banking business processes is reduced, as well as the costs of their implementation on average by 99% through the use of blockchain technology. Moreover, the operations become more transparent and reliable, and contractual ambiguities and inaccuracies are eliminated. Furthermore, banks which are using blockchain technology acquire a competitive advantage in the context of speed and reliability of operations, and can get the first-mover advantage. On top of that, a PR-effect arises for both banks and companies involved in the operations based on technology.

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Regulation of Multisided Markets: Market Definition Technics

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Abstract:
Platforms were around for a while: trade fairs may be considered as their ancestor. They are intermediaries that enable transactions between two or more distinct groups of economic agents on the demand and supply sides. Platforms have become a phenomenon of the 21st century as they grow extremely fast and change the way traditional markets look: Uber and Amazon displaced taxi companies and bookstores, Google and Airbnb created new markets. Recently several mergers between platforms in multisided markets have been cleared by antitrust authorities in different countries including one between Uber and Yandex.Taxi in Russia. Yet the existing literature on multisided markets does not provide a clear answer on appropriate instruments for antitrust analysis of competition in multisided markets. This paper discusses various tools of platform market definition. In particular, I define the features of the SSNIP test, the analysis of price changes and demand elasticities when applying to markets with platforms. Having analyses tools for platform market definition in terms of possible type I and type II errors, I come to the conclusion that one should consider a platform as a player in multisided market to reduce the likelihood of type I and type II errors in competition law enforcement. Apart from this, in order to use the discussed in the paper tests, antitrust authorities need a larger dataset compared to the analysis of one-sided markets.

Keywords: *Multisided Markets, Platforms, Indirect Network Effects, Market Definition, Antitrust Enforcement, Type I and Type II Errors*

1. Introduction

A phenomenon of multisided platforms has arisen in the economic theory after the seminal work of Rochet and Tirole (2003). The authors argued in this paper that the existed models were not able to explain zero or even negative price that platforms set for some groups of users. Since then the theory of multisided platforms has rapidly developed. And now literature on multisided platforms tackles the questions from price setting to investigating users with heterogeneous preferences (Rietveld, Joost and Eggers, 2018) and platforms with different degrees of product differentiation (Armstrong and Wright, 2007). Despite a wide range of articles that unravel many counterfactuals in multisided markets, there remains a gap in defining appropriate tools for antitrust analysis, specifically instruments for market definition.

2. Multisided markets and platforms

Platforms use new business models that build on so called network effects. These are gains or losses that economic agents on the demand and supply sides face when a number of users interacting on the platform increase. A user can face additional gains or losses with an increase in the number of users joining the platform on the same side. These changes are called direct network effects positive or negative respectively. Otherwise, when gains and losses appear on the other side, they are usually called indirect network effects. For example, Amazon attracts three groups of users (sides): buyers, sellers and advertisers. There are positive indirect network effects that buyers and sellers of goods face: the more buyers decide to join the platform, the more sellers gain in terms of the increasing probability and speed of finding a client, and vice a versa. In contrast, negative indirect network effects emerge on the buyers' side in the presence of advertisers.

Network effects change the profits that economic agents consider when deciding on whether to join a multisided platform. For example, using a multisided platform for consumers is associated with a decrease in transaction costs (search costs) and an emergence of direct and indirect network effects. These help to distinguish between the traditional (industrial) and new (platform or digital) business models that companies use: the first one uses supply-side scale effects that may result in the decision to invest in tangible assets or technologies. Network effects are a component of the supply-side scale effect. New business models take advantage of the demand-side scale effect and invest in intangible assets. Moreover, the development of search and matching algorithms is usually considered as an investment priority.

Not only do the business models change, but also competition between companies transforms. Multisided platforms by means of network effects may set zero or negative price on one of the sides that join it. And this decision fits all the existing constrains (e. g. breakeven point). Amazon, for instance, by accumulating profits from advertisers and sellers, on the one side, and brilliantly organized logistics, on the other, may decrease prices for buyers and so become more attractive to them. That makes competition denser and may hurt traditional market players whose market exit decreases market diversity. The latest has unclear consequences but should be considered when investigating competition in multisided markets.

3. Regulation of multisided markets

Regulation is one of directions in the research on competition in two- and multisided markets. There are several papers that present an overview of possible implementation of multisided considerations into the antitrust analysis (Evans, 2002, Hesse and Soven, 2006, Hesse, 2007, Rysman, 2007, Evans and Schmalensee, 2013, Auer, Petit, 2015, Grkaynak, et al., 2017).

4. Multisided market definition technics

In my research I examine different market definition tools and their application to platforms. When doing so, one may make several mistakes, that is why I consider a tested hypothesis, that market definition tests show actual market borders. Situations when players who actually operate in the market are mistakenly not included in it, I will call type-I error. In contrast, type-II error will be a situation when players are mistakenly included the market.

- SSNIP-test (Small but significant and non-transitory increase in price)
- Prices and quantity dynamics analysis
- Critical loss assessment, CLA
- Other tests
    - Upward pricing pressure test (UPP test)

5. Results

When analyzing competition in markets with platforms one can use a wide range of tools for market definition. I show that markets with platforms should be analyzed as multisided markets. Hypothetical monopolist test in one-sided logic can lead to type II errors when applying to markets with platforms. That is the relevant market will be definition to narrowly. On the other hand, if a hypothetical monopolist cannot adjust the price structure in response to an increase in price for one of the parties, then the relevant market will be defined too widely (type II errors). Using of the hypothetical monopolist test with possibility to adjust the price structure one requires a larger dataset that can be an invincible obstacle for antitrust authorities. In addition, alternative procedures for evaluating the potential effects of mergers and acquisitions may also lead to errors.

Academic Analytics: on the Way to Digital Higher Education

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Abstract:
This paper investigates taxonomy and application of academic analytics (AA) systems. These systems extract meaningful information from multiple data sources to predict, cluster, find relations, and prepare data for decision making process aimed at creating knowledge crucial for improving the quality of educational process in HEIs. Academic analytics incorporate three main types of systems: Learning Analytics (LA), Educational Data Mining (EDM) and Educational Big Data (EBD). As AA research field is rapidly developing even though a considerable number of papers have provided substantial insight on the theoretical basis of LA, EDM and EBD systems, taxonomy, classification and differentiation of types of the systems are still undefined and often overlap. The main research question of the study is to provide classification of academic analytical systems in HEIs according to the needs and goals of universities. Our findings are based on the analysis of papers on academic analytics in higher education published in 2010 - 2018. The focus of classification is based on three main categories: subject of analysis, target of analysis and primary source of information of academic analytics.

Keywords: *Academic Analytics, Learning Analytics, Educational Data Mining, Educational Big Data, Innovations in Universities, Performance Prediction*

1. Introduction

Digitalization of academic processes in higher education institutions, implementing web educational systems (Moodles), online courses and learning content, development of online communication and collaboration tools that integrate students' teams and educators create terabytes of electronic data. Shifting from collecting and storage of this massive data to creating knowledge able to help higher educational institutions in effective tracking, evaluating and predicting students' performance is crucial in accelerating educational quality, providing necessary information for educational stakeholders and, finally, help students in their education and career progress. Now higher education institutions (HEIs) concentrate efforts in digitalization of academic process not only on providing access to education, but to increasing of the quality of education (Lee, 2017, p. 15). To reach this target HEIs are implementing Learning Analytics, Educational Data Mining and Educational Big Data systems aimed to better understand and support student learning (Schumacher & Ifenthaler, 2018).

2. Learning Analytics, Educational Data Mining and Big Educational Data Taxonomy

Definitions of LA vary and there is no generally accepted definition of LA, but the mostly cited and used one is "the measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs" (Long & Siemens, 2011, p. 34).

Data mining techniques as a process of extracting meaningful and relevant information from data (Han & Kamber, 2006) applied as groundwork and instrument to find out solutions in collecting, processing, reporting and visualization of data generated and applied in educational process is often referred to as Educational Data Mining (Baker & Yacef, 2009).

Definitions of EDM and LA are quite similar and some researchers (Aldowah & Al-Samarraie, 2019) consider EDM and LA as a one type of educational analytical instruments. Other researches underline, that despite overlapping between their areas, there are some distinctions between them (Siemens & Baker, 2012). Primarily, they vary in their focus: EDM is mostly concentrated on automated discovery, while LA focuses on leveraging human judgment. Besides, EDM systems models refer to analysis of individual components of the process and their relations (classification, clustering, tracking, visualization and predicting individual or group (cluster) students' educational outcomes, successful and dropout patterns and models) (D'Mello et al., 2010; Cambruzzi et al., 2015). LA systems are mostly concentrated on performance of educational process in general, such as modeling educator-students collaboration (Gaudioso et al., 2009), evaluation of university learning content, curriculum and programs tracks (Campagni et al., 2014), institutional planning and strategies (Mankad, 2016), as well as administrative decision making.

Although, both LA and EDM research fields are still in the infantry stage (Ferguson & Clow, 2017) they have even "younger" successor, Educational Big Data (EBD) that focuses on analysis of students' behavior, not metrics and multiple external non-academic unstructured data sources (social networks, forums, volunteering, hobbles) without using foregone assumptions and statistical models, moreover, making conclusions and prognosis that stand out from the obtained data (S, Rajeswari & Raj, Lawrance, 2016).

So, EBD analysis mostly uses data from Educational Data Mining and Learning Analytics systems to predict students' academic and career performance and could be considered as an upgrade or add-in for both of these systems.

3. Empirical results and conclusions

Investigation of three main types of instruments for analysis of electronic data generated by universities targeted on improving quality of academic process (EDM, LA and EBD) shows that the exact difference between them is still undefined as this research fields are still on infantry stage and usage of these instruments often overlaps. In this study we propose to demarcate these systems according to the following criteria: subject, target and primary source of information. The empirical results of this demarcation are represented in the Table 1.

Table 1 Differentiation of LA, EDM and EBD

	Learning Analytics	**Educational data mining**	**Educational big data**
Subject	Holistic educational process	Students' educational outcomes	Integrated strategy of the university
Target	Enchanting student-educator and student-student collaboration within educational process	Optimization of students' educational tracks	Development of predictive and prescriptive roadmap of HEI development
Primary source of information	Data obtained from learning management system (LMS)	Data from LMS and students' individual digital portraits	Data from LA and EDM

We expect that this classification can provide HEIs with the background knowledge in the process of planning and step-by-step implementation of academic analytics.

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How Marketing Managers Sense and Seize Social Media Storms

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Abstract:
Social media storm (SMS) is usually framed as a crisis situation. However, new research suggests that SMS entails a promotive perspective which can empower some direct and indirect stakeholders namely customers, firms and society. To complement such new findings, and to understand the pathways of marketing managers to sense and seize SMS, this paper surveys the cognitive, affective, and behavioral perspective of SMS to generate novel insights around the domain of marketing management, consumer behavior and technology. A preliminary communication of the results of study on the sample of 226 companies showed that managers are expressing mixed feelings about SMS, but it makes them curious about people's thoughts, and they are prone to open a dialog with upset customers. Since silencing the storm and changing people's minds are preferred actions towards the storm, many managers hesitate to see SMS as an opportunity. Those contradictions call for further research on the alternative approaches to SMS in the area of marketing management.

Keywords: *Social Media Storms, Marketing Strategy, Consumer Sentiment, Empowerment*

1. Introduction

Social media emerged as a game changer for marketing by empowering consumers to collectively approve or oppose the behaviors of businesses. When consumers collectively accumulate anger and rise against companies, we talk of social media storms (SMS). The complex relationships among social media, negative customer emotion, empowerment, and risk assessment remain poorly understood (Ocasio, Laamanene & Vaara, 2018). Furthermore, the determinants of negative consumer emotions (Jani & Han, 2013) and how marketing managers sense the constructive role of consumer anger on social media is under-investigated. This paper aims to understand empowerment in the context of SMS by addressing: How do marketing managers sense and seize SMS?

2. Social Media Storms: An Empowering Cocktail of Affect and Assumptions

Consumer empowerment is not only realized through different types of online platforms and consumer-centric marketing (Niininen, Buhalis, & March, 2007). From a consumer point of view empowerment is also realized by openly sharing opinions, attitudes, and emotions towards companies and brands (Grappi, Romani, & Bagozzi 2013).

Consumer anger has been treated in research as a reaction to unmet product or service expectations and subsequent dissatisfaction (Su, Hsu, & Marshall, 2014). It has many different manifestations ranging from individual complaints to global riots. The traditional approach towards such consumer action is focusing more on the compromising rather than empowering perspective. However, some change approach and utilize the huge anger-driven attention gained by informing people on company’s brands’ core values, and initiate discussions of larger societal relevance. By doing so they create a potential of empowering the company. But how is that possible? First, this calls for a reconsideration of assumptions that empowerment is like a seesaw

swinging in favor of either the consumer or the company and that negative emotions are a threat. Second, empowerment researchers should *"incorporate diverse views on consumer behavior and its antecedents beyond the acquisition of knowledge as empowerment mechanism"* (Angulo-Ruiz & Pergelova, 2014, p. 6).

3. Methodology

We conducted a quantitative survey probing into how marketing managers sense and seize SMS. The sample of 226 respondents consisted of managers mostly from South Asia and Europe, and it is diverse in terms of size and area of operation of the companies. We used a structured questionnaire having mostly 5-point Likert scales. Data were analyzed by means of descriptive statistics and ANOVA.

4. Analysis and Findings

The findings show that marketing managers are fixated by an understanding of SMS as a crisis situation, but some do reflect more resilient perceptions of SMS in the sense that SMS can present a strategic opportunity for empowerment.

More than one third of companies have experienced an SMS, and almost half of them claim that they have strategies on how to act in case of SMS. In terms of the impact of SMS, 38% of the companies which experienced SMS claim that it had a negative impact. Moreover, almost two thirds of respondents believe that management should do what they can to avoid SMS, and that the dominant approach to handle SMS should be by means of classic strategic communication.

Meanwhile, responses also reveal the potential of seeing SMS as an opportunity for the company. Almost half of respondents agree that SMS can also strengthen their company's brand value and company reputation. Approximately two thirds of the respondents are encouraged to engage in the dialog with the people that participate in SMS and are curious about customers' feelings and thoughts. Moreover, two thirds of them claim that they would utilize the situation as a way of creating transparency. Finally, most of the respondents would ensure that they learn from the situation to protect their company from similar incidents, and use the SMS as an opportunity to strengthen the engagement with customers.

6. Conclusion

The preliminary findings show managers' perspectives on strategic responses to SMS. The results are contradictory to some extent. On one hand, it seems that managers are seeing SMS mostly as something that should be avoided as much as possible or managed as a communication crisis when occurs. On the other hand, they see the value in constructive customer feedback, and a chance to strengthen the ties with consumers. However, preferred actions towards SMS still demonstrate a little willingness to see SMS as an opportunity.

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Assessment Companies' Digital Transformation Readiness: the Model Structure

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Abstract:
One of the main reasons of digital transformation projects failure is a lack of companies' readiness. There are several concepts concerning company readiness for digital transformation such as "readiness for digital transformation", "digital readiness", "digital maturity", "digital business aptitude", and others. In research on digital transformation, these concepts are often mixed and replaced with one another. As a result, existing readiness assessment models evaluate different concepts and the results of the assessment are difficult to transform into practical recommendations. Therefor a readiness assessment model with the structure justified by existing management methodologies and confirmed by practical cases of successful digital transformation projects is needed.
The study's result is the structure of the model for assessing companies' digital transformation readiness. The model allows to identify barriers to digital transformation considering not only the companies' current state but its previous development. The structure of the model includes the domains "Systematic management", "Business processes", "Enterprise architecture", "Using of data", "Human Resource Readiness" and corresponding characteristics. The characteristics, specifying the parameters of readiness in the context of domains, are formed in appliance with management methodologies and verified by practical cases.

Keywords: *Digital Transformation, Readiness, Assessment Model, Practical Cases, Model Domains, Case Study Research*

1. Introduction

The practice of digital transformation varies widely in companies depending on the goals and objectives of transformation as well as on the company's background and the country's economic development. The paper attempts to analyze the experience of Russian companies-leaders of digital transformation to systematize and identify common areas of changes preceding the implementation of the announced digital transformation projects.

2. Related work

Analysis of available solutions concerning different models for assessing the companies' digital transformation readiness allows to draw two approaches which differ in terms of the evaluation results. The essence of the first approach (models/frameworks of Forrester, BCG, IDC) is the definition of the company belonging to one of the levels of digital maturity. Despite the usefulness, the corresponding models/frameworks are not suitable for distinguishing the internal transition barriers. The essence of the second approach (KPMG) is the assessment of individual aspects of readiness for digital transformation. The bottleneck of the models implementing the second approach is the choice of evaluation criteria, characteristics, and metrics.

3. Research methodology

This paper's objective is design the structure of the model for assessing companies' digital transformation readiness by matching the best practices of digital transformation and management methodologies. The model should provide a readiness assessment, as well as help to identify barriers to digital transformation considering not only the companies' current state but also its previous development.

The corresponding tasks are:

- to formulate hypotheses about the model's domains;
- to clarify the model's domains;
- to identify criteria and characteristics of companies' readiness for digital transformation;
- to verify the characteristic of readiness.

The research methodology is based on analyzing successful companies that are implementing complex, large-scale, announced projects on digital transformation.

The stages of research are:

1. Creating hypotheses about the model's domains: case study 1.
2. Clarifying the model's domains: analysis of methodologies.
3. Identifying criteria and characteristics of companies' readiness for digital transformation: analysis of methodologies.
4. Verifying readiness characteristics: case study 2.

4. Empirical results

Stage 1.

The objects of Case study 1 are 6 industrial companies – digital leaders.

The results of case study allow to declare that the key changes preceding the digital transformation projects have been implemented in the following areas: management system, business processes, human resources, and technology. The corresponding hypothesis is "the listed areas can be distinguished as domains, defining the structure of the model for assessing companies' readiness for digital transformation" (H1).

Stage 2.

To clarify the key areas of change, "Management system", "Business processes", and "Human resource management" and to identify domains, several management methodologies have been analysed, including ISO 9000, BPM CBOK 3.0, the Enterprise Talent Management Standards-Framework (TMI-ETMS), etc. The results of the analysis allow for narrowing the area of "Management System" to the domain "Systematic management", as the factor of systematicity is dominant in all the observed changes. The business processes area corresponds the domain of "Business processes". The area of "Human Resource Management" has been transformed into the domain of "Human Resource Readiness".

The results of the case study allow to draw a conclusion about the heterogeneity of the "Technologies" domain. It includes changes related to both purely technological innovations and IT management. Based on analysis of the methodologies of different groups (TOGAF, ITIL, COBIT 5, IT4IT, DMBoK, DGI Data governance framework) the domains of "Using of data" and "Enterprise architecture" have been distinguished from the "Technologies" domain.

Stage 3.

Based on the standards corresponding to the domains a list of key characteristics of the quality of management has been formed. The set of characteristics presented in the standards has been narrowed in accordance with the changes described in the case study 1. The hypothesis for further research is "characteristics of management quality in the context of each domain can be considered as characteristics of companies' readiness for digital transformation" (H2).

Stage 4.

To confirm hypothesis H2, the case study 2 has been conducted. The objects of the research 10 engineering companies that are currently implementing successful digital transformation projects.

The study is based on the assumption that changes implemented in companies in the period preceding digital transformation are the prerequisites for the success of digital transformation, as they have led to improvements in the quality of management in different areas. The presented cases of engineering companies confirm this assumption and the hypothesis that the characteristics of management quality can be considered as the characteristics of companies' digital transformation readiness in the context of each domain.

5. Conclusions

The study's result is the structure of the model (framework) for assessing companies' digital transformation readiness, that includes model's the following domains: "Systematic management", "Business processes", "Enterprise architecture", "Using of data", "Human Resource Readiness", and corresponding characteristics. Distinctive features of the model are:

- it allows to identify problems that hinder digital transformation;
- it considers the influence of the companies' previous development.

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The Competitive Order for the Digital Age

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Abstract:
The market environment of the new economy represents a set of highly concentrated industries, while a slowdown of the economic growth and an expanding gap between different strata of society have become urgent problems of modern days. The current trend does not give the reason to assume that these problems are just a temporary issue. The digital economy has opened new horizons for the problem of concentrated economic power. One of the most prominent schools of economic thought that have been obsessed with the issue of power concentration is the Freiburg school of law and economics, which appeared in the 1930s and later have been noticeably overlooked by the mainstream. This study assesses the possibility of application of the views and methods of the Freiburg school to the problems of modern days. In the light of this theory, there are no needs to regulate the economic process and redistribute incomes, but what should be done is to create a competitive order that will yield the most efficient solutions for the society in various spheres.

Keywords: *Digital Economy, Innovation, Regulation, Competitive Order, Competition, Ordoliberalism, Market Concentration*

1. Introduction

The ongoing process of technological changes rises numerous concerns for policymakers and the academic society. New technologies challenge core values of the western civilization such as privacy, security, freedom, democracy, and propel to adopt new rules and changes in industrial policy. The market environment of the new economy represents a set of highly concentrated industries, while a slowdown of the economic growth and an expanding gap between different strata of society have become urgent problems of modern days. The current trend does not give the reason to assume that these problems are just a temporary issue. On the contrary, they have become indistinguishable attributes of the post-industrial arrangement.

There could be different explanations of these modern problems. One might assume that this is the market that tilts industries toward concentration and contributes to social problems, and, therefore, there are needs to intervene and heavily regulate these new natural monopolies. Another point of view might be the totally opposite and to claim that we have to adopt the laissez-faire approach and allow the market to put everything in proper places. At the same time, both of these positions are subject to criticism: on the one hand, there are many reasons to assume that “more government” means incorporation of business interests into regulatory policy, corruption, decline of innovation and competition, and, as a result, the growth of social problems. On the other hand, “less government” might also signify that the unconstrained market is able to make things worse and to result in numerous social and economic problems. However, it is also possible to assume, that the real problem is that we have never had and, possibly, can not have unconstrained markets, and all economic activity everywhere on the planet is affected by government interventions, and, thus, the solution could be found in the policy that would be aimed at promotion of real market forces, rather than alleviation of problems caused by the alleged imperfectness of the market.

2. Research objectives

The research assesses the possibility of application of the views of the Freiburg school of law and economics, which appeared in the 1930s and later have been noticeably overlooked by the mainstream, to the problems of modern days. In the light of this theory, there are no needs to

regulate the economic process and redistribute incomes, but what should be done is to create and maintain a competitive order that will yield the most efficient solutions for the society in various spheres (Eucken, 1995). However, the question is whether this idea of competitive order is still actual in our days and how this vision could be achieved.

3. Main findings and discussion

One of the main arguments that support the belief in the inevitability of market concentration in the digital world is that this tendency is predetermined by technology. According to this view, the landscape of digital industries and the power of the giants are often protected through technological developments and architecture of modern networks. However, this view often completely ignores the impact of regulation on technological evolution (Trubnikov 2017). It is easy to admit that without the influence of regulatory activity on the market performance we could have not only a different landscape of markets, another sort of distribution of wealth among members of the society, but also a different set of available technologies.

We should not neglect the fact that even the Internet, the backbone of the digital economy, is a result of government activity and not a fruit of a free market system. ARPANET, the first step toward the global system of the Internet, was a project initially founded and funded by the US Department of Defense, and the following stages of the system were also not without active government participation. The leaders of the digital world have heavily benefited from various forms of government interventions: direct subsidization, taxation advantages, interventions in the area of intellectual goods, and even social policy aimed at solution of human rights issues or the "digital divide" problem (Trubnikov, Trubnikova, 2018). In other words, these digital markets look "free only because we so unconditionally accept [their] underlying restrictions that we fail to see them" (Chang, 2010). The real nature of the digital economy is the regulatory formed nature, and the highly concentrated form of modern markets is not a consequence of market imperfections, but the direct result of the distortions of market mechanisms.

The main focus of the Freiburg school was the issue of power and how to avoid or to reduce the concentration of power in economic and political spheres (Eucken, 1995). The main aim of regulation based on this approach would be the creation of competitive environments in the fields of the new economy and reduction of economic power of the giants through wide-scale divestiture of their businesses. Interestingly, but many contemporary scholars and pandits have started to appeal for similar methods (Roubini, Mihm, 2010; Hughes 2019). If we drop out the utilitarian ideas that govern economic policy and if we identify the problems of the digital world as problems of concentration of power and a lack of equal opportunities, then it becomes more clear what can be done in order to cope with these issues.

4. Conclusion

The permanent distortion of market mechanisms affects not only landscapes and performance of the markets, not only prices and the amount of the goods, but also available set of technologies, distribution of wealth and endangers core values of the modern civilization. The digital economy has opened new horizons for the problem of economic power that modern technology allows to transform to political power, and dissolving of this concentration should be among the main goals of contemporary economic policy. Such policy could be aimed at promotion of market forces, creation of competitive environment in the areas of the digital economy and reduction of economic power of the giants.

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Entrepreneurship and Innovation in Emerging Markets

Risky business? Integrating Perspectives of Entrepreneurial Orientation as Experimentation and Advantage to Explain Firm Performance

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Abstract:
This paper investigates the influence of two components of entrepreneurial orientation (managerial attitudes towards risk and entrepreneurial behaviors) on the level and variability of firm performance with a particular focus on the role of human capital in these relationships. The empirical settings are based on a robust national random sample of 509 Russian small and medium-sized enterprises (SMEs) collected from 2015 to 2016 during a period of economic crisis. Our results suggest that the EO-as-experimentation perspective is principally driven by entrepreneurial attitudes. Managerial attitudes towards risk-taking do not influence the magnitude of firm performance but do significantly increase variance in firm performance and produce a wider distribution of performance outcomes. However, and in line with an EO-as-advantage perspective, firm's entrepreneurial behavior increases mean growth and reduces variance. These relationships are contingent on the level of human capital. The current study sheds the light on the causal mechanisms underlining the EO-performance relationship.

Keywords: *Entrepreneurial Orientation, Attitudes Towards Risk, Entrepreneurial Behaviors, Performance Variability, Human Capital, Russia*

1. Introduction

Opening a new chapter in entrepreneurial orientation (EO) research, Wiklund and Shepherd (2011) advance two perspectives of EO, EO-as-advantage, and EO-as-experimentation, and consider EO to be more closely related to an EO-as-experimentation perspective where EO creates variance in firm performance, leading some firms to be discontinued that fall below a certain threshold at the lower end of the distribution, and improving the mean performance of surviving firms given that more firms are reaching higher levels of performance. Recently, Anderson et al. (2015) theorize that EO includes an attitudinal and behavioral component. Entrepreneurial attitudes capture managerial attitudes towards risk-taking, whereas entrepreneurial behaviors capture a firm's innovative and proactive new entries and competitive actions. Building upon this finer-grained conceptualization of EO, this research considers the theorized causal perspectives within EO research and investigates whether the EO-as-advantage and EO-as-experimentation perspectives may be equally valid depending on which component of EO, entrepreneurial attitudes or behaviors is being considered. Specifically, this study looks into the effects of managerial attitude towards risk and entrepreneurial behaviors on both level and variability of firm performance and examines the moderating effect of human capital on these relationships.

2. Theory and research hypotheses

Following the work of Wiklund and Shepherd (2011), many studies have adopted an EO-as-experimentation perspective within their theorizing and research to explain the causal mechanisms at play within EO-performance relationships. Yet, little research has examined the EO-firm-performance variance relationship empirically. Those exploring an EO-as-experimentation perspective have generally (a) not included, considered, or compared EO's influence upon mean firm performance and firm performance variance despite calls to deepen our understanding of this aspect of their theoretic model (Wiklund & Shepherd, 2011), (b) considered finer-grained investigations of the EO measurement model, or (c) proposed critical boundary conditions which shape the distribution or mean of performance outcomes. To address this gap, the following hypotheses are put forward and empirically tested in this study.

H1: Managerial attitude towards risk (EO-MATR) is positively associated with the level of firm performance (H1a) and variability of firm performance (H1b)

H2: Entrepreneurial behaviors (EO-EB) are positively associated with the level of firm performance (H2a) and negatively associated with the variability of firm performance (H2b)

H3: Human capital negatively moderates the association of managerial attitude towards risk (EO-MATR) to level of firm performance (H3a) and positively moderates its association to variability of firm performance (H3b)

H4: Human capital positively moderates the association of entrepreneurial behaviors (EO-EB) to level of firm performance (H4a) and negatively moderates its association to variability of firm performance (H4b).

3. Data and sample

For empirical testing of the proposed theoretical framework we rely on a combination of survey and financial data. The firm survey data was obtained from a large data collection project in the Russian Federation. The survey project investigated strategic characteristics of SMEs during the period of country-level economic crisis, relying on a comprehensive random sample collected between September 2015 and February 2016. The survey data was complemented by objective financial indicators. Specifically, firm revenue growth was employed to measure firm performance.

A formal test of the two-component representation of entrepreneurial orientation was performed using confirmatory factor analysis in a structural equation model. For assessing of the impact of predictors on conditional mean of a firm's revenue growth rate and degree of variation about a predicted mean, we follow the multiplicative heteroscedasticity estimation methodology.

4. Empirical results and conclusions

The results of hypotheses testing suggest that, with respect to the main effects of the focal constructs, managerial attitude towards risk (EO-MATR) has a positive impact on variability in firm growth, yet no impact on its level, supporting Hypothesis 1b yet failing to provide support to Hypothesis 1a. Entrepreneurial behaviors (EO-EB), on the other hand, demonstrate the positive impact on the level of firm growth and negative impact on variability. This provides strong support for Hypotheses 2a and 2b. Hypotheses 3ab and 4ab were tested with a fully specified model with interaction terms and moderator (human capital) added. Hypotheses 3a and 3b are fully supported: when the firm's level of human capital is high, the managerial attitude towards risk (EO-MATR) brings a negative impact on firm growth yet also increases the variance of the resulting distribution.

Finally, in line with Hypotheses 4a and 4b, the “EO-EB by human capital” interaction term demonstrates a statistically significant positive impact on the mean and negative impact on the variability of firm growth.

Importantly, the signs of the associations between EO-MATR, EO-EB and firm performance change depending on the level of the moderator. As such, the main effect hypotheses H1ab and H2ab get empirical support only under specific circumstances (high level of human capital: H1b, H2a, H2b; low level of human capital: H1a), and thus cannot be interpreted without consideration of the context.

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Assessing the Influence of Institutional Factors on the Innovation Ecosystem Model in Russian Power Sector

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Abstract:
This paper investigates the influence of institutional factors on the ecosystem model of EnergyNet within the Russian power sector. We argue that creation of ecosystem value proposition depends not only from the activities of actors, their positioning and links between them, but from the external environment as well. This environment can be described in terms of availability of resources, essential for ecosystem, possibility of partnership among actors, and state support of innovative activity. This allows to expand the ecosystem model point of view and reveal factors that determine current state of ecosystem development. Preliminary results of the research show disproportion in the assessment of importance to collaborate among big companies and SMEs. We also revealed that state support is considered to be the least important from the participants' point of view, which seems to be contradictive to the current point of view on innovations in Russia. In addition, we can observe a considerable imbalance in the assessment of availability and importance of various institutional factors.

Keywords: *Innovation Ecosystem; Russian Power Sector; EnergyNet; Ecosystem Model; Ecosystem Value Proposition; Institutional Determinants*

1. Introduction

Over the last 26 years, starting with work by (Moore, 1993), we can observe an increasing interest in research on the concept of "innovation ecosystem" (IE) (Gomes, Facin, Salerno, & Ikenami, 2018). However, most of the research lacks coherency and structure partially because they study rather young phenomena. Current body of research on IE includes a wide array of various streams and big variety of definitions of the observed construct, some of which are contradictory in their nature (Gomes et al., 2018).

Despite a considerable amount of criticism towards the concept (Oh, Phillips, Park, & Lee, 2016), there is a noticeable stream of researchers (Gomes et al., 2018; Ritala & Almpanopoulou, 2017; Romero & Molina, 2011), who advocate for the viability of research on IE. Within this stream there is a particularly promising area of research on ecosystem model (EM), which allows to create so-called ecosystem value proposition (EVP) (Walrave, Talmar, Podoynitsyna, Romme, & Verbong, 2018) – the whole purpose of IE existence. This process is represented in the right part of Figure 1. In our research we are making an attempt to step further – to investigate on how various institutional factors influence the EM (left part of the Figure 1), which in turn may reshape the EVP.

We are basing our research on EnergyNet – an IE within Russian energy sector, which was initially created in 2014 (National Technological Initiative, n.d.) in order to boost its innovative development, but considerably evolved since. Nowadays it includes around 150 members – both big companies and SMEs and the scope of its projects vary from various renewable generation equipment to the consumer products for managing energy use.

2. Research design

Institutional determinants are assessed via questionnaire with a [0;7]-point Likert scale. The questionnaire also includes the assessment of the importance of each of these factors from individual respondent point of view. This allows to create a weighted assessment of the importance of various groups of factors. The questionnaire is a part of a bigger project aimed at the unveiling of the structure of the whole IE and is currently in progress.

We are planning to collect at least 100 observations from the total of 150 members of EnergyNet. Taking into account the overall size of the IE, we consider 2/3 of it to be an acceptable sample size. For now, we were able to collect 16 responses, which allowed us to: (1) verify the clarity of the questionnaire; (2) highlight possible avenues for a more detailed analysis (will be briefly discussed in the following section).

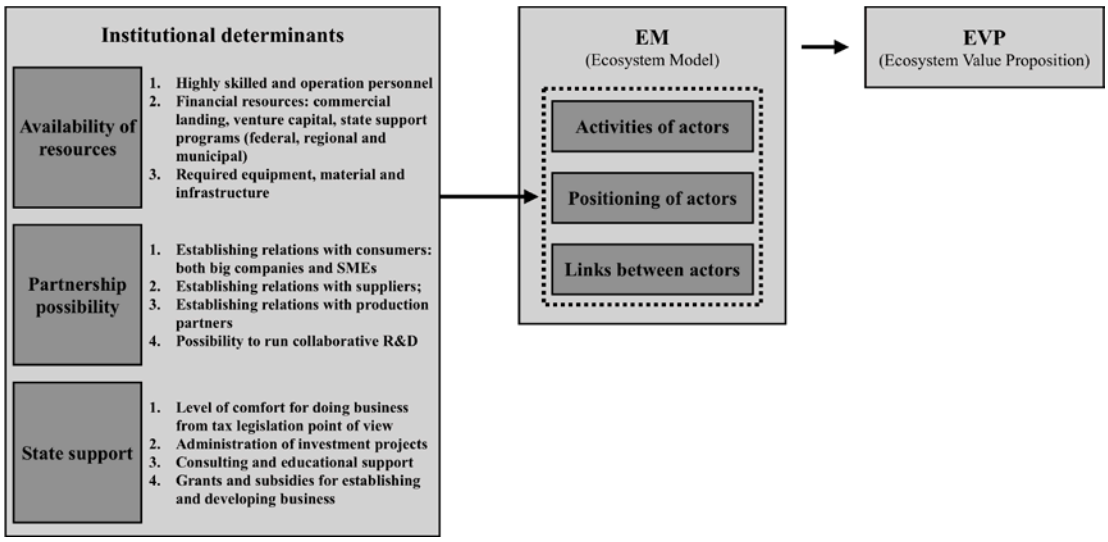

Figure 1. The research model – created by authors based on works by (Möller & Halinen, 2017; Walrave et al., 2018)

3. Preliminary results and conclusions

Taking into account the size of the currently collected sample it would be more productive to provide qualitative results of the questionnaire, which appear to be the most interesting in terms of the future development of the project:

1. While SMEs point out high and medium importance of collaboration with big companies and SMEs respectively, big companies seem to have moderate to low interest in collaborating with similar ones and SMEs;
2. State support in general seems to be less important in comparison to availability of various resources and possibility to collaborate – both for big companies and SMEs (which seems to be contradictive to current point of view on innovations in Russia);
3. There is an imbalance between the importance of various institutional determinants and the availability of these factors (Figure 2).

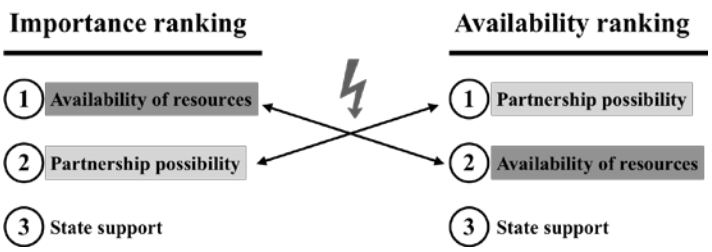

Figure 2. Importance and availability of institutional determinants

This leads us to 2 major conclusions: (1) a bigger dataset is needed in order to determine, whether the described situation is a matter of fact or is just a result of outliers within the dataset; (2) an assessment of IE productivity is needed in order to assess the influence of the observed imbalance. Second one seems to be a promising research stream, which may allow us to answer not only to the question about current state of IE, but what is more important, to reveal the factors that determine it.

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The Russian Far Eastern Entrepreneurial Environment: Cross-Cultural Aspects

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Abstract:
The Russian Far East economic progress is not exactly aimed at the total amount of entrepreneurs increase, but to development business area with high potential growth. In that regard, regional entrepreneurial culture insight based on cross-cultural communicative and business practices is necessary. The leading Far Eastern companies' sociocultural business area overview might define the major institutional factors challenging the international entrepreneurship. The regional "networks of trust" implementation as well as at the personal and institutional levels for the ventures operating in the emerging market is essential. That definitely will lead to the new business interrelation type formation in the Russian Far East based on different national cultures' elements merging. Study aim is to identify a set of strategies and daily practices for the foreign entrepreneurial network growth.

Keywords: *Russian Far East, Entrepreneurship, Business Ecosystem, Cross-Cultural Actors, Network Society, Business Culture*

1.Introduction

Economic growth of the Russian Far Eastern region which harmoniously might become a part of the advanced Northeast Asia business ecosystem will definitely lead to the new business interrelation type formation based on different national cultures' elements merging. Within various social and economic long-term state program implementation in the Far Eastern region, Vladivostok city might be considered as the regional "quasi-gates" of the second level, according to the economical and structuralist model by F. Braudel [Braudel F., 1992]. The social networks play the key role during the "the Far East gate" forming; first, the "networks of trust" are formed under the Northeast Asia countries' socio-cultural peculiarities. [Sergeyev V.M., Kazantsev A.A., 2013]. According to the theory of the Network Society by M. Castells the research object will be considered as "the network made of a various great number of subjects and organizations which are incessantly upgraded as the networks adapt to the supporting environments and market structures" [M. Castells]. This paper aims to identify a set of strategies and day-to-day practices for building the relationships network under conditions of trust in the Far Eastern region's impact on the Russian Far East progress.

2. Data and Sample

The business elite of Primosky and Khabarovsk Krai was considered as the sample. Choosing the phenomenon "regional business elite", we realize that according to the standard vocabulary of terms it would be more correct to use the term "leading entrepreneurs". Determining the study object as "elite" we are not assessing the businesspersons' impact on the nation-wide or regional political, economic decision-making process. While identifying the sample we rely on the valuable-semantic approach according to which the individuals from the elite are more intelligent, have various abilities and competences in comparison with the average activities of the considered society [Abulkhanova K.A., 2007]. Besides, during the universe formation we defined the business elite as a group of entrepreneurs who "are using the power of their financial potential and provide the impact objectively on socioeconomic and political processes" [Kukolev I.V., 2009]. The economic elite that is "the integral component of the nomenclature appointed by the general government sector same as the regional business elite's representatives, who are rather more independent from the federal government, present the sample also [Kryshtanovsky O.V., 2008]. Cross-border actors performing their activities within entrepreneurship in the Russian Far Eastern territory play an essential role for the international

business development in the modem socioeconomic conditions. Based on the theoretical and methodological cross-cultural interaction studies, as the analyzed phenomena of a cognitive factor of the institutional environment are defined:

1) Cultural measurements types (G. Hofstede);
2) Cross-cultural communication (E. Hall);
3) Stages of development of the company and the corresponding type of business culture (Organizational life cycle by I. Adizes);
4) The dominating sociocultural orientations in the studied business environment;
5) Corporate culture aspects.

Concerning the Far Eastern companies' entry into the northeast Asian countries' business ecosystem, in the case of the polyactive and reactive business cultures interaction (business cultures classification by R. Lewis), the companies' returnable transformation of the created sociocultural environment and replacement an entrepreneur's culture for bureaucratic one might be. It might lead to degradation of the business relations, to destruction of the formed networks of trust. To keep the developed Far Eastern companies' sociocultural environment, appointment of highly qualified top managers concerning the theory of business culture and acmeological management is essential.

3. Empirical results and conclusions

The paper describes the impact of the cross-border actors' role in the international business ecosystem implementation. Based on the findings, the main informal practices for relationship building between Russian and foreign companies in the Far Eastern region might be described. Network theory is the basic framework suggested to be the inclusive framework for entrepreneurship progress. As well, it is proved by our preliminary empirical research using the case method. There is no vital research to be found describing the process of the regional business culture formation in the Far Eastern emerging market considering cross-cultural business communicative practices as the basis for the regional "networks of trust" creation both locally and internationally. The paper contributes to the socioeconomic literature to provide the distinctive cross-cultural influencing on entrepreneurship success in the Far Eastern region. The results have important implications for theory and practice. In theory, the received results will provide a certain contribution to theoretical knowledge in the social network theory, expanding understanding of the cross-border actors' nature in the business ecosystem implementation. In practice, the obtained outcomes provide a broad view of cross-border actors' facets that could contribute into the region's economic growth. The results of the study also might have the practical interest for the foreign entrepreneurs.

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Learning-by-exporting, Radical Innovation and Firm Performance

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Abstract:
This study strives to contribute to the topical conversation on the antecedents and effects of product innovation, by analyzing the impact of the engagement in international activities and its impact in the development of new products, a phenomenon called "learning-by-exporting", and the relationship of the latter with business performance. Furthermore, our fine-grained analysis differentiates between the effects of two different internationalization facets, internationalization degree and scope, and the outcomes in terms of product incremental and radical innovations. Based on a sample of 1064 manufacturing firms over the period 2007 to 2014, our results show that a higher internationalization involvement and geographical diversification result in a greater incremental and radical innovation output. In turn, the findings indicate an opposite effect of these innovation types on sales growth for performance leaders and laggards. Our findings thus suggest a generation of new knowledge and dynamic capabilities stemming from both innovation and internationalization activities, although the final effects on sales growth depend on previous performance.

Keywords: *Learning-by-exporting; Geographical Diversification; Internationalization Degree; Incremental Innovation; Radical Innovation; Firm Performance*

1. INTRODUCTION

Product innovation and its effects on business performance have been widely acknowledged as seminal issue in strategic management and entrepreneurship literature (e.g. Rosenbuch et al., 2011). This study contributes to this topic by examining the role of internationalization activities as antecedents of product innovation, and its effects in terms of firm performance.

2. HYPOTHESES

2.1. Degree of internationalization and geographic scope as determinants of innovation output

Firms with a higher international involvement are likely to be particularly attentive to the needs and requirements of their foreign customers and intermediaries, considering that a large share of their turnover depends on their purchases. Those agents are likely to provide exporters with information and assistance on potential improvements in the firm's offering in an effort to obtain higher-quality, more differentiated, or cheaper products (Zahra et al., 2000; Clerides et al., 1998).

Additional to the degree of internationalization, a greater scope of geographical presence may also influence a firm's innovation performance, by providing specific advantages both in terms of knowledge and capability development. For example, a geographically diversified company may access a larger supply of innovation resources from the different countries in which it is present, such as collaborations with a wider range of clients, agents, local universities, or research centers (Santos et al., 2004). Hence, we propose the following hypotheses:

Hypothesis 1a. A higher degree of internationalization is associated to a higher incremental and radical innovation output.

Hypothesis 1b. A higher international market scope is associated to a higher incremental and radical innovation output.

2.2. Innovation and firm performance

We argue that the effects of incremental and radical innovation on sales growth will depend on whether the company is in a context of leading or lagging performance. We posit that incremental and radical innovation are associated to very different organizational attitudes, capabilities and behaviors, whose usefulness depends on a firm's performance status.

The purpose of incremental innovation efforts is to respond to the needs of current customers and markets (Lin et al., 2013). Companies that focus on incremental innovation tend to dedicate their efforts and resources to the preservation of their present, sure stream of revenues, while they veto or freeze any change that might threaten it (Tellis et al., 2009). For companies lagging in performance, getting stuck with the current clients and markets may condemn them to a continuous inferior performance.

Radical innovation, although it is considered a riskier endeavor, may offer unprecedented customers benefits, substantial cost reductions, or the ability to dominate world markets (Tellis et al., 2009). While the ability to develop incremental innovations allows companies to preserve their current market status quo, radical innovations may enable them to transcend current mental models, dominant logics, anticipate future needs, and thus tap into new high-potential market segments (Freixanet et al., 2019).

That is, for performance laggards, introducing radically innovative products gives firms the opportunity to move beyond short time frame competitive pressures and stagnant or shrinking product lines, and access broader market opportunities and superior growth (Srinivasan et al., 2002; Tellis et al., 2009). Hence, we put forward the following hypothesis:

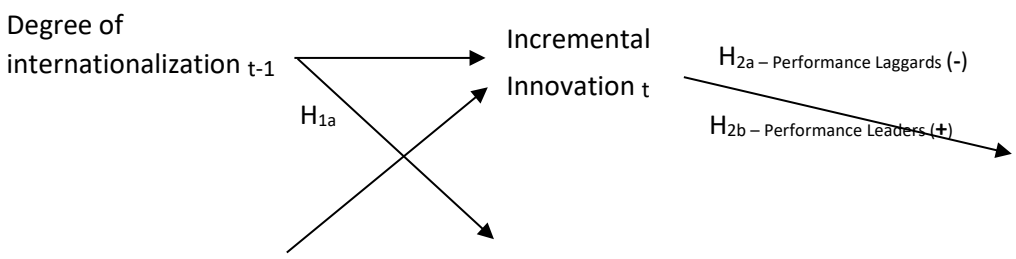
> *Hypothesis 2a. For performance laggards, radical innovation is associated with increases in sales growth, while incremental innovation is associated with reductions in sales growth.*

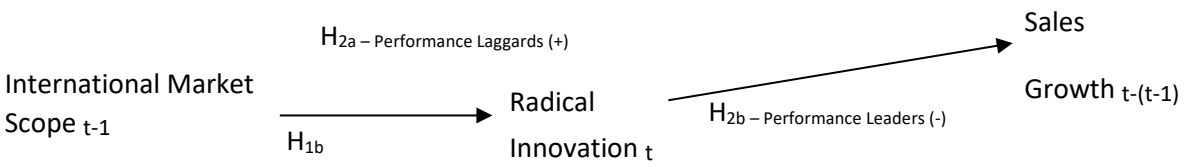
Opposite arguments may apply to sales growth leaders. For companies that are positioned in market segments which enable them to enjoy a position of business growth leadership, it is imperative to protect and preserve the core components of their current product lines. It is also a priority to retain their present clients that are providing a high sales growth, and make every effort to satisfy their needs for product improvement and adaptation. In this vein, incremental innovation may serve as a means of maintaining their position in a high growth market (Lin et al., 2013).

Instead, radical innovation may disrupt the present positive, reliable flow of revenues, while introducing a firm in a new context underlain by operational and market uncertainty, where it may not maintain its sources of competitive advantage (Sheng and Chien, 2016). Accordingly, we offer the following hypothesis:

> *Hypothesis 2b. For performance leaders, incremental innovation is associated with increases in sales growth, while radical innovation is associated with reductions in sales growth.*

Figure 1. Conceptual Model





3. DATA AND SAMPLE

This study analyzes a balanced panel of 1,064 firms from 20 industries over the period spanning from 2007-2014, drawn from the Survey on Business Strategies (SBS), an institutional database of Spanish manufacturing firms.

4. RESULTS AND CONCLUSIONS

We performed a logit panel model which shows that, consistent with the proposed mechanisms, both internationalization degree and market scope from previous year, have a positive effect on the probability of obtaining radical and incremental innovation outputs.
We also find that for those firms experiencing a previous sales growth lower than the average (performance laggards), incremental innovation is negative, while radical innovation is significant with a positive sign. Instead, for those firms experiencing a sales growth equal or higher than the average (performance leaders), the effect of incremental innovation is positive and significant while radical innovation is significant but with a negative sign.
These results shed new light on the important debate on the effects of the various facets of internationalization, and innovation, on business growth.

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Building Digital Entrepreneur Profiles on the Basis of the Data from the Vkontakte Social Network

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Abstract:
Development of entrepreneurship is among the core priorities of economic policy in any country, thus, issues related to entrepreneurship and entrepreneurs are frequent objects of research and policy discussions. Economic forecasts on entrepreneurship development and growth are associated not only with the trend of digitalization of the existing processes, but also with the appearance of fundamentally new business models and technologies. One example of such technologies are digital platforms and social networks. This research investigates the peculiarities of behavior of business agents in digital platforms with help of big data analysis. This data is provided by one of the biggest Russian social networks VKontakte where about 400 thousands of business agents are now registered.

Keywords: *Entrepreneurship, Social Network, Profiling, Digital Business*

1. Introduction

According to the last year results of study by the Global Entrepreneurship Monitor (GEM), the entrepreneurial activity in Russia over the last 12 years has been growning at an average rate of 2.5% per year. One can also observe that traditional businesses are more and more frequently replaced by the digital ones.

Digitalization, as a trend, involves closer interaction between people, and in particular between an entrepreneur and a client. The electronic access to consumers is becoming a mainstream in the market environment, especially among small and medium-sized businesses. The development of entrepreneurship is one of the priorities of the Russian economic policy; therefore an analysis of entrepreneurial activities in social networks is necessary for the economic development of Russia. However, Russian digital business in social networks is poorly investigated and became the main focus of this study. Using the data from a Russian social network VKontakte, it will be pssible to describe the entrepreneurial profiles of businesses in the Russian social network and evaluate its' business effectiveness.

2. Digital entrepreneurship in social networks

2.1. Literature review

According to the recent GEM study (2018), only 2.3% of respondents (mostly from the traditional businesses) received income from various forms of activity related to the use of digital platforms (for comparison, in the USA or Israel it is 10%).

Entrepreneurship in the digital environment has become possible due to the mass availability of modern information technologies. (Le Dinh et al., 2018) A recent study found that users in Europe spend an average of 27 hours on the Internet. (Comscore, 2013) Given the current trend, this time will only increase. Considering the patterns of successful businesses, many researchers have concluded that the use of social networks is necessary for prosperity. (Brüderl & Preisendörfer, 1998; Burt, 1992). In addition, now new Russian and Western entrepreneurs use social networks not only to inform about new products and possible special offers for goods and services, but also employ them as the only selling platform.

Online entrepreneurship is very different from the traditional approach and provides many new functionalities (Gironda & Korgaonkar, 2014; Hull et al., 2007; Song, 2015). The

differences are not only in the business, but also in the consumer behavior model. As part of social networks, a mechanism for attracting customers can be built differently. The user's decision to subscribe, purchase, and do some other actions necessary for an entrepreneur depends on many factors, including attitudes towards a particular instrument, subjective norms of behavior that are caused by social pressure from the outside and, finally, full control over their behavior, that is, compliance of the possibilities with the wishes of the consumer (Gironda & Korgaonkar, 2014).

2.2. Business activities in social networks

As of now, about 400 thousand companies run their business through the VKontakte social network, communicating with the customers directly, promoting products and services, as well as offering payment for purchases through the platform.

Creating a digital business community has several advantages. Firstly, the community provides an opportunity of a real-time access to the client, and the client has the opportunity to quickly communicate with company's representatives. Secondly, if a business does not have a website, then the social network community is a good alternative representation of the company on the Internet.

The VKontakte social network is the most popular one on the Russian digital market, and is most preferred by entrepreneurs from St. Petersburg (8.23% of all business communities) and Moscow (5.89%).

Founders and business owners, on average, are a little over 30 years old. Most often, they are residents of St. Petersburg (8.99%) and Moscow (7.33%), more than half (61%) of the business owners are women. A half of the registered in the VKontakte communities have been operating their business for more than 2 years.

3. Data and sample

For our study, a randomized sample of business communities was formed; the sample size was 40,000 communities.

It is worth noting that the number of communities' subscribers varies a lot. A half of the communities have less than 650 subscribers, while the largest community has more than a million subscribers. Such statistics representatively reflect the distribution of small and medium digital businesses in Russia. In small towns, several hundred subscribers in the community are the backbone of the business. At the same time, multinational companies can charge hundreds of thousands of subscribers due to the penetration and recognition throughout the country.

The types of business represented on the social network are very diverse. For example, here you can find small beauty salons, furniture manufacturers and car repair services. In this study, 6 integrated categories of business were identified, including:

- Auto, Moto
- Beauty, health, medicine
- Professional services
- Entertainment, culture, tourism, sports
- Restaurants, delivery
- Goods, shops

4. Results and conclusions

Our in-depth analysis of the collected data on business communities in the VKontakte social network allowed building more sophisticated profiles of the entrepreneurs this network.

The profile is specific as related to the geography and the industry of the business. In addition, we were able to identify how the usage of the digital tools of the social network, such as digital market, affects the popularity of the business community as a whole.

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The Importance of Strategic Entrepreneurship in Explaining the Performance of Small and Medium-sized Tourism Enterprises (SMTEs)

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Abstract:
With the increasing role played by tourism worldwide, several economies are turning to use tourism as an effective tool for overall development. Tourist destination offers a variety of products, all of which constitute a tourism experience. These different products are usually offered by several Small and Medium-sized Tourism Enterprises (SMTEs) operating in the destination. Thus, there is a growing interest in the performance and management methods of such companies. Through the analysis of literature, this paper examines SMTEs by studying their characteristics and the challenges they are facing. The paper also investigates Strategic Entrepreneurship (SE) as a management method appropriate for managing SMTEs. The study finds that both components of SE (exploration and exploitation) are compatible with the factors that affect the performance of SMTEs. Consequently, the application of SE in SMTEs might enable managers and owners of SMTEs to overcome the various challenges and shortcomings experienced by these companies and to exploit their resources in a way that helps them achieve the best possible performance.

Keywords: *Strategic Entrepreneurship, Tourism, Small and Medium-sized Business, SMTEs, Tourism Company Performance, Entrepreneurial Orientation, Coopetition*

1. Introduction

In recent years, tourism plays a key role in the global economy. As countries increasingly open up their borders to join the wave of global integration, the development of tourism industry has become a source of substantial foreign exchange revenues and a contributor to job creation for several economies [8].

The destination can be considered as the raison d'être for tourism [3]. The strategic importance of the tourism destination to which the firm belongs lies in its nature as a space that bounds its activity and as a potential source of advantages that strengthen all the firms located within it. From the marketing point of view, the tourism product is an integrated experience for the tourist which is perceived and assessed as total enjoyment at the destination [2]. Thus, the tourism destination offer is determined by a mix of products, provided by different Small and Medium-sized Tourism Enterprises (SMTEs) that influence the tourism experience and act within a determined geographical parameter and generates a differentiated image [10].

SMTEs usually focus their competitive efforts against their neighbouring SMTEs, while they have to recognise that they also compete against tourism products and services offered in alternative destinations. So, SMTEs should concern about developing the destination where they are operating. They have to work with each other by focusing on the common benefits of the destination rather than only on individual goals [3].

Unlike larger tourism companies, it is increasingly difficult for SMTEs to survive and prosper in markets where competition is fierce. Therefore, SMTEs need a comprehensive management method that helps managers making the right decisions and achieving the best performance. That is what will be clarified below.

2. Characteristics of SMTEs

Despite their unrivalled abilities to stimulate a rapid infusion of money into local economies and provide a feeling of being welcomed and of personality to the tourist, SMTEs face a lot of problems and challenges.

They are short of resources, lack finance and struggle to adopt new technologies. These characteristics prevent SMTEs from enhancing their access to the information needed and from building and developing their knowledge which is not only negatively affect the growth or the performance of SMTEs, but also represents a threat to their survival. In general, SMTEs are more vulnerable to failure, particularly in their early years of operation, where up to 40% tend to fail within the first three years and 60% close within 10 years [2].

3. Performance of SMTEs

In their quest to achieve superior performance, SMTEs should adopt appropriate strategies to enable them to overcome different challenges.

Contemporary business theory discusses that the superiority in performance resulting, in part, from the synergy of value-adding relationships developed between individual organizations. The Resource-Based View (RBV) and its complement, the Dynamic Capabilities-Based View (DCBV), as a part of strategic management theory, argue that firms attempt to obtain and sustain a competitive advantage through the strategic use of resources. However, more often than not, critical resources (such as money, skills, etc.) tend to be scarce and do not reside within SMTEs. SMTEs, thus, enter into collaborations, even with their competitors, to take advantage of complementary assets and capabilities [14].

Also, SMTEs need to cooperate at the destination level in order to increase their total competitiveness as a destination (or as the total tourism product) against substitute tourism and leisure products or factors which reduce their profitability or market share [3].

In this regard, coopetition particularly focuses on the simultaneous combination of cooperation and competition among companies regardless in what part of the value chain or supply chain these two will emerge [11]. According to Morris et al. (2007) there are three key dimensions underlie the formation of a synergistic relationship with a competitor: mutual benefit, trust, and commitment [12].

Coopetition is consistent with RBV, considering that “bunching together creates complementarities that develop the market even if there's sometimes more competition in dividing it up” [1, p. 34]. In their study on 149 SMTEs in Naples and 169 in Sorrento, Italy, Della Corte and Aria (2016) found that coopetition improves performance, and a key determinant is not only numbers of links but also acquired trust between partners [5].

In a related context, a dynamic capability is the destination/firm ability to integrate, build and continuously reshape tourism competencies to address rapidly changing environments, exploiting/exploring local resources such as landscape, heritage, infrastructure and so on. Further, when possible, weaknesses should be reduced and can sometimes even be turned into strengths, just as external threats can be considered potential opportunities to explore and exploit. This is possible through a creative exploration of local assets coupled with a governed renewal of tourism competencies [6].

One way to explore opportunities is through entrepreneurial orientation. Innovation, risk-taking and proactive inclinations are some of the more acknowledged characteristics that have been used to define entrepreneurial companies [4]. The study of Fadda and Sørensen (2017) on 224 accommodation firms in Sardinian, Italy, concluded that entrepreneurial orientation has a positive effect on firm performance [7].

Strategic entrepreneurship (SE) is a relatively new recognized field built on the integration of strategic management and entrepreneurship. The modern business world requires an orientation toward SE [13]. Furthermore, SE is important for companies to get superior performance and to create maximum wealth [9].

Ireland and Webb (2007) define SE as “a term used to capture firms’ efforts to simultaneously exploit today’s competitive advantages while exploring for the innovations that will be the foundation for tomorrow’s competitive advantages” [9, p. 50]. Figure 1 shows our research model of SE.

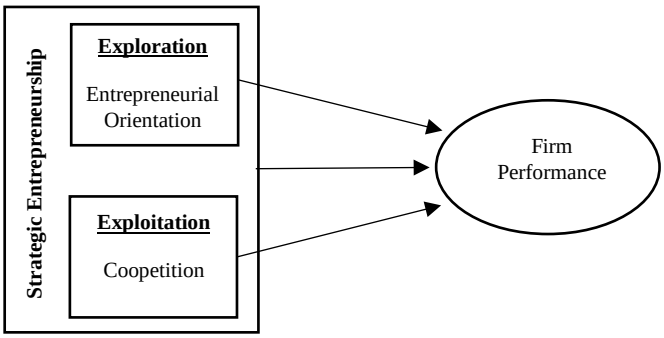

Fig. 1. Research Model of SE
Source: Adopted from [13].

4. Conclusions

Most SMTEs are very limited in resources for the implementation of their strategies and cannot engage in various activities without confidence in obtaining positive results. A kind of harmony exists between both components of SE (exploration and exploitation) and the factors that affect the performance of SMTEs. Thus, the application of SE in SMTEs might enable managers and owners of SMTEs to overcome the various challenges and shortcomings experienced by these companies and to exploit their resources in a way that achieves the best possible performance.

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Lean Innovations in Manufacturing and Frugal Innovations in Services: Dualism or Convergence Towards Sustainable Innovations?

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Abstract:
The article focuses on the issue of the accumulated deficiencies in understanding and conceptualizing types and categories of innovations: economic, lean, good-enough, frugal, and sustainable ones. It could be argued that there is an increasing need for deeper interpretations of interrelations for innovations of different origins, especially in view of growing similarities in basic principles of innovative thinking and business model applications among different economic sectors. The field of innovation typologies and categorization of innovative (incremental and disruptive) influences on business models demands study efforts in a number of fields, incorporating prospective interdisciplinary trends, notably, sustainable development, community-based models for industries. For emerging markets that presents specific difficulties, as there is still some lagging behind both in innovative practices, and fundamental factors of future trends. The paper presents a preliminary framework for critical understanding of the research area which is becoming complex and versatile, and that brings opportunities for more comparative studies.

Keywords: *Lean, Frugal, Sustainable, Innovations, Community-Based, Experiences, Cost, Economical, Good-Enough, Low-Cost*

1. Introduction

This article sets forth the following four research tasks. Task 1 is to try to conceptualize the current state of lean and frugal innovations' interpretations in the context of comparative approaches between different sectors. Task 2 is clarifying at this stage the relevance of the current conglomeration of definitions and concepts for types of innovations: cost, economical, good-enough, lean, frugal, reverse, sustainable innovations. Task 3 is to conceptualize relationships of lean, frugal and other types of innovations with the notion of sustainable innovations. Task 4 is a clarification of the terminology forming in the Russian-language literature segment to the international categories and concepts (Fig. 1). The importance of the last task is becoming evident as both translation and conceptualization of different types of categories for now is very sporadic and inconsistent. That's in itself an interesting phenomenon as how some terminology in Russian studies becomes very path-dependent from initial inaccurate translations, and that gradually builds up big confusions. For instance, right now both lean and frugal innovations are translated as the same word – «бережливые инновации».

Frugal innovations and their true potentials are still interpreted in a wide range on concepts by policy makers, scholars, and different types of practitioners and some sectors have received very limited attention, especially agriculture and education [Hossain, 2017]. Another important sector, where is still no sufficient link between frugality and sustainability is the tourism sector. Obviously, there is the sustainable tourism framework nowadays, and a very influential one, in tourism studies, but its prominent feature is that it does not go sufficiently in the field of origins of innovations and mechanisms on how they transform business models, and that can reinforce sustainability agenda and policies in day-to-day business practices (for instance, low-cost airlines, sharing of bikes and e-scoters, etc).

The overall goal of the research effort is to clarify the range of understanding of the categories of lean, frugal, economical, sustainable innovations, and then to propose a clearer research framework for establishing possible sectoral variances in interpretations of different types of innovations within their business models. There could be a more precise field of studies on how

different types of innovations specified in the contexts of particular industries. In terms intersectoral understanding of manufacturing and services innovation trends there is a growing number of attempts to make generalizations on aspects of their influence on business models transitions (Rosca, Arnold, Bendul, 2017).

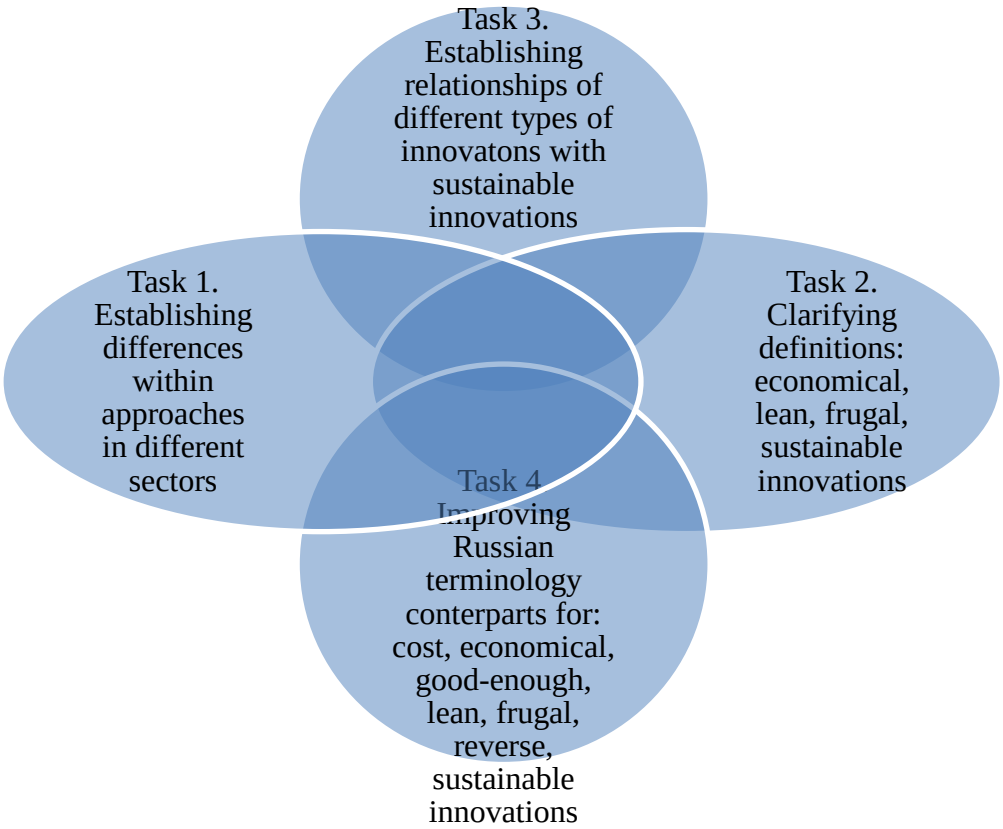

Fig. 1. The current issues with regards to a better understanding of interrelations among lean, frugal, and sustainable innovations.

2. Interpretations for lean and frugal innovations in the context of business models

The main hypothesis is that there can be conceptualized differences and variances is nature and mechanisms of lean, frugal and sustainable innovations in terms of transformation of business models in different sectors. Besides, many conceptual explanations of lean and frugal innovations sound relatively fragmented in various author's interpretations. And this brings some conceptual needs for mapping purposes. Just as some illustrations, mention several categories from the whole definitions' conglomerate.

Type 1. ***Cost and economical***. Based on cost savings and manifested in the following main approaches and effects: a) cost savings due to savings on production factors in emerging markets; b) Disruptive Innovation Business Models; c) reducing the size of a unit of goods so that it falls within the «affordability zone» (Kaur, 2013).

Type 2. ***Good-enough and frugal innovations***. The advantages of cost reductions in emerging markets are also used, but product characteristics are reduced without changing the functionality and quality of impressions and experiences in the protected basic and critical parameters, due to the use of cheaper components only for non-critical, minor components of the product. And that has a particular relevance to the contexts of emerging markets (Zechky, Widenmayer, Gassmann, 2011).

Type 3. ***Eco and community-based innovative approaches***. Experiences of immersions into the contexts of nature and authentic cultures for the purposes of long-term sustainable development. Post-industrial redevelopment into creative industries clusters in big cities is an interesting development, widening the recognition of community-based approaches beyond remoted, rural and depressed areas.

3. Cases explaining the dialectical relationships between types of innovations

A very illustrative example of the transition to frugal innovations from cost-reductionist and economical can be represented by the evolution of business model of low-cost airlines, especially in the context of value propositions from European low-cost carriers – Raynair, WizzAir, Easyjet, Smartwings, other. The transition to the low-cost airline model and its rapid scaling along the route network of Europe initially, in the first one and a half decade (1997-2012), was interpreted precisely as economical innovations due to the most reductionist cost cutting across the entire spectrum of the transportation components (baggage, food, additional services) – and, retrospectively, at the stage of sharp growth of the market that such a strategy was most efficient.

However, over the past few years (2013-2019), the model has been adapted to frugal innovations, where some cost components are still treated as non-critical - and are cut off for all passengers, while other components are rethought in modifying the business model as critical from the viewpoint of the value proposition for the consumer and their experiences, and, thus, flexible product and tariff lines are offered.

And in recent years, thanks to such solutions, low-cost carriers have up to 20% of their revenues from the so-called "additional" services (previously abolished), for better thrill-factor efficiencies (Visser-Amundson, Korte, Williams, 2016). For budget aviation, it took around 20 years to go through that dialectic cycle.

Another prominent case is a rapidly emerging case of micro-mobility in the cities the form of electric scooters sharing. The research question here could be a very similar one – what will be the cycle of "thrill factors removal – scaling up the business model – partial return of thrill factors"? How will stage 3 be supplemented: mostly by manufacturing improvements to back up better returns and viability of the sharing business model? Or by finding better frameworks and synergies with services industries. For instance, when big malls provide vouchers for e-scoter rides for loyal customers. Or if local communities and municipalities, which are keen on ecology and noise-reduction poicies, provide support for less well-off enthusiastic riders.

4. Assumptions on the mapping of types of lean, frugal and sustainable innovations in the context of the business models

Business models are becoming more inclusive. The influence of the factor of strengthening the context of socio-cultural and environmental significance has accumulated gradually over the past decades (Fig. 2).

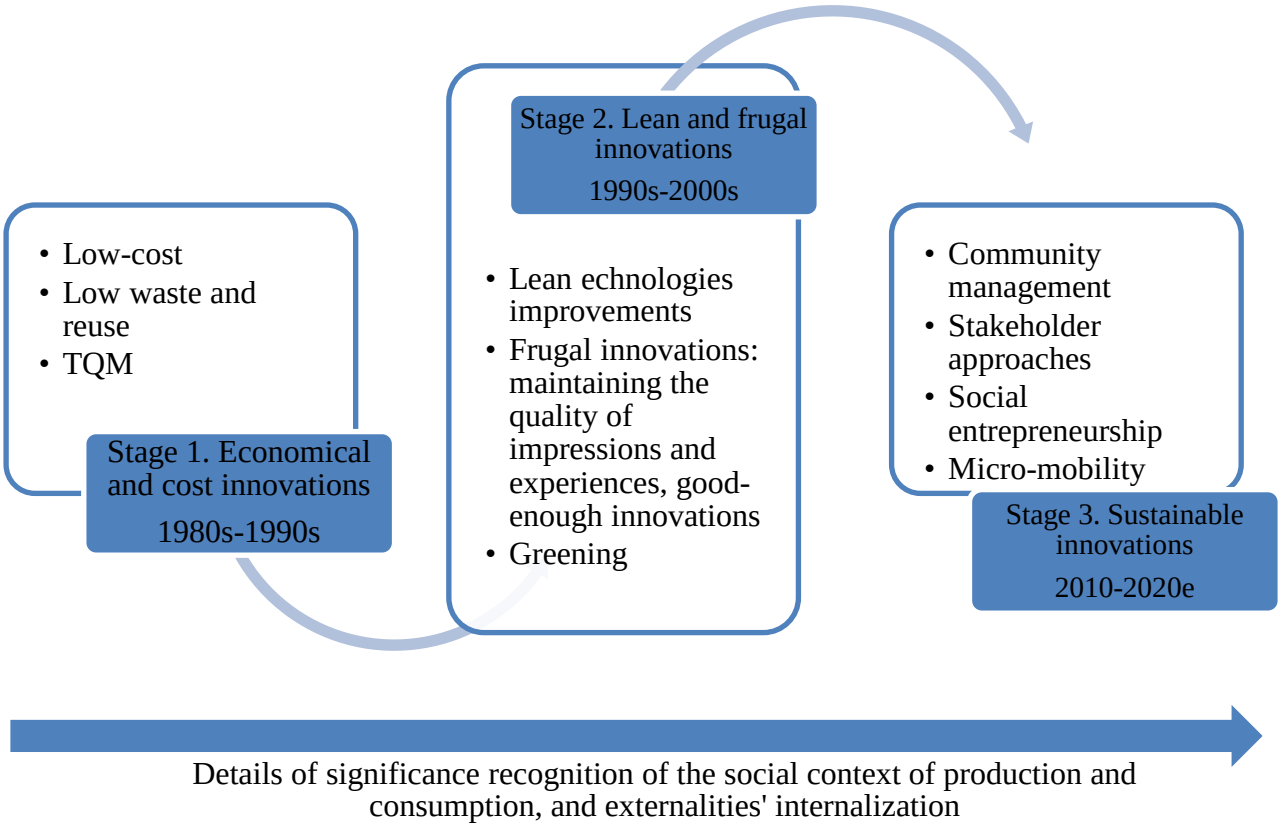

Fig. 2. Approximate periods for evolution of economical, lean, frugal, and sustainable innovations. Source: Author's interpretation.

Innovative restructuring of the economy will be a powerful factor in the continuation of trends: digitalization, wider social contexts, focus on community well-being, individualization of consumption, growth of segmentation, new sub-types of innovations, new trends and practices in diffusion of innovations. Better understanding of future innovation landscape may contribute to better innovation audit frameworks and build-up of unique profiles for innovating [Frishammar, Richtner, Brattstrom, Magnusson, Bjork, 2019].

5. Preliminary conclusions and implications

Lean and frugal innovations are likely to deviate from the concept of economical innovations and move towards a closer association with with the concepts of sustainable innovation. Whether there is a good case for differentiating innovation approaches, is a debatable issue. As a preliminary theoretical attempt at coneptualization, this paper sets a number of research questions and illustrations to be discussed and detailed. Will sectoral and technological specifics become more significant? Or more universal approaches and methods will become more prevalent? To which extent the sustainability perspective becomes central? How to accentuate broader sustainability principles in initial settings of business models based on lean and frugal innovations? What will be the balance of societal and technological factors in business models future transition trajectories in such cases as the current rise of micro-mobility?

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The Role of Islamic Finance in the Relationship Between Culture and Innovation Among Technology Start up in Malaysia: Grounded Theory Approach

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Abstract:
The objectives of this study are to explore: (i) entrepreneur profile of technology start-ups (TSs), (ii) ethnic culture issues of TSs, (iii) innovation issues of TSs, (iv) government interventions issues of TSs, (v) ethnic group's preference of Islamic Finance of TSs. The study employs grounded theory as the main methodological approach to analyze primary data. We conducted a semi-structured interview with technology entrepreneurs, government agencies, industry associations, venture capitalists and leading accelerators. The study finds culture to be an impediment to innovation. Factors such as collective culture and herd mentality behavior were identified as barriers to innovation and fear of failure was attributed to low entrepreneurial innovation. Entrepreneurial attitude on the other hand was identified as a significant quality that is positively related with innovation among technology start-ups. Data analysis reveals that technopreneurs who display positive attitude, determination, perseverance and self-efficacy are more likely to display some form of innovation in their start-up. These technopreneurs were more likely to be financed by venture capital funds and private or angel investors.

Keywords: *Innovation, Technology Start-Ups, Culture, Islamic Finance, Entrepreneurship, Malaysia, Grounded Theory, Technopreneurs*

1.0 Introduction

The Global Entrepreneurship Monitor (GEM) 2015/16 report ranks 62 countries on various entrepreneurship dimensions, where Malaysia scores high on financial development, infrastructure and entrepreneurship ecosystem. This study is an extension of the body of knowledge in the area of start-up financing and technology entrepreneurship in Malaysia. To the best of our knowledge, there are no previous studies that examine or measure the role of financing especially Islamic Finance among techno-entrepreneurs in Malaysia. The objectives of this study are to:

1. explore ethnic culture issues of TSs,
2. explore innovation issues of TSs,
3. explore various ethnic group's preference of Islamic Finance.

2.0 Literature Review

Entrepreneurship and innovation have a strong and direct correlation. Schumpeter (1934) was one of the early scholars to explain this relationship. His innovation theory explains how entrepreneurs challenge the status quo and disrupt the economy. Cultures that value behaviours like risk-taking and independent thinking uphold a tendency to develop and introduce drastic innovations.

Herbig and Miller (1992) show a negative relationship between collective cultures and early stage entrepreneurship. Individuals in collective cultures are more likely to belong to a group that looks after them in exchange for loyalty (Soares et al. (2007), whereas individuals in individualistic cultures look after themselves and their immediate family independently. Turró et al., (2014) strongly argue that innovation is a key determinant not only for firms' performance,

but also for national economic performance. Recent studies have tried to explain innovation in start-up firms in relation to culture, ethnicity and government role in formulating effective policies.

3.0 Methodology

This study employed semi-structured interviews with 17 respondents who are technology entrepreneurs, executives from governmental bodies, regulators and financiers. We used grounded theory to analyse our interviews data.

4.0 Research Findings

This section divided the discussion into 3 sub-topics namely, (i) Ethnic culture, (ii) Innovation, and (ii) Financing.

A. Ethnic Culture (EC)

The visibility of cultural traits among Malaysian entrepreneurs varies in degree from person to person. The five factors below shed light on cultural traits and their variability:

Cultural Attitude: Cultural attitude refers to cultural practices that are dominant over all groups, regardless of ethnicity; these practices may be present in other Asian cultures as well. **Competition:** Respondents stressed out that fair competition practices among ethnic entrepreneurs is important. **Diversity:** Respondents touched upon diversity from different perspectives: the need for ethnic diversity among Malaysians, the need for diversity in the workplace. **Ethnic Entrepreneurship:** Respondents acknowledged that Chinese Malaysian entrepreneurs have an edge over the other Malaysian groups for many reasons. **Start-up Culture:** A new culture have emerged: a culture that encourages risk taking and shows less ethnic bias. Such culture brings higher efficiency, faster work rhythms and open communication.

B. Innovation

Respondents listed seven innovation factors as follow:

Commercialization: Respondents emphasised commercialization as an end goal for innovative ideas and new ventures. **Entrepreneurship Spirit:** The influence of entrepreneurial spirit on cultural and economical advancement in recent years has been evident through the rapid growth of TSs in many countries. **Incubation:** Incubators provide services to support startups at the early stage of their existence, they provide training, coaching, mentoring, working space and other resources as per the incubator mandate. **Innovation Culture:** Incubators play a fundamental role with start-ups in building their first Minimum Viable Product (MVP), or what is commonly referred to as a prototype. **Innovation Strategy:** Respondents acknowledge that there is an innovation gap, where, there are innovators but they are not plugged into the ecosystem, and there is no channel of communication with them.

C. Financing (F)

Respondents revealed 8 financing factors related to conventional and Islamic financing perspective:

Access to Finance: Respondents believed that access to finance constitutes a challenge at various growth stages, from inception to growth and expansion and it increases in importance at the growth stage. **Angel Investors:** Respondents are of opinion that there are low engagements from angel investors in Malaysia. **Co-investment Programs:** Respondents assert that public investments are more likely to yield better results if co-invested with private funds and venture capital funds. **Private Sector:** The involvement of private sector in the TS sector could provide a new source of liquidity, expertise and infrastructure. **Seed Funding:** Lack of seed funding is one of the most prominent financing challenges for growing startups in Malaysia, with series B being more challenging to secure. **Venture Capital:** Respondents pointed out that most venture capital firms invest in traditional businesses in a traditional manner, therefore lacking the venture capital approach and knowledge of IT-based businesses, which could increase risk and financial losses. **Islamic Finance Competitiveness:** Respondents stated that most banking sector customers tend to benchmark Islamic Finance Institutions (IFI) to conventional institutions. **Shariah Tech Funds:** Respondents believed that Islamic fashion, halal and the Islamic market overall is one of the largest in the world today.

5.0 Discussion and Conclusion

Building and developing innovation culture seems to be a significant contributor to building a supportive entrepreneurship ecosystem. One could conclude that innovation culture is one of the essential pillars in building a conducive entrepreneurial environment that encourages innovation and tolerate failure. Startups that are able to commercialize their ideas and demonstrate market traction are able to secure financing from private investors and venture capital. The study recommends government agencies to focus on supporting innovative ideas and entrepreneurial spirit regardless of ethnicity and background. As for Islamic Finance, it seems that the majority of entrepreneurs indicate there is a lack of awareness of IF. Indeed, IFIs' should be more aggressive and contribute to real economic activities and to the development of fair and just financing.

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The Impact of Innovations on Enterprise Productivity in Russia

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Abstract:
This paper investigates the factors behind innovations and the effects of innovations on firms' productivity based on the CDM model, using BEEPS data for 2012-2014 on the Russian companies. We consider a range of firms' characteristics and a number of exogenous factors, such as institutional climate, human capital, and government involvement. It is confirmed that business environment and state policy substantially affect firms' innovation activity. A range of problems of innovative activity of the Russian firms are revealed. First of all, there is underdevelopment of institutions, not high enough quality of human capital, low competition and inefficient government spending. In addition, cooperation of large and small firms should probably be more intensive, since small firms often require financial support and since the amount of time needed to implement an innovative project can be too long for small firms. It is worth taking into account that quality of institutions is important for innovation activity and improvement of conditions for human capital on the enterprise and regional levels facilitates innovations.

Keywords: *Innovations, R&D, CDM Model, Firms, Business Climate, Productivity, Human Capital, Compet-Itiveness, Social Capital*

1. Introduction

Innovations are important for productivity of any firm as well as for overall economic growth of regions and countries. In this paper, we study the effects of innovations on firms' productivity. We employ micro-level dataset of the Russian firms based on the BEEPS survey. Three-stage CDM model is used. We consider a range of firms' characteristics and a number of exogenous factors, such as business climate, human capital, and governmental support. In particular, we assess the impact of the introduction of different types of innovations on the performance of firms. We also reveal, which factors are essential for the firms' capacity to develop and implement innovations. It is assumed that not only internal, but also external determinants, such as competition and barriers to business activity, substantially affect firms' innovation activity.

2. Background and the existing research

Interconnection between innovations and productivity has been well discussed over the past decades. In this section, we present several papers relevant for our research.

First, the paper fundamental to our study is contribution of the researchers Crépon, Duguet and Mairesse (Crépon et al., 1998). They have developed a CDM-model (Crépon-Duguet-Mairesse model), which links the intensity of R&D, introduction of innovations and productivity in a single chain. The CDM model developed in the original version consists of 3 stages. At the first stage, firms decide whether and how much to invest in R&D. The main factors of R&D are the size of firms, industry, diversification, market share, as well as demand and technology. At the second stage, the innovative result depends on investment in R&D. At the third stage, the connection between innovation and productivity is explored.

Various forms and modifications of the original CDM model were suggested depending on the purpose of the study. In addition, the innovation indicator has been measured differently in different works. For example, Lööf et al. (2003) and Janz et al. (2004) took innovative sales per employee of Swedish and German firms as innovative result; Hall et al. (2008) and Duguet (2006) measured innovations as the probability for Slovenian firms to introduce various types of innovations (product, process, etc.).

3. Data and methods

The focus of this study is to address the endogeneity of innovations performed by the firms. With this in mind, we have chosen CDM model as the main tool for the analysis.

We employ data from the Business Environment and Enterprise Performance Survey (BEEPS) conducted by the World Bank and the European Bank for Reconstruction and Development for 2012-2014 on firms from transition countries. This survey involves 1564 manufacturing enterprises from 37 regions of the Russian Federation.

We found that the most appropriate model for the first step of the CDM model is the negative binomial regression. At the first stage, the following factors of influence were identified: 1) the external factors – competition, import, business environment conditions; 2) the individual characteristics of firms – age, size, being a part of a large association or enterprise.

At the second stage we decided to use four classic types of innovation - product, process, organizational and marketing. Given the binary nature of the dependent variables, the equations will be estimated using the probit model.

When studying the types of innovations, the question arises as to what extent they are substitutes or complements for each other. So we decided to construct the most likely combinations of types of innovations.

For the evaluation of the third step, the standard Cobb-Douglas production function was chosen. The dependent variable is revenue per employee.

4. Empirical results and conclusions

In general, the results of CDM model showed that the return on investment in R&D is significant for innovations, and all types of innovations are positively significant for labor productivity. In particular, investing in R&D becomes more significant for the joint probability of the types of innovations, which indicates greater efficiency from the introduction of several types of innovations.

Our results confirm that it is important to develop competitive environment and minimize monopoly power. Also it's necessary to simplify bureaucratic procedures for business so that start-ups and small firms could work on the market. As far as human capital and R&D are concerned, it is important both to pay attention to fundamental science and education, and to aim education at the needs of innovative enterprises. Moreover, cooperation of large and small firms should probably be more intensive, since small firms often require financial support and since the amount of time needed to implement an innovative project can be too long for small firms.

In the near future, we are going to investigate the impact of social capital on innovation, that is how the level of trust and ways of interaction between people contribute to innovative success. For this purpose, BEEPS data and World Value Surveys at the regional level will be used.

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Technological Entrepreneurship - the Driver of Emerging Markets

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Abstract:
The purpose of the present work is to analyze the experience of implementing a joint student's projects of two universities - RANEPA and MIPT to create conditions for development of technological entrepreneurship, training personnel capable of working in a multi-tasking environment, and forming a community of future leaders of emerging markets. The projects based on a mechanism for developing and implementing marketing decisions on positioning technology projects, developing cooperation between innovative project developers and marketing specialists. The focus of 11 technology projects is diverse and reflects the current trends of the digital era: from the development of chat bots and hydrophones to post-quantum data protection technologies and gamified education of schoolchildren.

Keywords: *Technological Entrepreneurship, Multi-Tasking Environment, Emerging Markets, Development of Chat Bots, Post-Quantum Data Protection Technologies, Gamified Education*

A special role at emerging markets in the new conditions belongs to technological entrepreneurship. Its main difference from traditional business activity is to define the goal of innovation, which, in the classical sense, is the realization of the idea and the launch of a new product on the market, driven by consumer demand in order to gain business benefits in the form of profit. A feature of technology entrepreneurship is not meeting existing demand, reducing costs and maximizing profits, but forecasting future consumer demands that can be met on the basis of the latest high-tech technologies through the development and implementation of innovative products and technical developments. As a rule, technological entrepreneurship is realized in the form of start-ups, identifying the target audience, forming a new user request and obtaining a positive cash flow can take a longer time. The result of the implementation of projects in the field of technological entrepreneurship is the creation of new markets, where new customer demands and innovative products meet the demand at a modern technical level and but it is a sign of emerging markets.

A special role in the development of competencies for the implementation of innovative start-ups belongs to universities, graduates of which must have skills in the new market conditions. The solution of the problem of preparing students and bachelors with maximum efficiency can be achieved with the joint participation of universities in various industries and activities. At the XI Congress of the Russian Union of Rectors, which took place in April 2018 in St. Petersburg, Russian President Vladimir Putin suggested that the best conditions for technology start-ups should be built on the basis of Russian universities, which should further contribute to the creation of successful high-tech companies. [1].

At present, on the basis of a number of Russian universities, together with business enterprises, an infrastructure has been formed for the creation and development of high-tech ideas, the commercialization and market launch of a new product. In particular, employees of the Faculty of Technological Management and Innovations at ITMO University (St. Petersburg) introduced the course "Innovative Economics and Technological Entrepreneurship" with the aim of developing entrepreneurial competencies among students. A feature of the course is the development of cross-cutting group projects proposed by real business and based on innovative developments of specialists of universities and research teams [2, p.16-18]. On the basis of the technical university in the city of Komsomolsk-on-Amur (KnAGTU) there functions a technopark, on the basis of which a full range of works is carried out from the creation of an idea to the implementation of scientific developments in high-tech industries [3, p.53].

An example of teamwork in shaping the skills of technological entrepreneurship of students is a project implemented by the Moscow Institute of Physics and Technology (MIPT) and the Russian Academy of National Economy and Public Administration under the President of the Russian Federation (RANEPA). On the part of the Moscow Institute of Physics and Technology, the masters of the department of technological entrepreneurship of the Moscow Institute of Physics and Technology, headed by the head of RUSNANO A. B. Chubais, from the RANEPA side, are students of the Department of Market Technologies at the Institute of Industrial Management within the framework of the Management Laboratory course.

The goal of the joint project of the two universities was to create conditions for the development of technological entrepreneurship, training young people who are able to work in a multitasking environment, and form a community of future market leaders. The joint work of students of two universities on projects contributed to immersion of specialists of various directions in the conditions of the modern market environment, the formation of not only a new innovative product, but also the calculation of financial indicators, competitive positioning in the market, the development of marketing solutions to ensure the product's marketing promotion.

Eleven technology projects developed jointly by students from two universities were presented in the competition. The focus of the projects was diverse and reflected the current trends of the digital era: from the development of chat bots and hydrophones to post-quantum data protection technologies and gamified education of schoolchildren. The projects represented not only ideas, but also real technologies and products that were ready to enter the market. Within the framework of the project development, each group solved the following tasks: study of the potential consumer of an innovative product and its problems, the solution of which will be promoted by the proposed product; drawing up a brief description of the product from the user's point of view; testing of the prototype of the future innovation product for potential customers (customer development), determination of material and financial resources, sources of their replenishment, calculation of financial indicators of the project.

The winners of the competition are projects:

- the STEM FIGHT project, offering to market a unique educational mobile application, the purpose of which is to increase user involvement and the degree of development of educational material on the subject (physics) by introducing the Game Based Learning approach. The product is a mixed mix of interactive lecture and game. The use of innovation allows the student to master the theory of the subject more deeply, and also to understand how physical processes should be applied in real life.
- the project to create a crypto library with post-quantum algorithms. The B2B market segment project allows users to provide storage and reliable protection of confidential data through a crypto library running on post-quantum algorithms, and also provides users with service support and the provision of consulting services for embedding a library into an organization's information system.

The proposed innovative product, according to the developers, may be of interest to a wide range of users - from government agencies and commercial enterprises to individual entrepreneurs and start-ups in emerging markets.

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Improving Lives of the Managers by Making Investment on Development of Greater Psychological Resources: Curvilinear Relationship Between Job Autonomy and Job Stress

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Abstract:

This study examines the moderating role of psychological capital in the nonlinear relationship between job autonomy and job stress. The researchers collected the data from six hundred and eighty-eight (N = 688) financial services employees using the time-lagged method from an emerging market. Multiple hierarchical regression analysis was used to test the hypothesis. The results depicted the curvilinear relationship between job autonomy and job stress. Furthermore, it depicted a negative relationship between psychological capital and job stress. The results also show support for the moderation of psychological capital in the curvilinear relationship between job autonomy and job stress. The scientific endeavor at hand has indicated that (i) the moderate level of job autonomy may be more beneficial to employees, (ii) a reasonable level of job autonomy might intrinsically motivate the employees by making the job meaningful, interesting and enjoyable, hence experiencing less job stress, (iii) too high job autonomy is beneficial in decreasing stress only for employees who possess higher psychological capital.

Keywords: *Job Autonomy, Psychological Resource, Job Stress, Emerging Market, Job Design, Non Linear Relationship*

Introduction:

In today's competitive and dynamic global world, organizations are keen on decreasing job- related stress among their employees (Abbas & Raja, 2015). Job autonomy is considered as an important resource to deal with unstructured & complex jobs. Job autonomy is defined as "the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out" (Hackman & Oldham, 1976. P. 258). By and large, researchers suggested that job autonomy is positively related with wanted outcomes like organizational commitment and negatively related with undesirable employee wellbeing outcomes like Stress (Humphrey, Nahrgang, & Morgeson, 2007). Despite of the fact that most of studies have found adverse relationship between job autonomy and job stress, few recent studies have revealed that employee may perceive greater job autonomy as an additional stressor (Kubicek, Korunka & & Tement, 2014). Non-linear relationship between job autonomy and job stress is still not studied. Greater job autonomy is also associated with more planning, scheduling and decision making requirement. To meet these extra challenges employee may also have needed greater psychological resources. In this study, I will use framework of COR (Conservation of Resource) theory (Hobfoll, 2011) to argue that psychological capital will act as "a solid reservoir" (Hobfoll, 2002: 318) to reduce the negative effect of greater job autonomy.

Literature Review:

The Vitamin Model (Warr, 1990 & 1994) had challenged this assumption that job autonomy is generally beneficial. This model argues that taking vitamins is beneficial for health till a certain level, but if you take vitamins beyond a certain limit. It may have damaging effect on physical health instead of positive effect. Same is the case with job characteristic, as level of job autonomy increases employees may have feeling of more responsibility of making decision, strategy etc.

Greater job autonomy is also associated with more planning, scheduling and decision making requirement. To meet these extra challenges employee may also have needed greater psychological resources. In this study, I will use framework of COR (Conservation of Resource) theory (Hobfoll, 2011) to argue that psychological capital will act as "a solid reservoir" (Hobfoll, 2002: 318) to reduce the negative effect of greater job autonomy. Employee having positive psychological capital may perceive greater job autonomy as motivator. While employees who have low psychological capital may perceive autonomy as a stressor.

Hypothesis 1: There is a U shaped relationship between job autonomy and job stress.

Hypothesis 2: Psychological is moderating the U shaped relationship between job autonomy and job stress.

Methodology:

The researchers collected the data from the counter employees of eight financial services firms located in three big cities in Pakistan. The researchers distributed and collected the questionnaire using the self-administrated method via three subordinates. Assurance of confidentiality and anonymity was given. All respondents had enough knowledge of the English language as the medium of instruction was English in firms as well as in the universities of Pakistan. The scale used for the questionnaires was a measurement from one (strongly disagree) to five (strongly agree). In the first phase, I distributed the questionnaires for assessment of job autonomy and demographics (gender, age, and qualification). All possible responses were attained within one week after distributing the questionnaires.

The second phase of data collection initiated four weeks after receiving surveys of job autonomy. In the second phase, I distributed the questionnaires for assessment of psychological capital with the time gap of four weeks. The third phase was completed with the time lag of four weeks after receipt of the completed psychological capital questionnaire. In the third phase, I distributed the questionnaires for measuring job-related stress. I received 688 properly filled questionnaires. Therefore, the response rate was 42%. Of these respondents, 75% were male and 25% female. Of these respondents, 26% had secondary, 47% intermediate and 26% were university graduates. Of these respondents, 50% were aged 18 to 30 years, 45% aged 30 to 40 and 5% were above the age of 40.

Perceived Job Autonomy

Perceived job autonomy was assessed by nine items validated by Morgeson and Humphrey (2006). Job autonomy questionnaire consists of three subscales of Work design questionnaire: work method autonomy (3 questionnaire), decision making autonomy (3 questionnaire), and work scheduling autonomy (3 questionnaire).

Psychological Capital:

Psychological capital was assessed by 12 items shortened questionnaire developed and validated by Luthans, Avolio et al. (2007). Original version of questionnaire consists of 24 items, 6 items of each dimension. Shorter version of questionnaire consists of self-efficacy (3 items), Hope (4 items), resilience (3 items), optimism (2 items). All Items were measured on 1(strongly disagree) to 5 (strongly agree).

Job Stress:

Job stress was assessed by shortened version of 9 items, originally 13 items developed by Parker & DeCotiis (1983). This scale was used in Pakistani settings (Abbas & Raja 2015).

Control Variable:

The researchers used One-way ANOVA for controlling the effect of demographics variables on job stress. The One-way ANOVA reflected qualification ($f = 5.52$, $p < .01$) and age ($f = 3.47$, $p < .03$) had significant impact on job stress. Other demographics factors did not have any significant impact on job stress.

Descriptive:

Table 1

Standard Deviation, Mean, Alpha Reliabilities Univariate statistics and Pearson Correlation

Variables	**Mean**	**Standard Deviation**	**1**	**2**	**3**	**4**	**5**	**6**
Gender	1.25	.44						
Qualification	2.0	.72	-.23**					
Age	1.55	.59	-.05	.08				
Job autonomy	3.03	1.13	-.04	.03	.06	(.77)		
Psychological Capital	3.24	.91	.03	-.02	.05	.11**	(.71)	
Job stress	2.70	1.30	.01	-.11**	-.09*	.-14**	.-17**	(.88)

n=688: Alpha reliabilities had presented in Parenthesis

** *P <0.01 *P <0.05*

Table 1 consists of mean, standard deviation, correlation, and alpha reliabilities. The age and qualification had the negative correlation with job stress. Job autonomy had the negative correlation with job stress (r = •.11, p <.05) and had a positive correlation with psychological capital (r =.268 p <.01). Psychological capital had the negative relationship with job stress (r = .17 p <.01). These outcomes provide initial support to our hypothesis that job autonomy and psychological capital have the negative correlation with job stress.

Hierarchal Regression Analysis Model:

Multiple hierarchical regression analysis was used to test the curvilinear relationship between job autonomy and job stress as suggested by Aiken, West & Reno (1991). Moderation of psychological capital was analyzed by using the regression analysis procedure as proposed by

Aiken et al. (1991). Table 2 presents the results of multiple regression analysis values. In the first step, I measured educational qualification and age as a control variable, and results had shown a negative relationship between qualification and job stress (b = -.203, p < .01). The significant negative relationship between age and job stress appeared (b = -.20, p < .05)

TABLE2

Moderated Hierarchal Regression Analysis Results

	Dependent variable	**B**	**Change In R**	**ΔF**	**DF**
Step 1	Qualification	-.19**	.021**	7.2**	685
	Age	-.20*			
Step 2	Job autonomy	-.15***	.018***	12.5***	684
Step 3	Job autonomy Squared	.17***	.023***	16.9***	683
Step 4	Psychological Capital	-.22***	.025***	18.4***	682
Step 5	Job autonomy X Psychological Capital	-.12*	.008*	6.3*	680
Step 6	Job autonomy Squared X Psychological Capital	-.15**	.014**	10.9	681

Dependent variable =Job stress

N=688,

**P <.05,*

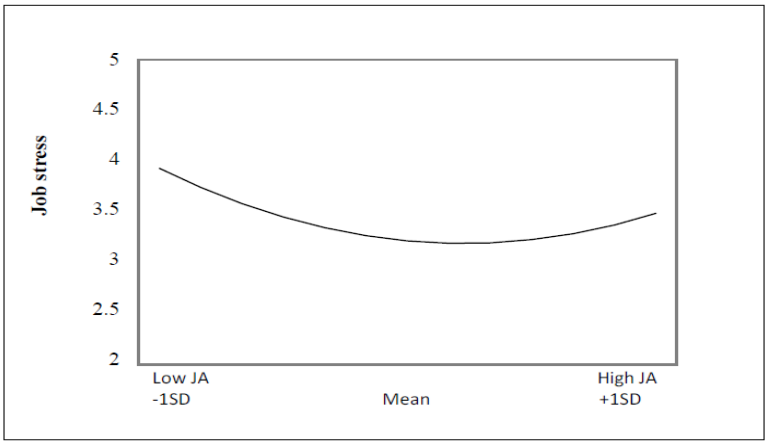
***P<.01,*

****P<.001*

The researchers included job autonomy in the second, squared job autonomy in the third and the psychological capital in the fourth step of regression analysis. In the fifth step, the product term of job autonomy and the psychological capital were embedded to check the moderating effect of the psychological capital in the linear relationship between job autonomy and job stress. In the sixth stage, the interaction term of job autonomy squared and psychological capital was used to check the moderation of the psychological capital in the curvilinear relationship between job autonomy and job stress. The results rendered support to our hypothesis as follows:

Job autonomy had a negative relationship with job stress (b = -.15, p < .001). Job autonomy also had a curvilinear relationship with job stress (b = .171, p <.001). Figure 1 shows the plotted curvilinear relationship between job autonomy and job stress.

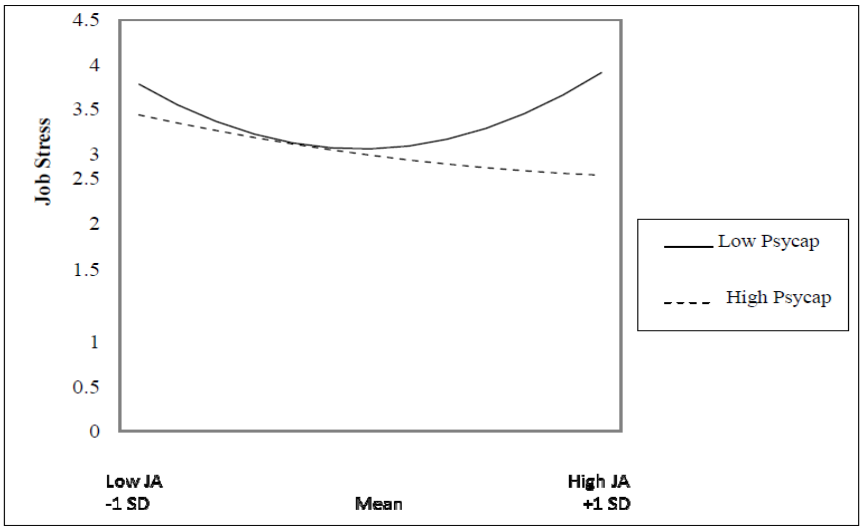
Figure 1



JA= Job Autonomy

Psychological capital had a negative relationship with job stress (b = -.224, p < .001). The psychological capital moderated the linear relationship between job autonomy and job stress (b = -.116, p < .05). The psychological capital had also moderated the curvilinear relationship between job autonomy and job stress (b = -.14, p < .01).

Figure 2



Psycap = Psychological Capital

JA= Job Autonomy

Results:

The study data results proved that job autonomy was perceived as motivator till a certain level. Data results also proved that too much job autonomy even perceived as job stressor instead of a job resource.

So these results suggests, that too much as too little job autonomy increase stress level. However to find an optimal level of job autonomy future researchers are suggested to repeat the study in different context, regions and industries. Future researchers are also suggested to test the curvilinear relationship of job autonomy with different employee outcomes.

These results proved that employee with greater psychological capital have less chances of experiencing job level stress. This study also suggests in the lines of past studies that higher psychological capital is a good source for combating stress full events at job.

Future direction for research:

To find an optimal level of job autonomy researchers are suggested to repeat the study in different context, regions and industries. Future researchers are also suggested to test the curvilinear relationship of job autonomy with different employee outcomes.

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Entrepreneurial Leadership: an Analysis Based on Review Articles

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Abstract:
Entrepreneurial leadership, as a new concept of research, has recently become increasingly popular among scholars and practitioners, both in the field of entrepreneurship and in the field of leadership. The purpose of this study is to provide an analysis of main research on entrepreneurial leadership theory and empirical research published in academic journals from 2004 to 2018. The analysis identified the stages of development, main directions of entrepreneurial leadership studies and research areas in which entrepreneurial leadership logic has not been studied yet. Entrepreneurial leadership is still evolving, lacks definitional clarity and has not yet developed appropriate tools to assess it characteristics and behaviours. The conceptual and empirical papers in this Special Issue address some of these limitations by consolidating existing embryonic theory development, stimulating new conceptual thinking and highlighting unanswered questions and opportunities for further research.

Keywords: *Entrepreneurial Leadership, Leadership, Entrepreneurship, Literature Analysis, Leader, Entrepreneur*

1. Introduction

The concept of entrepreneurial leadership originated at the junction of two scientific schools: entrepreneurship and leadership, therefore, for a better understanding of the main provisions of EL, the paper briefly discusses the origins of the concept of EL, both from the position of entrepreneurship and from the position of leadership theory and their mutual influence on the conceptualization of EL.

2. Method of articles selection

The selection of articles on entrepreneurial leadership was carried out through the use of Scopus and Web of Science databases to search for the keyword “Entrepreneurial Leadership” and further clarify the relationship of articles to the subject area of management and entrepreneurship. As a result, 93 articles were selected.

The increase in the number of articles and citations indicates high interest of the academic community in EL (Figures 1, 2). The average number of citations of one article devoted to EL, according to the Web of Science, is 9, h-index is 14, which is quite high for research in this area.

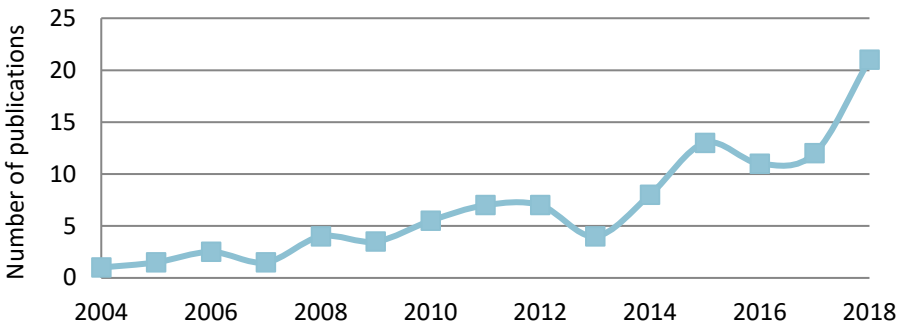

Figure 1. Dynamics of the publications number on entrepreneurial leadership from 2004 to 2018 (according to Scopus and Web of Science)

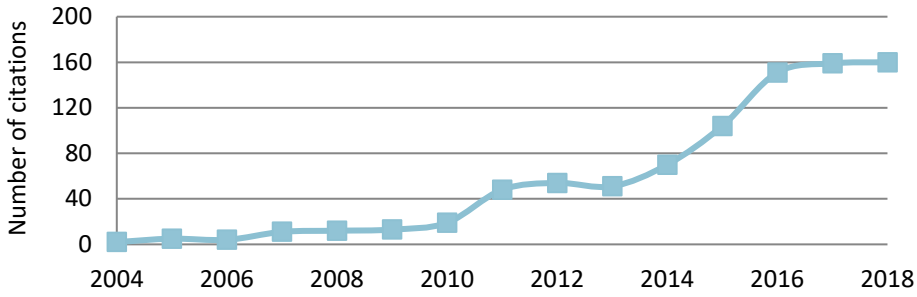

Figure 2. Dynamics of the number of citations of articles on entrepreneurial leadership (according to Web of Science) from 2004 to 2018.

Most publications on entrepreneurial leadership are theoretical and are based on the construction of theoretical models or represent research using qualitative methods. Only one fifth of the publications studied is devoted to empirical studies using quantitative methods.

3. Discussion

The focus on studying entrepreneurial leadership has traditionally been twofold, depending on whether the theory of entrepreneurship or the theory of leadership is the starting point. For some authors, entrepreneurial leadership is simply a type of leadership that manifests itself in certain conditions, such as starting a new business or operating a small, fast-growing enterprise. Such a perspective, admittedly, implies a unidirectional transfer of concepts from the field of leadership to entrepreneurship [8].

For other scientists [3; 7] the world is at the center of the "entrepreneurial revolution", and entrepreneurship is an "integrated concept that permeates our society and individuals in an innovative way". Entrepreneurship becomes the essence of leadership. The leader in terms of entrepreneurship is a manager (entrepreneur) who is able to recognize opportunities, create a vision and mobilize key holders of resources to realize their vision and create values [4, 6]. This new generation of entrepreneurs is innovative, who understand how to cope with risks and uncertainty, and are active to maintain growth.

These diametrically opposed views on entrepreneurial leadership force theoretically to fix the concept either in leadership theory or in the field of entrepreneurship. This perspective does not take into account the comprehensive set of behaviors, the complex interaction with other stakeholders and the context, as well as the dynamic nature of the phenomenon as a whole. Many authors [1, 2, 5, 9,] agree that entrepreneurial leadership exists at the intersection of entrepreneurship and leadership, and in order to get the maximum benefit, it is necessary to proceed from a cross-sectional study of both areas.

4. Conclusions

Based on review articles, the following can be identified as future directions:

1) Expansion of elements of the EL analysis, including the individual entrepreneur-leader, a team of business leaders and inter-organizational and dynamic relationships between them. This is based on leadership as a collective activity based on the practice of many members of the organization, rather than individual leaders. and contributes to a more holistic understanding of EL.

2) For further research on entrepreneurial leadership, it is also necessary to pay special attention to the organizational context in a wide range of entrepreneurship and SMEs (size, stage of development, industry).

3) From the perspective of the cultural context, given the prevalence of Anglo-American models and structures, research is needed on how entrepreneurial leadership is understood and varies within countries and regions, as well as between them.

The analysis of research papers on EL leads to the conclusion that the development of the concept of entrepreneurial leadership is at an early stage of development, which is characterized

by a focus on conceptual work, a lack of consensus among researchers in defining entrepreneurial leadership and a limited number of proven tools for assessing its characteristics.

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Concentration of Russian High Tech Business: Regional Differences and Key Determinants

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Abstract:
Paper deals with regional factors of High Tech business development in Russia. Empirical basis is presented by SPARK database and official regional statistics. High Tech companies were selected using formal classification introduced by Rosstat. 2016 data were used. The results of analysis of general sample of High Tech companies revealed their high regional heterogeneity; the majority of firms operate in 3 out of 81 analyzed regions. Differentiation was also confirmed with the help of suggested special coefficients which reflect regional concentration of High Tech business. Influence of regional environment on high tech entrepreneurship was studied within 5 groups of factors including regional economic profile, labor, investment and innovative potentials and digital infrastructure. Special statistical indicators were chosen for each group. It was proved that such factors as high level of manufacturing industries, high share of employees with secondary professional education, availability of PCs, employees' involvement in R&D and technological innovations have positive significant influence on the development of regional High Tech business.

Keywords: *High Tech Business, Regional Differentiation, Research and Innovation Potential of Region, Regional Concentration*

1.Introduction

Modern technological patterns and rapid development of digital economy determine special role of high tech (HT) and knowledge intensive (KI) companies. In 1990 American HT sector demonstrated growth rates 4 times higher than the whole US economy (Cortright, Mayer). Creation and development of HT companies depend on different characteristics of external environment; many of them deal with regional conditions(Li et al.) Presence of HT business in the region to some extent reflects level of regional economy development.

These tendencies could be clearly observed in Russian economy. Unfortunately Russia is not included to the group of countries leading on HT sector development. Its share in GDP was about 22% in 2016 which is higher than in previous years but much lower than in Eastern Europe and BRICS countries (Barinova et al.).

The main goal of our research is to assess regional differentiation of HT business in Russia and to determine regional environment factors which are significant for its development.

2. Research motivation

Geographical heterogeneity of HT business development is discussed in many publications. In most cases researchers distinguish manufacturing industries and KI services and pay attention to cross country and cross regional differences. HT business has complex nature and its development demonstrates complicated and sometimes controversial tendencies.

About 4600 HT manufacturing companies were counted in 2014 in 28 EU countries. The majority of these firms (53%) were located only in 4 countries including Germany, Britain, Italy and Poland [2].

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[2]High –tech statistics – economic data Statistics Explained (http://ec.europa.eu/eurostat/statisticsexplained/) - 12/06/2018 7

Significant regional differentiation of high tech production development in the US regions was found (Cortright and Mayer, Hathaway). Specific country factors influencing innovative startups were determined using OECD companies data presented in CRUNCH data base (Breschi et al.)

It should be noted that not all researchers confirm importance of territorial heterogeneity. It was shown that regional conditions are not so important for fast growing British companies (Du, Bonner).

Most publications are concentrated on the analysis of HT companies influence on regional entrepreneurial environment, while rather few of them deal with opposite relationship. Many researchers prove that market access, labor availability, knowledge and technologies flows are important for HT companies' growth. Positive influence of mentioned factors is explained within various theoretical approaches while empirical evidences are rather controversial.

Influence of selected elements of regional environment on HT business is analyzed in our paper.

3. Empirical basis and general characteristics of the sample

Regional economy indicators were taken from Russian official statistics, SPARK database was used as a source of information on companies. Level of HT business development in regions was determined basing on companies'performance measures. Formal classification introduced by Rosstatwas used for HT companies' selection.

Sample was formed basing on 2016 data, only companies which had turnover more than 120 mln. rubles per year were taken into account. Total number of companies was 11867 and their turnover was 19 829 bln. rubles.

Companies which were included to the sample represent 81 regions of Russian Federation. The highest number of firms is registered in Moscow (4131), the second place belongs to St Petersburg (1423) and the third -to Moscow region (746). Three regions host more than 50% of HT companies.

The structure of our sample fully confirms regional heterogeneity of Russian HT business. The performance models and results are also very different for companies from different regions.

As Russian regions have different size, economy's structure and other characteristics it is reasonable to compare those using relative indicators instead of absolute ones. Many researchers use various types of location quotients which compare selected relative indicator estimated at regional level with the meaning calculated for the whole country. We used this instrument and introduced regional coefficient of HT business concentration for the region i.

$$\text{Regional coefficient of HT business concentration}_i = \frac{\dfrac{\text{Turnover of HT business in region}_i}{\text{GRP}_i}}{\dfrac{\text{Tutnover of HT business in Russia}}{\text{GDP}}}$$

Therefore regional coefficient of HT business concentration shows the difference between relative turnover of HT companies in region and similar indicator in the country (at national level it is 0,23).

Values of this coefficient turned out to be very different. Leading place is occupied by Kaluga region where the coefficient is 4,79. Partly this could be explained by the development of automobile cluster at this territory. Moscow and St Petersburg also are included in the group of leaders, with coefficients being 2,51 and 2,24 respectively. However Moscow region took only 12-gth place with the coefficient being 1,36. In total 21 regions have coefficient more than 1;6 of are characterized by coefficients more than 2. At the same time more than 60 regions demonstrated rather low values (less than 1).

4.Research methodology

Approach suggested in the national report "HT business in regions of Russia" (Barinova et al.)was used in our research. 5 elements of regional environment related to business development

are defined. They are: general characteristics of regional economy - regional profile, investment, labor and innovative potentials, digital infrastructure. Official statistic's data were used as quantitative indicators of each element's development.

According to our basic hypotheses HT companies grow up successfully in the regions where these elements are well developed and therefore form favorable environment for HT business.

Level of HT business development measured as share of HT companies' turnover in GRP was taken as dependent variable while all regional indicators were used as independent ones. OSL method was used for the analysis of existing relationships.

Our estimations confirm that characteristics of regional economy and HT companies' results are related. Rather high levels of $R^2$and general constructed models significance indicators illustrate this statement.

All five selected elements of regional environment have influence on HT business development at regional level. However not all indicators included in analysis turned to be significant.

5.Results and conclusions

Our econometric analysis revealed that certain regional factors have positive significant influence on HT production in region. The set of such factors includes: high level of manufacturing industries share, availability of employees with secondary professional education, availability of PCs, employees involvement in R&D and technological innovations. Such factors as high share of extracting industry and per capita investments to fixed assets also turned to be significant but their influence is negative. The most significant influence deals with characteristics of research and innovation potential.

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Healthcare Innovation Development in Countries with Emerging Economy

Losses of Russian Regions from Mortality Due to Sharp Climate Fluctuation

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Abstract:
The ecological problem is particularly acute in emerging markets due to the lack of attention to environmental protection against the background of ensuring stable high rates of economic growth. Climate change in Russia is significantly higher than the world average. The paper is an attempt to determine the economic losses of the regions of Russia from the mortality of the population of working age. The unit for data collection was Russian cities with a population of over 50,000 people. Climate change refers to air temperature fluctuations in extreme ranges (colder than –30°C, and hotter than +25°C) from 1997 to 2017. The data on mortality are collected by groups of patients most sensitive to sharp climate fluctuations: cardiovascular diseases, coronary heart disease, and respiratory diseases. Losses of the gross regional product from mortality of the population at working age (from 14 to 60 years) for 82 constituent entities of the Russian Federation are estimated. There are regions where there is a statistically steady increase in the number of days with extreme temperatures per year in the last 20 years of meteorological observations. Based on the analysis of an array of publications in peer-reviewed journals of the Scopus and WoS databases devoted to studies of the effects of temperature anomalies on a person's life, the authors of this article have identified the most important directions for developing regional development strategies with regard to improving the quality of life and sustainable growth objectives.

Keywords: *Climate Change; Mortality; Loss of GRP; Weather; Emerging Market, Extremely Hot and Extremely Cold Temperatures*

Introduction

Great interest in the topic of the influence of weather on certain regions of different countries has arisen since the late 1990s. Observations of the temperature of the air on the surface of the Earth show that warming in Russia is greater than global warming. According to observations provided by the meteorological network of Roshydromet, the warming in Russia for the last 100 years (1907–2006) was 1.29°C, while global warming for the same period was 0.74°C. The purpose of this paper is to assess mortality losses in populations at risk for pulmonary and cardiovascular diseases for the economy in the regions of the Russian Federation from 1997 to 2017, which would attract attention and provide a basis for developing strategies for "smart" regional development.

1. Research Overview

The authors conducted a three-step content analysis of an array of publications on the effects of climate change on various aspects of society, published in scientific journals included in the databases Web of Science (hereinafter - WoS) and Scopus. The initial selection was carried out using a multilevel filter for the keyword "weather", the source type «article» and thematic categories: for WoS - Management, Economics, for Scopus - Economics, Econometrics

and finance, Business, Management and accounting. The time period was 97 years from 1921 to 2018. The lower limit of the period is determined by the date of the first record, which satisfies the conditions of the specified filters. The total number of selected publications was 4561 papers (Skopus – 3106 and WoS – 1464).

The authors studied the effects of weather changes in three major areas: indicators of economic activity (Lanzafame, 2012), social processes (Goetzmann and Zhu, 2005) and personal characteristics (Asheim, 2006).

Another side of articled found that the number of days with extremely hot temperatures affects mortality in the US (Asheim, 2006). The following aspects of the topic addressed not enough studied in our opinion.

For empirical base of the study, the authors in most cases used panel annual data on temperature. Also, a little attention was paid to the effects of climate on human health.

In this regard, our interest has focused on identifying the impact of changes in air temperature on the health of the population of regions within a single country with a large territory – Russia. We chose the mortality rate that are subject to temperature fluctuations: coronary heart disease, circulatory system diseases, respiratory diseases.

2. Research database

The data on mortality was collected using open access to the data set of a United Interdepartmental Information and Statistical System from 1997 to 2017. In terms of causes of death, deaths due to cardiovascular, respiratory diseases, coronary heart disease and respiratory diseases.

The selection of temperature data was carried out using the data set of the All-Russian Scientific Research Institute of Hydrometeorological Information in the same period as above. The data collection was carried out from 1121 meteorological stations.

Data at the regional level were weighted by the population of the administrative collection unit for aggregation obtained. The number of days with extremely cold (-30°*C* and below) and extremely warm temperatures (+ 25°*C* and above) was calculated in each region.

A statistically stable upward trend in the number of extremely high temperatures was found in 6 out of 82 federal subjects. This has a particularly negative effect on people suffering from cardiovascular and respiratory diseases. Climate reduction is observed in regions where the number of extremely cold temperatures has statistically significantly decreased, there were 9 of them in 21 years.

3. Econometric modeling and assessment of the impact of extreme temperatures on the mortality of vulnerable populations in cities

The fixed-effect panel data model was used to assess the effect of hot and cold days on mortality in the three groups of people that were vulnerable to sudden temperature fluctuations.

$$Mortality_{rt} = \beta_1 Cold_{rt} + \beta_2 Hot_{rt} + \alpha_r + \lambda_t + \Psi Region * Trend + u_{tr}, \quad (1)$$

where:

- $Mortality_{rt}$ – the number of deaths for various reasons in the region *r* per year *t*;
- $Cold_{rt}$ - the number of days in the region *r* in the year *t* with a temperature below –30°*C;*

- Hot_{rt} – the number of days in the region *r* in the year *t* with a temperature above +25°*C;*
- α_r – fixed effect of region *r*;
- λ_t- fixed effects of year *t*;
- *Region* – dummy variable equal to 1 for the region in question and 0 for all others;
- *Trend* – linear trend;
- *Region*Trend* – individual trend for the region;
- u_{tr} – random error.

A significant dependence of mortality was found on low temperatures for all diseases, and for cardiac diseases, on high temperatures. At the same time, effect of high temperatures on mortality is stronger than cold. The same indicator for extremely low temperatures is 0.312.

The economic losses from mortality in the three vulnerable groups of the population were estimated only for the working age.

Due to the lack of data losses from mortality due to climate change were calculated only for the period from 2000 to 2017.

Economic losses were calculated as follows:

(2)

$$\text{losses}_t = \sum_r GRP_{rt} * LFP_{rt} * \text{average number of deaths}_{rt}$$

where:

t – year, r – region;

LFP_{rt} – the share of employed and unemployed by the total number of people aged from 14 to 60 years in the region *r* in the year *t*;

GRP_{rt} – gross regional product in the region *r* in year *t*.

Calculations are given in current prices and do not take into account the adjustment for inflation, the share of losses from GRP stably fluctuates around 0.6 - 0.7% annually, which can be considered as critical losses taking into account the overall growth rates of the Russian and world economy over the study period.

Conclusion

Our study confirmed the findings of previous researchers on the close direct relationship between the increase in the number of days with extreme temperature and the mortality of persons with respiratory and cardiovascular diseases. At the same time, an increase in the number of hot days is most dangerous for these populations.

The set of measures to prevent the negative economic consequences of climate change should include a variety of areas. The most obvious measures are the development of facilities and air conditioning systems for residential and industrial premises, increasing their accessibility for people, monitoring adverse weather conditions. In addition, it is necessary to implement as widely as possible the principles of a “smart city” and energy-efficient green building in Russian regions, which is the basis for improving the quality of life and a factor of economic and social development.

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The Policy of Drug Supply in the Regions of Russia: How to Restrain the Growth of Public Spending on Medicines?

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Abstract:
The article deals with the problems of implementation of the state policy in the field of provision of vital and important medicinal products of the population on the example of the Sverdlovsk region. Based on the data of the Monitoring of the assortment and the prices of vitally important and important medicinal preparations for the period from 2011 to 2017, on the hospital and outpatient segment, an analysis is made of the change in the average retail price for domestic and foreign, original and generic medicines. The results of the analysis showed the existing limitations and opportunities in the field of state regulation of assortment and pricing policies for medicines on the example of the Sverdlovsk region.

Keywords: *Policy of Drug Supply, Health Care, Outpatient Segment, Hospital Segment, Vital and Important Medicinal Products*

1. Introduction

To ensure the availability of medical care to the population of the country, it is important to Finance the national and regional health systems based on the goals and interests of the state.

Curbing the costs of medicines for the population and medical institutions can be considered as one of the directions of the General policy of state regulatory bodies to effectively spend limited financial resources.

The intensification of the state policy in the sphere of health protection, the increase in the availability of medical care and the increase in the average life expectancy of the population are accompanied by the emergence of the problem of covering the growing costs of ensuring the effective functioning of the health care system.

In Russia, state financing of health has grown over the last fifteen years by 3.5 times in real terms which will require the use of policy options regulation - either through the establishment of a strict procedure of financing, either through deterrence; or the use of tools for their rational combination. [1,2,3].

2 Policy of drug supply in the regions of Russia

The increase in public expenditure on the health system is subject to budgetary constraints and macroeconomic constraints, while the increase in public expenditure creates equity-related problems.

The growth and ageing of the population, the increasing diversity and complexity of medical interventions and changes in society's expectations of the attainable level of health and the desired level of health development increase the pressure on funding for this area.

In Russia, the key problem of the pharmaceutical market in recent years has been the "survival" of its participants in post-crisis conditions. The pharmaceutical market, primarily due to the commercial segment, demonstrates a stable positive trend towards growth from year to year, reflecting an increase in the purchasing power of the population and a decrease in the influence of financial and economic factors. There are two main trends in the consumption of drugs – an increase in the share of domestic drugs and switching the consumer to generics. But if the consumer switches mainly to branded generics, the volumes of generics sold under international nonproprietary names also grow in public procurement.

Among the current research issues on the agenda were the following:

How variable is the regional policy in the field of provision of medicines to the population (on the example of Sverdlovsk region) in terms of forms, tools and consequences?

What problems arise in the course of implementation of the state policy in the field of provision of medicines in the Russian Federation at the local level?
Did the focus on import substitution affect the structure and dynamics of the regional pharmaceutical market in terms of outpatient and hospital segments and how feasible were the goals?
The solution to the problem of covering the growing costs of ensuring the effective functioning of the health care system is associated with the justification of the structural financing of certain sectors of this system, including the pharmaceutical one.
Public policy options for the provision of medicines aimed at containing costs in the pharmaceutical market:
- control over drug prices at various levels, including Federal and local;
- impact on demand through financial measures such as budget financing and compensation;
- stimulating demand through the activities of health workers.
The reasons for the organization of control over the prices of medicines are related to the need to invest in expensive pharmaceutical innovations to protect society from low-quality and unsafe drugs; the presence of patent monopolies of pharmaceutical companies; the existence of intermediaries between the end user and the seller – manufacturer, reducing the sensitivity of the first to prices; misleading the end user about the quality of the drug and adherence to the rule of "WIKA price – high quality", with limited bargaining power of the parties.
The aim of the present work was to assess the use of various tools of regional policy aimed at curbing the growth of drug costs (based on the Monitoring of the range and prices of essential and essential drugs (VED) of the Sverdlovsk region).
Among the objectives of the study were considered such as:
- analytical assessment of changes in prices and range of medicines for outpatient and hospital segments of the pharmaceutical market of Sverdlovsk region for 2011 - 2017.;
- analysis of the processes of replacement of patented drugs with generics and the use of parallel import procedures in the pharmaceutical market of the Sverdlovsk region for 2011 - 2017.;
- study of conditions and consequences of import substitution of medicines for outpatient and hospital segments of the pharmaceutical market of Sverdlovsk region for 2011 - 2017.;

3. Hypotheses and information base of the research

Econometric and statistical analysis of the average prices and range of medicines (retail price of one package of a medicine) for the outpatient segment (monthly about 2000 items) and the average price of one package by trade name for the dosage form for the hospital segment (monthly about 1800 items), etc.) for the Sverdlovsk region for 2011 - 2017.

The information base of the study was the data of Monitoring the range and prices of vital and essential drugs (VED) in the Sverdlovsk region for the period 2011 - 2017.

More than 200 thousand accounts entered by the subject of the Russian Federation were entered into the database, most of which (from 80 to 88%) belong to the outpatient monitoring segment, and from 20 to 12 % to the hospital segment.

In addition, we used the results of in-depth and semi-structured interviews with experts (representatives of medical organizations and pharmacies, the Ministry of health of the Sverdlovsk region, Roszdravnadzor in the Sverdlovsk region) for the period from 2011 to 2017.

In contrast to the existing research on this issue, the paper attempts to study the specific problems arising in the implementation of the policy in the field of providing medicines to the population on the scale of the regional pharmaceutical market.[5,6,7].

4. Results of the study and conclusions.

Particular attention is paid to the study of the process by which the state is trying to reduce the cost of drugs, stimulating the production, appointment and sale of usually cheaper generic drugs instead of more expensive equivalents protected by patents. The possibility of such a replacement arises if the patent protection of the original patented drug has expired, allowing

other manufacturers to produce it at a competitive price under a non-proprietary (international, non-proprietary) or new patent name. At the same time, the price of generics increases their attractiveness for both outpatient and hospital segments of the regional pharmaceutical market of the Sverdlovsk region, as a result of which the ratio of sales of original drugs and generics in kind and in value terms begins to shift sharply in favor of the latter and, according to our estimates, averages 15 and 85%, respectively.

Thus, in the course of the study it was found that the variability of the policy of containing the population's costs of medicines in the regional aspect on the example of Monitoring the range and prices of vital and essential drugs (VED) in the Sverdlovsk region is limited to the use of two tools:1) registration of maximum selling prices of manufacturers at the regional level and the establishment of maximum wholesale and retail allowances at the regional level for drugs from the list of VED, 2) selective quality control of drugs, implemented in the outpatient and hospital segments of the regional pharmaceutical market.

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How Self-Rated is Self-Rated Health? Exploring the Role of Individual and Environmental Factors in Reporting Heterogeneity in a Russian Population Survey

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Abstract:
This paper provides the first analysis of the drivers of heterogeneity in self-reported health of the Russians based on the RLMS and Rosstat data for 2006-2014. Potential drivers are chosen from the set of both individual and macroeconomic factors. The methodology of eliciting heterogeneity drivers is based on the assumption that systematic differences exist between true health and self-reported health of the individuals. To fix true health at a certain level and re-solve an identification problem the authors use objective disease index based on the six diseases diagnosed by a physician: diabetes, myocardial infarction, stroke, anaemia, hepatitis and tuberculosis. Generalized ordered probit model demonstrates that for the following factors influenced reporting behavior in assessment of health for males and females: age, income, incomplete secondary education, residence in several Russian regions, on the macrolevel – log of GRP per capita, share of labour with tertiary education. Presence of heterogeneity should be accounted for when comparing SRH across samples of population, including international comparisons which currently do not account for heterogeneity and incorrectly show lower values for SRH for the Russians. It is important to note that algorithms for detecting heterogeneity have been developed only recently since calculations require computer power that had not been available until mid-2000.

Keywords: *Reporting Heterogeneity, Self-Reported Health, Russia, RLMS, Objective Disease Index, Generalized Ordered Probit Model*

1. Introduction

Self-rated health (SRH) has become one of the most frequently utilised health measurements in social science research. In 1996, WHO recommended the employment of SRH as a principal tool for monitoring the health and quality of life of the population. SRH is necessarily associated with an unknown element of subjectivity which, if non-random and variable across sub-groups, could give rise to systematic biases in comparisons of SRH across time, place and population sub-group. This phenomenon, of potentially systematic differences in SRH behaviour defined by population markers (e.g. gender, religion, age, region, education level) is referred to as "reporting heterogeneity" (Shmueli, 2003; Lindeboom and van Doorslaer, 2004; Kaneva, Baidin, 2018).

The paper aims to provide the first formal assessment of reporting heterogeneity in the context of Russian data in which, following Lindeboom and van Doorslaer (2004).

2. Methodology

Let H^S correspond to the individual responses to an ordinal SRH question and $H*$ represent a latent variable denoting unobserved true health, In estimating SRH, we define an ordered probit model for the categorical variable H^S and its correspondence with the latent variable $H*$ as:

$$H^S = i \Leftrightarrow c_{i-1} < H* \leq c_i\,,\ i = 1,...,n\,, \tag{1}$$

$$H* = f(H^0;\alpha) + X_2{}'\beta_2 + \varepsilon_2\,. \tag{2}$$

Where $H*$ is a function of X_2, a set of factors affecting true unobserved health (e.g. environmental, medical and genetic factors) and H^0 is the unobserved initial health level. It

follows from (2) that, if there are no factors in set X_2, H^* will correspond to the initial true health H^0.

Relaxing the proportional odds assumption allows the cut points to vary conditional on a set of behavioural factors, X_1, which may overlap with X_2. Thus, the formula for c_i is:

$$c_i = g_i(X_1;\beta_{1i}) = X_1'\beta_{1i} + \varepsilon_1,\ i = 1,...,n-1,\ \ c_0 = -\infty,\ \ c_n = \infty\,. \tag{3}$$

Substituting (2) and (3) into (1) and then combining (1) with (3) yields the generalized ordered probit model of (4) – (6) below. This model extends the previous one by incorporating an additional set of variables, associated with cut-point shifts. That is, the β_1 parameters are allowed to vary between the categories. This allows us to distinguish between f_1, in (5), which captures the determinants of SRH and f_2, in (6), which describes the determinants of true unobserved health. In combination, (5) and (6) describe the relationship between true health (H^*), self-rated health (H^S), the factors influencing health reporting behaviour (X_1) and the factors influencing true health (X_2), with ε_1 and ε_2 representing random errors.

$$H^S = i \Leftrightarrow g_{i-1}(X_1;\beta_{1,i-1}) - X_2'\beta_2 < f(H^0;\alpha) + \varepsilon_2 \le g_i(X_1;\beta_{1i}) - X_2'\beta_2\,. \tag{4}$$

$$H^S = f_1(H^*, X_1, \varepsilon_1;\beta_1)\,, \tag{5}$$

$$H^* = f_2(H^0, X_2, \varepsilon_2;\beta_2)\,. \tag{6}$$

Following Lindeboom and van Doorslaer, we focus on the existence of a cut-point shift and test the null hypothesis (7) that reporting heterogeneity is of the index shift form and that each k_i factor in X_1 influences each cut point c_i in a similar way. Rejection of (7) indicates reporting heterogeneity of the cut-point shift variety while, if the hypothesis is not rejected, we are unable to identify whether changes in SRH are due to an index shift or reflect changes in true underlying health.

$$\mathbf{H_0}:\ k_i = const,\ \ \forall i\,. \tag{7}$$

Estimation of (4) - (6) and the testing of (7) may give us some indication of the type of reporting heterogeneity in our data, but it doesn't resolve the identification problem explained above.

3. Data and sample

This research draws principally on data RLMS. We augment our data with regional macroeconomic data and a similar variable capturing public health expenditure from Rosstat for the period 2006-2014. Self-rated is a 3-category dependent variable capturing good health (=1), average health (=2) and bad health (=3).

4. Empirical results and conclusions

To resolve the identification problem we, following, Lindeboom and Doorlaer, construct an objective disease index (ODI) based on six diseases diagnosed by a medical specialist: diabetes, myocardial infarction, stroke, anaemia, hepatitis and tuberculosis. The index, scaled to take values between 0 and 100, is constructed from the predicted values of a panel random effects probit regression which includes the six diagnosed diseases as independent variables regressed on a binary variable indicating whether the respondent has experienced health problems in the last 30 days. Inclusion of ODI in the model for SRH allows us to fix true health and attribute all changes in SRH to changes in reporting behaviour (Table 1).

Table 1. Random effects generalized ordered probit regression for SRH for males and females, 2006-2014.

	Female		Male	
	Average and bad vs good health	Bad vs average and good health	Average and bad vs good health	Bad vs average and good health
Disease index, females (ind6f)	0.025*** (0.001)			
Disease index, males (ind6m)			0.029*** (0.001)	
Age	0.059*** (0.001)	0.055*** (0.001)	0.055*** (0.001)	0.051*** (0.001)
Single	-0.044 (0.031)	0.291*** (0.047)	0.030 (0.035)	0.374*** (0.060)
Divorced	-0.021 (0.032)	0.173*** (0.038)	-0.028 (0.049)	0.244*** (0.065)
Widowed	0.036 (0.039)	0.249*** (0.033)	-0.093 (0.082)	0.215*** (0.070)
Incomplete secondary education	0.287*** (0.037)	0.596*** (0.038)	0.293*** (0.038)	0.434*** (0.045)
Secondary education	0.235*** (0.027)		0.193*** (0.032)	
Vocational education	0.138*** (0.027)		0.150*** (0.034)	
Income (log)	-0.057*** (0.010)	-0.117*** (0.016)	-0.107*** (0.012)	-0.241*** (0.019)
PGT	-0.219*** (0.058)	0.117* (0.063)	-0.163*** (0.058)	
Rural	-0.049 (0.032)	0.053 (0.036)	-0.057* (0.034)	-0.208*** (0.044)
North and North-west	0.111 (0.092)	-0.152 (0.106)	0.203** (0.100)	-0.155 (0.137)
Central & Central BE	0.385*** (0.080)	-0.031 (0.093)	0.373*** (0.088)	-0.296** (0.123)
Volga & Volga Vyatski	0.364*** (0.088)	-0.230** (0.100)	0.308*** (0.096)	-0.367*** (0.128)
North Caucasus	0.141 (0.089)	-0.169* (0.101)	0.161 (0.098)	-0.386*** (0.133)
Urals	0.198** (0.088)	-0.323*** (0.101)	0.202** (0.097)	-0.482*** (0.131)
Western Siberia	0.441*** (0.090)	-0.192* (0.104)	0.353*** (0.099)	-0.373*** (0.135)
Eastern Siberia & Far East	0.398*** (0.085)	-0.292*** (0.098)	0.347*** (0.092)	-0.388*** (0.127)
GRP per capita (log)	0.334*** (0.045)	0.158*** (0.051)	0.424*** (0.049)	0.102 (0.062)
Regional share of higher education in the labour force	-0.009*** (0.003)	-0.021*** (0.004)	-0.006* (0.004)	-0.020*** (0.005)
Regional Morbidity	0.0007*** (0.000)		0.0008*** (0.000)	0.000* (0.000)
Regional government healthcare spend (log)	-0.070 (0.066)		-0.175** (0.078)	
Rho	0.563*** (0.005)		0.547*** (0.007)	
N	66532		47144	

* p < 0.1, ** p < 0.05, *** p < 0.01. Std. Err. in parentheses.
**In the second and fourth columns, the coefficients are given only if the coefficients are different by categories.
*** year dummies are included in the set of control variables but not presented in the table
*** drivers of cut-point shift heterogeneity are in bold

Table 1 shows factors that drive heterogeneity in self-rated health in Russian population. These are: on the individual level: age, income, incomplete secondary education, residence in several Russian regions, on the macrolevel – log of GRP per capita, share of labour with tertiary education.

Presence of heterogeneity should be accounted for when comparing SRH across samples of population, including international comparisons. It is important to note that algorithms for detecting heterogeneity have been developed only recently since calculations require computer power that had not been available until mid-2000.

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Customer Loyalty Analysis in Healthcare Organizations of Kazakhstan

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Abstract:
The healthcare marketing is the priority sector of Kazakhstan and an indicator of social and economic processes in the emerging economy. Since the moment of independence the healthcare marketing in the Republic has had a number of transformations. On the basis of the primary data collected by means of personal cooperation with patients, the author carried out collecting empirical data and the comparative analysis of the loyalty index (Net Promoter Score) on 5 healthcare institutions of various specialization. As a result, the factors affecting loyalty of patients are revealed. The author makes recommendations about practical use of research results. Article can be of interest to researchers of Service marketing, to Managers of Healthcare organizations and Faculties, who teaches Service Marketing, Healthcare Marketing, Marketing research.

Keywords: *Healthcare in Kazakhstan, NPS of Healthcare Organizations, Healthcare Marketing, Net Promoter Score, Service Marketing, Emerging Economies*

Introduction

Many healthcare organizations (further "HO"), having public financing, are interested in income from commercial activity. However, possibilities of marketing activity are limited to ethical aspects of health sector. The marketing activity can be perceived by patients as interest of HO in growing number of patients. In these conditions the client loyalty in medical institutions influencing growth of sales is forced to lean on opportunities of Internal marketing and Marketing of relationship the front personnel with patients. Researches of consumers loyality were conducted by such scientists as J. Liesse, S. Schlueter, D.Aaker. In different years, understanding of client loyalty has had some changes. At present, it is necessary to understand readiness for repeated purchases, recommendations, maintenance and consolidation of the developed communications of the consumer concerning the concrete medical organization as loyalty. At the same time, various measurement methods of consumers loyalty appear. Among them:

- Index methods "Division Method of Requirements" (David A. Aaker, Jan Hofmayer, Butch Rice) and "Convertion Model TM";
- Relative methods "Method of Marketing Scaling" and Net Promoter Score.

Research metodology

Results of poll were measured by means of the Loyalty Index of NPS (Net Promoter Score) which ancestor is considered to be F. Reichheld. This method consists of three stages:
1. Patients answered the question concerning the probability of the possible recommendation of the company, a product or a brand to other people. Assessment is carried out on a 11-mark scale where 0 corresponds to the answer "I will not recommend at all", and 10 — "I will surely recommend".
2. On the basis of the received estimates all patients are divided into 3 groups: 9-10 points — promoters, 7-8 points — neutral consumers, 0-6 points — detractors.
3. Calculation of the NPS index is made on a formula: NPS = promoters % — detractors %.
Collecting primary data to carry out the subsequent analysis of Client loyalty, was carried out by means of personal poll of patients, accompanying persons and visitors of health care facilities. Researches were conducted on the basis of five medical institutions of various forms of ownership, specialization, sizes and not in the capital. Questionnaires had the structured

character with the obvious purpose to determine the loyalty level of everyone who had personal contact with employees of the studied health care facilities. Questionnaires included 3 "closed" questions on identification of quantitative indices and 1 "open" question on identification of quality indicators. During the research 1000 patients and visitors, on 200 respondents in each of the specified medical institutions were interviewed.

Empirical results

By results of poll, the average indicator of the loyalty Index of NPS on 5 medical institutions was 62%. The lowest indicator of policlinic was 5%. As the leader the Medical and improving center performed with an indicator of 97%. In Table No. 1, it is possible to see "dispersion" on three questions on identification of quantitative indices "in" each HO.

Table 1. Indicators of the loyalty index

№	Questions	Healthcare Organization (HO)				
		Versatile center of oncology and surgery, %	Poli-clinic, %	Medical and improving center, %	Children's hospital of infectious diseases , %	Clinic of a reproductive medicine, %
		1	2	3	4	5
1	What probability that you will recommend this Clinic to close people?	76	-14	100	46	67
2	In what degree does the staff of Clinic facilitate to you interaction with them (show desire to help)?	69	6	95	75	70
3	In general, how quickly Employees respond to your questions (problems) the concerning health services?	71	22	95	77	75
	Loyalty Index NPS, %:	**72**	**5**	**97**	**66**	**71**

Indicators of Policlinic "fluctuate" in a corridor from-14% to 22%. Fluctuation Children's infectious diseases hospital is limited to indicators from 46% to 77%. Other three players of the market have more stable indicators. Such dynamics depends on specifics of diseases, medical institutions and medical services. Such as: a number of healthcare services, which the consumer gets by force; an emotional condition of patients during purchase and consumption, more often, negative, feelings of uncertainty, grief, fear, despair prevail; in such situations, people are sensitive and can stay under the influence of what others tell and do; assessment of treatment results is influenced by their perception about that, as how exactly happened during all "contact points" and process of interaction of patients and its environment to employees and medical institution. In particular, as one of the reasons of the maximum index of loyalty (100%) for Question # 1, at the Medical and improving center, can serve the fact that patients are already at

a recovery stage in a positive emotional state, can voluntarily acquire procedures in the preventive purposes. People, being on emotional lift are ready to share more recommendations, than in a condition of increase or peak of a disease.
Answers to Question # 4: "What changes in Clinic, could influence your decision to give more appreciation?" allowed to clear needs of patients. In case of satisfaction of these needs HO can increase the level of consumers loyalty. Most often the answers were concerning about: shortages of doctors of narrow specialization; the inattentive attitude towards patients (the personnel have no desire to help); long lines; a "coupon" system (at first to come for obtaining the coupon and then to come to appointment); old bed linen.

Conclusions

Collecting empirical data, assessment and the analysis of client loyalty by the NPS Method was carried out in the Medical organizations of Kazakhstan for the first time, and represent the scientific and practical importance. On the basis of the received results Management of medical institutions is recommended to carry out work on satisfaction of the revealed needs of patients, to conduct repeated survey of patients and the analysis of the obtained data. To reveal dynamics of customer loyalty changes.

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Bad Habits as Barriers to Sports for Health Purposes

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Abstract:
This paper investigates adult individuals' decisions about non-professional sports. Probability models of binary choice and models with sample selection were used to analyze the data obtained from the 2017 health survey of the analytical center of Yuri Levada on the attitude of people to their own health and the quality of medical care in Russia. The sample is representative at the national level and contains data for 4006 individuals aged 16 and over. The main hypothesis is that the probability of sports and the probability of paying for sports is associated with bad habits, such as smoking and alcohol abuse. The results of the study indicate the relationship between the presence of bad habits in the individual and the probability of sports and the probability of paying for sports.

Keywords: *Sport; Probability of Sports; Probability of Paying for Sports; Bad Habits; Smoking; Alcohol; Health; Human Capital; Russia*

1. Introduction

The average index of body weight increases in Russia over the years, that is the reason why there is a rapid prevalence of obesity and overweight among Russians. Sport is one of the types of physical activity that can prevent diseases associated with overweight and premature mortality. Nevertheless, there are still a little study devoted to individual choice in favor of sports in Russia.

One of the most important aspects of a healthy lifestyle is physical activity (including sports). Insufficient physical activity and overweight-related diseases are the leading causes of death in the adult population (WHO, 2010). Sport as a form of physical activity provides the individual with the opportunity to improve his or her health, the employer with the opportunity to reduce problems caused by sick leave and reduced productivity, and the state with the opportunity to develop human potential and improve the quality of life of citizens (Cawley, 2004; Miles, 2007; Downward, Rasciute, 2011). In addition, people's participation in sports is accompanied by many positive effects in addition to improving health: a positive impact on the achievements in the field of education (Pfeifer, Cornelisen, 2010), the labor market (Lechner, 2009), an increase in the level of socialization (Downward, Riordan, 2007) and a drop in crime (Caruso, 2011).

Sports activity can be carried out within the framework of professional activity (if the individual is an athlete), as a way of leisure and for recreational purposes. In all these cases, sports activity can, but not always, promote health. Nevertheless, in this work it will be studied mainly sports and physical culture, initially aimed at improving the health of individuals. This will explain the further choice of theoretical concepts and the database for empirical analysis.

2. Review of the current state of the studied problem

Economic decision-making theories in relation to sports can be broken down into two main types: neoclassical and heterodox approaches. Neoclassical approaches employ a rational-choice framework to model individual sports participation. Becker (1965) develops a model for the allocation of time that focuses on nonwork activities. He assumes that households combine time and market goods to produce ''commodities'' that increase their utility. The main problem with this approach is that the data collected have no information about commodities. Therefore, the empirical applicability of this model is rather limited.

Heterodox economic theories, in contrast, consider a wider set of methodological and theoretical principles than neoclassical theory. These theories incorporate economic, sociological, and psychological approaches. The first approach emphasizes that individual behavior is linked to broader aspects of social behavior such as the importance of social values and the consumption of sport involves learning by doing and spillover effects (Lavoie, 2004). Bourdieu (1984) presented two different factors to explain divergent tastes in sports: economic capital (income) and cultural capital (education). The psychological approach argues that the individual's preferences and tastes are not given (Scitovsky, 1976); they therefore evolve and change over one's life span. Thus, individual work-versus-leisure choices are based on interdependent individual preferences and motives that change during a person's life due to situational influences in the personal environment.

We mainly relied on the conceptual activities of the Becker household and its modifications, because the purpose of our work is to determine the role in sports decisions. At the same time, our empirical model includes variables that characterize a number of demographic and social factors, that are used by the followers of heterodox theories.

3. Methodological framework

Empirical researches can be roughly divided into three areas: the study of the possibility of participation, the intensity of sport participation and research of sports spending. Hence, ensuing from the above rationale we derived the following hypotheses:

H1: The probability of sports activities for health purposes is connected with bad habits, such as smoking and alcohol consumption

H2: Expenses on sport are associated with the income of the individual and a role of an inner circle.

The empirical analysis is based on the survey of the analytical center of Yuri Levada about the attitude of people to their own health and the quality of medical care in our country, conducted in 2017. The sample is representative at the national level and contains data for 4006 individuals aged 16 and over. The estimation used probabilistic models of binary choice, probit models with sample selection, the two-step model of Heckman and the Tobit model.

4. Results and discussion

The main results of the empirical part show negative relation between bad habits and sport participation. Moreover, we see that the probability of sport participation reduces with alcohol consumption and smoking. However, if the individual engages in sports for health purposes then the probability of payment for sports rises.

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Smart Health for Smart Cities: Healthcare Innovations in Saint-Petersburg

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Abstract:
The paper analyses smart city and smart health concepts and their interrelation. The cases on introduction of technological innovations in healthcare in St. Petersburg a are used as the basis of the analysis. The best practices of innovations in healthcare, based on information-communication technologies, are analyzed. The expert opinions of heads of public and private medical organizations of St. Petersburg are used to identify factors of external and internal environment influencing development of smart health concept on the basis of three elements – smart regulators, smart technologies, smart patients and smart medical organizations. The recommendations for regulatory bodies and medical organizations concerning enhancement of the process of introduction of innovations are formulated.

Keywords: *Smart Cities, Smart Health, Medical Insurance, Healthcare Innovations, Private Medical Organizations*

Introduction

The phenomenon of smart cities becomes more and more popular. The concept of smart city, which is also called a "digital city", is based on provision of modern conveniences for everyday life through implementation of innovative edge-cutting technologies. Such technologies are concentrated on effective and ecological usage of urban infrastructure and bringing use to city residents. A smart city is based on development, which is seriously related to informational technologies. The main stimulus for smart city creation is provision of improving infrastructure through special city management approach.

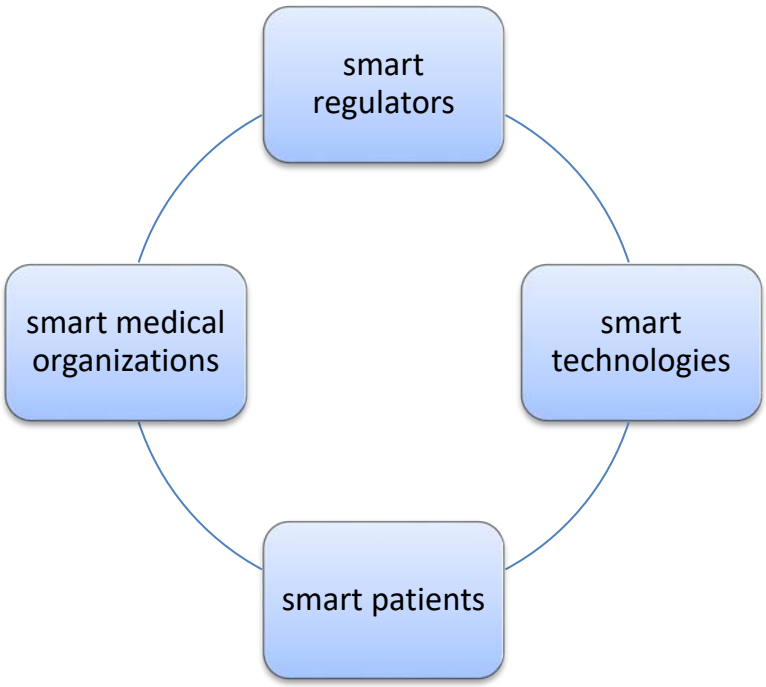
Significant interest is formed by studying the concept in relation with specific case studies and possible ways of bringing this phenomenon to actually existing environment. So the aim of the paper is to analyze possible ways of development of smart city concept in St. Petersburg from the point of view of one of the sectors of city economics – healthcare system, which should be smart to become valuable part of the smart city concept.

The empirical basis for the analysis is built of collection of expert opinions of heads of healthcare organizations of St. Petersburg and information available from open sources.

The smart health concept

To discuss the role of different actors in successful implementation of the smart city concept, we analyze possible impact of service providers, consumers and city administration authorities on peculiarities of one of the elements of the smart city concept strategy in Russia – the smart health concept.

It is possible to define smart health in the following way: "smart health (s-health) is the provision of health services by using the context-aware network and sensing infrastructure of smart cities" (Solanos, 2014). The picture below presents those components of healthcare system which make it smart.



Picture 1. Smart health components

The smart health environment includes four groups of elements which are joined in a single system, i.e. they are toughly linked to each other and should be developed simultaneously.
The smart health concept, as well as the smart city concept, not just assumes introduction of technological and non-technological innovations inside medical organizations, but also needs effective collaboration between clinics, patients and city management.

Smart health in St. Petersburg

The city government (The St.Petersburg Public Health Agency) initiated the unification of disparate and dissimilar medical information systems into a single e-health space. In February 2017, the "Electronic Healthcare" project was included in the list of priorities for St. Petersburg development. By 2020 the e-health system should also aggregate private medical organizations. By now all patients of participating clinics have possibility to get information about their clinical tests on-line, and later it will be possible to get online access to doctor's notes. This project aims to create unified electronic medical records for all patients, which can be used in any medical organization. Finally the project should create not less than 45 e-services for patients, doctors and public health authorities.
Also, in 2016 in St. Petersburg a single system of medical tests information exchange was introduced. Now clinics have possibility to share medical tests information online.
Today, almost all aspects of clinics' management and their services are concentrated in medical information systems. The digitalization in the healthcare industry makes it possible to solve yet another common problem - to ensure the storage and accessibility of medical data.
The private clinics provide multiple examples of implementing solutions based on artificial intelligence.
In St. Petersburg, large network players build federal telemedicine networks that perform several functions at once: remote branch management, telemedicine consultations, data collection.

Factors influencing implementation of innovative projects in medical organizations of St. Petersburg

To define factors, influencing development of smart health in city, we analyzed the expert opinions of heads of public and private medical organizations in St. Petersburg (19 respondents in total). The questions were connected factors of external and internal environment and main constraints on the path of application of healthcare innovations in medical organizations – the development of smart medical organizations.

Results of the surveys and interviews showed, that private and public clinics are interested in technological projects and development of smart doctors, but pay very little attention to ICT projects, which could attract extra patients and to improve quality of services. Nevertheless, the respondents noted, that the growths of the total quantity of patients in St. Petersburg influences the quality of operation of medical institutions, alongside with that the current federal strategy of healthcare development plays a very important role for public medical institutions in defining steps for application of innovative products.

Among internal to medical organizations factors it is important to mention the strategy of medical institution development set by its top managers; the need to decrease time needed to search and analyze medical information; the lack of medical personal; shortage of financial resources of the organization; and quality of a medical organization in comparison with its competitors.

Conclusion

The main directions for the development of smart health in St.Petersburg should be the following.

For smart regulators

Improvement of procurement procedures – increase of availability of information about medical organizations' demand of medical equipment on the basis of medical, social and economic efficiency. To promote innovations, it is necessary to develop insurance methods for financing healthcare. It leads to provision of extra financing for medical insurers, to make them to develop the "pay-for-performance" system. The share of technologically advanced services in total amount of medical services may become one of the main performance indicators.

For smart medical organizations

Public as well as private medical organizations should rely on innovation to increase their clinical and economic efficiency.

For smart patients

Medical insurers have to participate in provision of information about available digital services as well as assist patients and medical organizations to use these services. Being intermediary agents between medical organizations and patients, insures have to become the fifth element of the smart health concept.

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Designing Sustainable Performance Measure for the Saint-Petersburg Public Hospitals: Accounting for Heterogeneity of Healthcare Services' Profiles. Construction of the Performance Indices and Empirical Findings

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Abstract:
Nowadays national healthcare systems face numerous challenges on the way to improve delivery of the health services to the communities they serve. Patient satisfaction and patient experience are becoming the front-and-center given trends within the healthcare as assumed by "patient-centered care model". Rapidly changing field of healthcare makes previous performance measurement models of hospitals no longer relevant.
The study develops the stakeholders' satisfaction approach to performance assessment. Particularly, it investigates sustainability of St. Petersburg public hospitals' ranking obtained from the overall performance index (OPI) estimated from general sample of the city's public hospitals. Sustainability of OPI based ranking implies that obtained ordering of the hospitals is invariant across the field-oriented subgroups of hospitals.
The 47 St.Petersburg public hospitals form 4 field-oriented subgroups of hospitals, which are believed to be more homogeneous as compared to the general sample. The study distinguishes the following subgroups: maternity hospitals, child hospitals, multi-specialty hospitals and special hospitals, which embraces the hospitals that do not belong to the first 3 subgroups.
The study highlights the most significant stakeholder groups as well as foreground quantitative and qualitative indices describing hospital's performance. The indices are further used to build the OPI of public hospitals. The multifaceted performance assessment applies the Neely's concept of Performance Prism. It relies on the analysis of the stakeholder specific preferences. To reveal them Data envelopment analysis (DEA) and aggregated preferences indices system (APIS) are used.
An OPI function for a general sample of 47 St.Petersburg public hospitals has been constructed for the specified stakeholders' preference patterns. Field-oriented cluster formation of hospitals served in place for testing the OPI's sustainability and comparisons of the OPI based ordering of the hospitals with those obtained from ranking within field-oriented subgroup.

Keywords: *Healthcare Organizations, Public Hospitals, Maternity Clinics, Performance Measurement, Neely's Performance Prism, Data Envelopment Analysis, Aggregated Preference Indices*

1. Introduction

Assessing the effectiveness of budget funds spending on the provision of healthcare services by public hospitals assumes a multifaceted perspective as far as there are numerous stakeholders involved: patients, doctors, nurses, institutional units of the public health sector, founders, competitors, linked organizations (public and commercial), etc. Institutional changes in the healthcare field, high level of technological change in medical care, significant increase in health expenditures all over the world in the

last decades explain the need to develop the approaches for measuring performance of public hospitals adequate to the new realities.

Overall purpose of the study is to assess the organizational efficiency of public hospitals from the stakeholders' perspective by identifying preference system of these stakeholders. It investigates St.Petersburg public hospitals providing medical services to citizens under the scheme of multi-channel financing in which the mandatory medical insurance fund is dominating financier. Particular aim of the study is to investigate sustainability of St. Petersburg public hospital's effectiveness ranking obtained from the overall performance index (OPI). The hospital's OPI, calculated from the data on all public hospitals (general sample). It accounts for the stakeholders' preferences revealed from the hospitals' operational and survey data. The study tests the hypothesis of OPI ranking invariance when used for ordering the hospitals in field-oriented subgroups. To put it differently, it explores the conditions under which the OPI ranking constructed from the general sample when applied for ordering of hospitals in the field-oriented subgroups will produce the same rankings as the OPI estimated from subgroup samples.

The study considers community of St.Petersburg public hospitals formed of the field-oriented subgroups of hospitals. These subsamples are more homogeneous compared to the general sample. The study distinguishes 4 subgroups: maternity clinics, child hospitals, multi-specialty hospitals and field-specifuc clinics, which embraces the hospitals that do not belong to the first 3 subgroups.

2. Models and methodology

The study deals with assessment of the organizational performance. It applies DEA (Data Envelopment Analysis) method to measure technical efficiency of the hospitals from available data on resources and outputs. Technical efficiency estimates then used to construct the OPI for each hospital, which accounts for perception of organizational performance by different stakeholders identified in the study. There are 2 OPI estimates for each hospital both calculated with the aggregate indices method – APIS (Aggregate Preference Indices System). They differ in samples used: general sample or respective field-oriented sample

Thus, the OPI formula for public hospital "*i*" (H_i) looks as follows:

$$OPI(H_i) = \alpha\, TE(H_i) + \beta\, PS(H_i) + \gamma\, DS(H_i) + \delta\, NS\,(H_i)$$

where we $TE(H_i)$ is a measure of the hospital's *i* (H_i) technical efficiency; $PS(H_i)$ – measure of patients' satisfaction with services of hospital *i*; $DS(H_i)$ – measure of doctors' satisfaction with performance of hospital *i*; $NS(H_i)$ – measure of nurses' satisfaction with performance of hospital *i*; α, β, γ, δ – the weights' of stakeholders' satisfaction measures. $\alpha>0$, $\beta>0$, $\gamma>0$, $\delta>0$, $\alpha+\beta+\gamma+\delta=1$.

3. Data and sample

The empirical database of the study includes information on performance of operational St. Petersburg public hospitals. The data includes 2 types of information: annual data on inputs and outputs

reported by the hospitals in the period from 2013 to 2017, and data collected from the surveys reflecting the stakeholder's perception on the hospital's performance. The surveys were conducted for 3 groups of stakeholders: doctors, nurses and patients, In the questionnaires while assessing a hospital doctors and patients were responding on 7 attributes, nurses – on 6 attributes. The study employs the panel data on inputs and outputs.

4. Empirical results and conclusions

The study yields numerous insights on the performance of public hospitals in St.Petersburg. The OPI based assessment of the hospital's performance incorporates explicitly the stakeholders' perceptions of public hospitals. Therefore, it allows taking into account specific preferences of each stakeholder group and provides management with valuable information for strategic and operational decisions.

Procedure of validation of invariance of the hospitals' OPI ranking obtained from general sample when projected on the hospitals within the field-oriented subgroups includes 4 stages. The first stage deals with clustering and results in formation of 4 field-oriented subgroups of St.Petersburg public hospitals. The second stage exploits data from general sample. It provides the estimates of the hospitals' OPIs from the general sample, which then serve a basis for 2 hospitals' rankings: one within general sample, another – projection of the former on respective subgroup sample. The third stage works with data from the subgroup samples. It calculates the hospitals' OPIs separately for each subgroup and uses these OPI estimates for respective internal subgroup rankings of the hospitals. The fourth stage compares the subgroups rankings, i.e., those received from the OPI estimates obtained from general sample data with the internal subgroups' rankings.

Validation proved for the invariance of the OPI's general sample ranking under certain conditions in APIS estimations. They include:

a. uniform *a priori* priority ordering of the attributes for hospitals' OPI estimations/rankings (general and internal);
b. the OPI estimations/rankings on the basis of general sample should contain *a priori* orderings of the hospitals from the same field-oriented subgroup.

Thus, OPI performance measure is sustainable for the St. Petersburg public hospital general sample with regard to its field-oriented subgroups. It makes it possible to use the OPI function parameters for ranking the performance of public hospitals within their treatment profile.

The OPI model of performance assessment provides management with numerous insights on the operation of the public hospitals, which allow for:

- quality assessment of the hospitals from different standpoints and identification of strategic directions for improving the performance of the units in question;
- identification of the most significant areas for improving the efficiency of the hospitals in each field-oriented group;
- sound background for a wide scope of both strategic and operational decision-making.

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Information and Knowledge Management in Business Administration

Knowledge Sharing in Cross-Functional Teams

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Abstract:
This article deals with the project of studying the influence of coordination mechanisms affecting the knowledge sharing when developing innovative products in organizations and cross-functional teams. The article is aimed at analyzing the influence of various coordination mechanisms on the knowledge sharing in cross-functional teams when developing innovative products. Such coordination mechanisms as formalization, bilateral relationship, informal socializing, and common views are taken for consideration analysis. As a result of the study, it is planned to determine the degree of influence of various coordination mechanisms on the knowledge sharing in cross-functional teams, which will allow developing effective strategies for managing the knowledge of these teams.

Keywords: *Cross-Functional Teams, Knowledge Sharing, Coordination Mechanisms, Formalization, Bilateral Relationship, Informal Socializing, Common Views*

1. Introduction

Cross-functional teams created for the purpose of developing innovative products or providing innovative services are formed of interested narrowly focused specialists. Since the staffing of the team, each member ceases to be just an organization's employee, he/she becomes part of this team, sharing its goal and interacting with colleagues to achieve this goal (E. G. Kalabina, O. Yu. Belyak, 2019). The most important task of a cross-functional team is to establish the sharing of information and knowledge (Smith P. G., 1997).

The best communication practice enriches the culture of teamwork and promotes innovation activity (Roy S. et al., 2018). Knowledge sharing in cross-functional teams, including various functional units, can contribute to innovations and success of new innovative products (for example, (Roy S. et al., 2018), (Tsai WP, 2002), (Hansen MT, 1999)).

Probably, factors influencing the knowledge sharing in cross-functional teams are associated with coordination mechanisms operating in the organization (Tsai W. P., 2002). Such coordination mechanisms include not only formal methods, such as formalization and bilateral relationship, but also informal socializing and common views, which together contribute to the development of various communication channels.

Despite some significant research advances in the field of the knowledge sharing in cross-functional teams, there are still gaps in our understanding of the influence of intra-team coordination mechanisms on the knowledge sharing of cross-functional teams.

2. Methodology

As part of the work being carried out, the study will deal with the influence of four key coordination mechanisms on the knowledge sharing in cross-functional teams, as well as personal interest and commitment.

Formalization. Formalization includes rules, task descriptions, guidelines acting within the organization, regulating individual interaction (Ayers D. et al., 1997).

Assumption 1: Formalization has a positive effect on the knowledge sharing in cross-functional teams.

Lateral (horizontal) relationship. Lateral relationship reflects relations between individual members of different structural divisions that are on the same hierarchical level.

Assumption 2: Lateral relationship has a positive effect on the knowledge sharing in cross-functional teams.

Informal socializing. Informal relations develop between the organization's employees from different divisions and structures of the company. Informal socializing can foster the knowledge sharing through its role in creating shared knowledge (Tsai W.P., 2002). Informal relations increase the intensity and efficiency of the knowledge sharing (Willem A., Buelens, M., 2007).

Assumption 3: Informal socializing has a positive effect on the knowledge sharing in cross-functional teams.

Shared vision. Shared vision plays an important role in establishing cooperation and willingness to share knowledge and information.

Assumption 4: Shared vision has a positive effect on the knowledge sharing in cross-functional teams.

Personal interest and commitment. Personal interest and commitment express the external and internal motivation of a member of a cross-functional team to share knowledge.

Assumption 5a: Internal motivation has a positive effect on the knowledge sharing in a team.

Assumption 5b: External motivation has a positive effect on the knowledge sharing in a team.

To implement the empirical part of the study, it is planned to conduct an individual assessment by the respondents of a set of statements regarding the studied variables.

For the survey, it is planned to use well-established scales from existing scientific sources: the scales proposed by (Willem A., Buelens, M., 2007), (Willem A., Buelens, M., 2009), (Calantone, R.J. et al., 2002), (Foss N. et al., 2009).

As control variables, the questionnaire includes general data (age, gender), experience in the profession, level of education.

The main dependent variable in the study is "individual activity in knowledge sharing". To asses this variable, the scale proposed in the work by (Wu, Hsu, Yeh, 2007), adapted (Sergeeva A. V., Andreeva T. A., 2014) was chosen.

To assess the proposed statements of the questionnaire, it is planned to use a 6-point Likert scale.

3. Expected results

As a result of the study, it is planned to determine the degree of influence of various coordination mechanisms on the knowledge sharing in cross-functional teams, which will allow developing effective strategies for managing the knowledge of these teams.

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Managing Organizational Forgetting Effectiveness Factors in Russian Mechanical Engineering Companies

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Abstract:
The paper investigates the effectiveness of various methods of organizational forgetting management (including counteracting accidental loss of necessary and supporting intentional unlearning of unnecessary knowledge) in Russian mechanical engineering companies. The methodology of the research is based on an econometric estimation of the influence of intensity of usage of several knowledge management practices on the organizational forgetting management effectiveness, applying regression analysis in the form of an ordered logit regression. The questions of the survey have been answered by respondents belonging to senior management of 81 companies. According to the results, a positive influence is exerted by intensity of regular analysis and documentation of critically important knowledge and knowledge gaps, control of quality of knowledge obtained from partners, and adaptation of the new knowledge to the existing; intensity of getting rid of knowledge having lost its actuality is negative. On the basis of the obtained results, recommendations are suggested considering the development of organizational forgetting management in Russian companies of mechanical engineering industry.

Keywords: *Knowledge Management, Knowledge Sharing, Organizational Forgetting, Organizational Unlearrning, Mechanical Engineering*

1. Introduction

A problem of managing organizational forgetting, i.e., counteracting undeliberate loss of necessary and supporting deliberate unlearning of unnecessary knowledge, is undoubtedly actual for Russian producing industries due to the lack of engineering personnel of the middle age between the young and the retiring specialists (Uhanova, 2015).

2. Theoretical and methodological background, data and sample

In this paper, the organizational forgetting management effectiveness criteria are based on the classification of (de Holan, Phillips, Lawrence, 2004). In this classification, organizational forgetting is divided into four types: “unlearning” (intentional forgetting of existing knowledge), “avoiding bad habits” (intentional forgetting of new knowledge), “memory decay” (accidental forgetting of existing knowledge) and “failure to capture” (accidental forgetting of new knowledge).

The effectiveness of these functions’ execution in the researched companies, as perceived by the respondents, forms the dependent variables of the study (respectively, further addressed as DV_1, DV_2, DV_3 and DV_4).

The independent variables have been based on the respondents’ answers regarding the intensity of usage of a number of knowledge management practices in their organizations:

1. development and execution of the integrate strategy of knowledge management as a whole and knowledge sharing in particular (respectively, further addressed as IV_1);
2. regular analysis and documentation of critically important knowledge (IV_2);
3. getting rid of knowledge having lost its actuality (IV_3);
4. getting rid of obsolete documents (IV_4);
5. firing the employees or shutting down the organizational subdivisions holding unnecessary or undesirable knowledge (IV_5);
6. staff turnover between various organizational subdivisions (IV_6);
7. control of quality of knowledge obtained from partners (IV_7);

8. control of quality of knowledge obtained from other external counterparties (IV_8);
9. adaptation of the new knowledge to the existing (IV_9);
10. dissemination of knowledge between all the employees to avoid its concentration among the direct specialists (IV_{10});
11. regular analysis and documentation of knowledge gaps (IV_{11});
12. video fixation of interviews or master classes of key knowledge holding employees (IV_{12});
13. personal mentoring practices (IV_{13}).

As the control variable (CV), a size of the companies has been chosen.

The research checks influence of intensity of usage of all the 13 abovementioned practices on the effectiveness of each of 4 organizational forgetting management functions; thus, 4 models have been created, that can be in general described by the following equation:

$$DV_n = IV_1 + \cdots + IV_{13} + CV + \varepsilon$$

The sample comprised representatives of senior management of 81 Russian mechanical engineering companies.

4. Empirical results and conclusions.

The models have been tested as ordered probit regression equations in the Stata/SE 14.2 statistical package.

The table demonstrates the models testing results.

Research variables	DV_1		DV_2		DV_3		DV_4	
	Coefficient	*p*-value	Coefficient	*p*-value	Coefficient	*p*-value	Coefficient	*p*-value
IV_1	0,243	0,505	0,389	0,298	0,001	0,997	–0,239	0,477
IV_2	**0,608**	**0,070**	0,174	0,590	0,261	0,403	0,146	0,506
IV_3	–0,077	0,517	–0,142	0,268	**–0,322**	**0,039**	**–0,278**	**0,034**
IV_4	–0,027	0,868	–0,233	0,205	–0,032	0,853	–0,010	0,951
IV_5	–0,132	0,207	–0,089	0,437	0,058	0,560	–0,000	0,997
IV_6	0,024	0,879	0,159	0,322	–0,015	0,904	–0,009	0,957
IV_7	**0,662**	**0,025**	**0,526**	**0,023**	0,111	0,638	0,083	0,773
IV_8	–0,511	0,246	–0,521	0,168	0,239	0,472	0,184	0,719
IV_9	**0,756**	**0,039**	0,396	0,140	0,211	0,356	**0,789**	**0,013**
IV_{10}	–0,042	0,788	0,155	0,302	0,494	0,244	0,105	0,468
IV_{11}	–0,229	0,579	0,214	0,496	**0,161**	**0,045**	0,276	0,404
IV_{12}	0,139	0,273	–0,118	0,363	–0,179	0,236	0,010	0,944
IV_{13}	–0,121	0,726	–0,391	0,085	–0,396	0,315	–0,192	0,372
CV	0,219	0,562	–0,541	0,137	–0,144	0,705	–0,585	0,162

The independent variable coefficients having p-values less than 0,05, making them statistically significant at the 99,5% significance level, are marked in bold.

The interpretation of the results that can be obtained from the table allow developing recommendations for the companies of mechanical engineering and related industries. Namely, regular analysis and documentation of critically important knowledge, control of quality of knowledge obtained from partners, adaptation of the new knowledge to the existing as well as regular analysis and documentation of knowledge gaps can be recommended to counteract accidental and stimulate intentional knowledge forgetting, while getting rid of knowledge having lost its actuality can hardly be recommended as negatively influencing the effectiveness of counteracting accidental knowledge forgetting.

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Approaches to Delivering/Creating Students' Knowledge in The Digital Era: Inctructivism, Constructivism, and Connectivism

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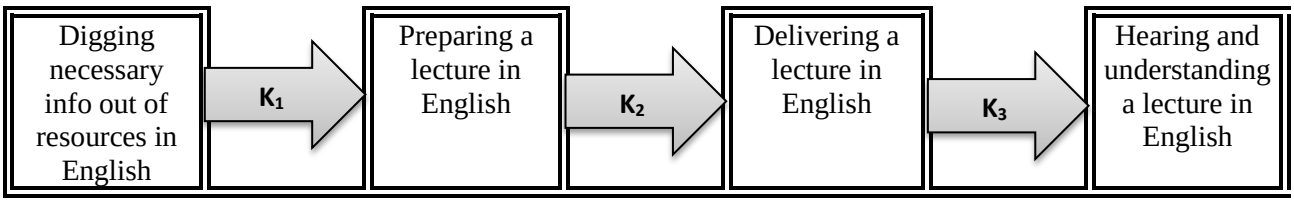
Abstract:
"Purpose – The paper presents some theoretical suggestions and practical applications resulted from the work on studying an evolution of dominant teaching approaches applied in classes of economic schools in the chain "instructivism – constructivism – connectivism". Besides, here there is a criticism of excessive enthusiasm for a connectivist approach to teaching students in economic schools.
Design/methodology/approach – The said work is arranged as critical analyzing a representative set of relevant academic papers, textbooks and monographs that were mainly published abroad. A set of appropriate Internet blogs is also analyzed in the same way. Critical considerations concerning the connectivism approach are justified by appropriate academic works and comparative tests of students in the chosen discipline with a ban and permission to use the Internet, respectively. For an experimental testing students' creativity the dramatization method is used where a case on international marketing is taken as a scenario to be played by students.
Findings – While analyzing the content of the sources mentioned above an ambiguous attitude to different teaching approaches among academics is revealed in the said sources, while the vast majority of students are passionate about the Internet (especially when using mobile digital de-vices). However, primitive questions asked by a number of students during personal interviews (such as, a multiplication of two-digit numbers in the mind, basic knowledge of economic geography to solve the simplest logistical issues or defining Russian-language professional terms adequate to English ones and vice versus) showed their horrific Internet and digital devices addiction. This leads to the conclusion that it is necessary to use a ""weighted"" mix made up of all three approaches to teaching students. Then the instructivism is best suited for the initial stage of learning. The connectivism is very useful as a powerful source of information that a student should use when she or he has an advanced critical thinking. The constructivism should remain a dominant approach developing students' creative and critical thinking
Originality/value – The present paper, in our mind, covers a lacuna in the field of research de-scribed above, namely: (1) a comparative analysis of three teaching approaches is done; (2) the connectivism approach has been criticized reasonably but its use as a powerful auxiliary tool is noted; (3) the drama method is defined as a field for testing students' creativity and capacities in solving business problems; and (4) a draft of future of further research is presented".

Keywords: *Connectivism, Constructivism, Dramatizing Business Cases, Instructivism, Knowledge Consumption, Knowledge Creation*

English has factually been taught in Russian universities as the most common foreign language since the end of the 2WW. Besides, in the post-Soviet period the English became the well-used medium of teaching in advanced Russian business schools and economic universities. Since the 1990s, the main subject of the present paper – teaching management/economics in English in Russia (Wilkins and Urbanovič, 2014; Legasova, 2015; Rubtcova et al., 2016) – attracted a great attention of academics and students. Sometimes, while including "real" English, some invited lecturers of Business Dpts. were involved to teach in English Russian students (Students…,

2015). However, the main part of courses taught in English was delivered by Russian instructors having different levels of proficiency in English.

A simple mathematical example should show the inevitability of a significant loss of information in such a situation. The process of preparing and delivering a quantum of knowledge in a lecture hall could be presented as a chain of knowledge transfers (see the pic below):



The chain of knowledge transfers in preparing and delivering a lecture in English

According to the theory of information it is well-known that ат information transfer coefficient (K_i) of knowledge through a passive link of a chain channel should be less than 1,0 and the sequential connection of a number of channel links has the total transfer coefficient of the channel (K_t) as a whole has to be equal to the product of transfer coefficients of all channel links. For the case of the channel on the pic above they have ($K_t = K_t*K_t*K_t$). Suppose the teacher and his students are fluent in English. So, K_i = 0,9 and K_t = 0,729. Therefore, the loss of information is minimally equal to 27%. And if they take into account the theory of double filtering while transmitting special knowledge in English the knowledge transfer will be significantly worse. Finally, it is absolutely necessary to understand that “teacher-students” contact hours are limited by the time budget in accordance with the curriculum accepted. It seems that this contradiction between efficiency and effectiveness of teaching in English, on the one hand, and volumes of knowledge to be delivered to students, on the other hand, is a unresolvable one. However, we live in the digitalized society now and the key to the said contradiction is somewhere in combining digital technologies and pedagogical ones. However, pedagogical technologies are to play, in our opinion, the leading role. Before making the final consideration it is necessary to present the etiology of pedagogical technologies applied in the domestic higher school before. The main purpose of the seaid technologies should be inspiring students to learn using new digital devices and applications out of class rooms and any limitations applied by curriculum time budgets.

Striving to inspire students’ learning activities and to help students to overcome their anxiety about learning and using English, teachers have developed a set of innovative pedagogical approaches to teach English (sometimes called now as *Globish* having extrimely reduced vocabulary – about 3,000 items). The said approaches differed from simple using the multiple hi-tech innovations of the Digital Era (off-line multimedia teaching-learning facilities, adjusted to English web-sites, MOOCs, SKYPE, searching machines, Wiki facilities, Web-Quests, blogs, etc.). These *pedagogical* innovations were based on smart combinations of newly designed and/or well-forgotten old pedagogical decisions (Cherenkova, 2006, 2017) and could be classified as low-tech innovations (Cherenkov et al., 2014). However, taking into account – as it was said above – that the main part of lectures and workshops have been delivered/moderated in economic universities (schools) by such domestic instructors to whom English was not their

mother tongue a common problem could be faced. This one was the quality of communication in the “instructor⇒students⇒instructor” channels. As it was well-known (Mossop, 2007) quantifying the quality of translation was rather hard to be executed. A fortiori, quantifying the quality of knowledge transfer (as in the particular case of teaching-learning in English) was expected to be a more sophisticated task (Holi and Wickramasinghe, 2008). However, the problem of quantification concerning communicative competency in English of future international managers (Cherenkova and Cherenkov, 2015) was aside from the mainstream of the present paper.

Before the second part of XX century the higher school was the place where old traditions were almost without innovations. Talking about innovations it is necessari to split them into two parts: innovations fore means of techimng (analogue and digital devices/gadgets) and pedagogical innovations. The oldest instructive method of teaching was presented by a "one way route" from a teacher to students (O2M class of communications). Interactive methods are classified as O2M+M2O class of communications. The constructivist method of teaching-learning could be considered as a form of integratin active and interactive approaches. The active methods could be formalized as (O2M+M2O)+(external resources). We suppose that dramatizing business cases is the most suited field for constructivist method because students have therein a lot of dimernsuions to develop and apply their knowledge fertilized by their creativity.

Whereas the constructivist method, in our mind, belongs to the alternative pedagogical dyad – ”instructive versus constructive” Dubs, 2004) – we include the said method of teaching as the most fitted to the goals and objectives of the drama teaching based on business cases as scenarios. Our decision was formally based on the fact that the constructivist teaching method as one absorbing the tools of other ones mentioned herein has included as many as possible information transfer channels. Therefore, and it was the most important factor for implementing the drama teaching (Cherenkova, 2014), the constructivist method appeared the most appropriate one for including business cases in teaching English. Students taught by the said method relied factually on some form of guided discovering where the instructor avoided most direct instructions and attempted to lead students through questions and guided activities to discover, discuss, appreciate and verbalize the newly creared knowledge (or, in terms of present article, case decisions). In our mind, this theatrical decision was best suited to the implementation of constructivist approach. Dramatizing English lessons was rather well-developed in Russian elementary and secondary school where fairytales and short stories were successfully theatricalized (Shishkina, 2007). This tradition was continued in the higher school but mainly in advanced universities. Therefore, on the way toward improving efficiency and effectiveness of teaching-learning English we came to necessity of using the dramatized business cases. As a result, the combination of drama technique and case method gave to English teacher/learners a possibility to get all features of constructivist teaching-learning, namely (Langan et al., 2009), 1) collaboration; 2) deep learning (competitive necessity to access to outer on-line/of-line resources); 3) reflection (encouraging students to connect the English course content with their prior knowledge and personal experience in using English); 4) engagement (discussing and building a point of view by means of feedback with teacher and dialogue during preparatory and workshop activities); and 5) caring (skills of attending and listening each other).

Finally, the Digital Era has gifted new innovative tools to be included in the “pedagogical craft”. The education in an information society is to provide students with a set of competencies that will enable them personal development in new mainly digitized environment. The effective way for continuous students' development stems from emerging new possibilities of using information communication technology (ICT) in the teaching-learning process. The teaching-learning system has been drastically changed by the most technologically innovative approach

known as the connectivism (Siemens, 2005; Anderson and Dron, 2011; Tait, 2014). Its basic premise is a statement of the fact that omnipresent information communication technology (ICT) has a significant impact on the human being everyday life, work and, naturally, learning. (Jaszczyszyn, E. and Szada-Borzyszkowska, 2014). Considering the principles of connectivism (Siemens, 2005) they could reveal: (1) learning and knowledge rests in diversity of opinions; (2) learning is a process of connecting specialized nodes or information sources; (3) learning may reside in non-human appliances; and (4) capacity to know more is more critical than what is currently known. At first glance, everything is correct and fully consistent with the digitalization of modern life. However, the concept of connectivism as a learning theory has had some criticism. For example, they say (Verhagen, 2006) that connectivism fits exactly at this level of pedagogy and curriculum rather than at the level of theory, since, in effect, people still learn in the same way, though they continue to adapt to the changing technological landscape of digital communities. Students might move away from their classroom and be connected with a teacher and each others, but the effects of alive connection could be lost and, honestly speaking, Internet information flows (from blogs, buzzing advertising pages, multiple wiki- and other non-peer revised sources) are to be filtered. Besides, it is stated (Foroughi, 2015) that gathering and integrating knowledge (from Internet) are important steps in the learning process, but simply presenting students prepared information supress their critical thinking, evaluation, and argument building that are forever crucial in the educational process. Indead, we agree, the connectivism is a powerful learning theory and tool comprised of different series of nodes to connect hundreds of networks to facilitate synchronous and asynchronous learning (Dunaway, 2011). Other critic of connectivism as a learning theory (Bell, 2010), referred to connectivism as an instructional theory, not a learning theory. An instructional theory is understood (Kropf, 2013) as a conceptual framework based on empirical findings and grounded in learning theories, which recommends the design of learning materials, resources, or situations (cases) to help learners achieve their learning outcomes and maximize their learning potential.

Finally, in our mind, this consideration is to be commented from the position of integrative approach advocated and proposed by the authors of the present paper. In the frame of this integrative approach the constructivism namely occupies the central place of teaching-learning processes (the authors consider teaching and learning as inseparable reverse and averse of the same coin) and the connectivism should play a role of flexible and powerful but supportive approach in the school. Naturally, these final conclusions need to be tested and we do hope to arrange special research devoted to this disputable issue – the connectivism should exist instead of constructivism or to be integrated with.

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Emergence of Knowledge Management in Russia: Towards Legitimacy for Practice

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Abstract:
The explicit assumption of the knowledge-based view of the firm is that knowledge is an organization's most valuable resource for the creation of a competitive advantage. This suggests that knowledge resources, along with the knowledge-related policies, practices, processes and technological tools, are necessary components for a firm's survival and success in the modern volatile, uncertain, complex and ambiguous world; and it becomes quite clear that firms – considering the present economic, political and social trends that are tangibly reshaping the business landscape – cannot remain globally competitive by basing their strategy primarily on 'traditional' tangible resources. The advancing globalization forces, digitalization of business, technological evolution, etc. – all of these exogenous factors have facilitated the emergence and formation of knowledge management. Although the popularity of knowledge management has been steadily increasing over the last decade, pertinent literature has had little conversation about the legitimation of knowledge management and related practices in non-Western contexts, including countries of CEE and the Former Soviet Union (known as transition economies). In this article we reflect upon the emergence of knowledge management in Russia and offer context-specific explanations as to how knowledge management practitioners seek legitimacy with different constituencies.

Keywords: *Russia; Knowledge Management Emergence; Pragmatic Legitimacy; Moral Legitimacy; Cognitive Legitimacy; Transition Economy*

1. Introduction

For over a quarter of a decade management scholars and practitioners have tested the universal applicability of different knowledge management (KM) practices, and technological tools in different settings, primarily focusing on the idiosyncrasies of the national and/or organizational culture profiles and exploring the boundary conditions for the potential relationships between key KM architecture elements and the micro- / meso- and/or macro-level antecedents and consequences of KM implementation (e.g., Dong et al., 2016). Recognizing the cultural biasness of knowledge-related processes, they have explored the role of the country context in the efficiency of KM interventions and investigated the potential effect of the national culture on a firm's ability to create, share/transfer and apply knowledge and develop innovation capabilities via the adaptation / integration of relevant KM practices.

The contemporary discourse on the feasibility of the culture-of-the-model approach in KM is at the point of animation, the context-specific enablers of the emergence of KM in countries that do not follow the Western or Eastern management tradition are not explicitly studied, which significantly limits one's understanding of the nature of KM in firms from particular clusters of countries. In some transition economies, KM is at the stage of formation (e.g. Gavrilova et al., 2017) – it remains underdeveloped, despite different stakeholders, inter alia, management consultants, executives from local (non)governmental organizations, representatives of the teaching / scientific communities, and managerial talents from KM-adjacent fields, acknowledging the role knowledge and KM systems play in the creation and maintenance of sustainable competitive advantage. Consequently, when inquiring into the

reasoning and the assumptions regarding the general formation of KM as well as the legitimation of the KM practice, one has to understand the contextual specificity. We, in particular, set the focus on Russia – a transition economy that falls out of the 'Western – Eastern' dichotomy in the KM discourse, thus representing an interesting and rather peculiar research context (Andreeva, Ikhilchik, 2011).

2. Literature review

2.1. The concept of legitimacy

The concept of legitimacy is contracted in the framework of the neoveberian approach as a process of raising the status of a particular occupation (Larson, 1977), which is implemented by broad range of counterparties. Success in this promotion is largely due to the symbolic work that is needed to justify the legitimacy of their claims to high status and the corresponding privileges (Abbott, 1988). Business and the state, represented by educational institutions and regulatory bodies, play an important role in gaining authority, monopoly on expertise in a particular field of activity, and in increasing prestige. Pragmatic, moral and cognitive resources of professionalization in neoliberalsim approach are closely intertwined. Thus, the prestige of professions is associated with the level of necessary education and income, the influence of professionals, their opportunities for self-realization, the degree of autonomy. And if the classical explanations of the profession by definition were associated with the public good, high autonomy and trust of citizens (Wilensky, 1964), modern research recognizes the many contradictions and challenges that accompany the processes of professionalization in various contexts.

2.2. Legitimation of KM in Russia

The country- specific peculiarities regarding KM issues – general hostility towards knowledge sharing (e.g., Michailova, Hutchings, 2006), medium to low employee commitment to organizations (e.g., Fey, Denison, 2003), historical heritage of high power distance, uncertainty avoidance, limited tradition of empowerment and authoritarian leadership (e.g., Holden, Vaiman, 2013) – have affected the legitimation of KM on all fronts. Though local companies acknowledge the importance of effective KM systems for a firm's success, KM is mainly carried out only through organizational learning and best practices, and occidental companies benchmarking or external training (Klafke et al., 2016). Meanwhile, Russian universities are engaged in KM to a larger extent: as a response to the global trends in business, management and IT education, they are including KM-related courses into their educational programs, therefore legitimizing KM in the Russian academic sphere. Nevertheless, despite these efforts, the demand for knowledge managers remains at a low level, with local firms continuing facing the difficulty of filling the few available KM vacancies. This suggests the following: either the overwhelming majority of Russian companies are – for some reason – not entirely convinced that long-term investments in KM (i.a., creation of new occupations in KM, adoption/adaptation of best KM practices) are relevant for operational success; or the quantity and/or quality of KM specialists is low, which implies local talent suppliers do not satisfy local business demands.

3. Data and sample

Within this research, we have collected and analyzed the following data: (1) conference materials of the two main KM-related conferences (KM-Russia and Innowave); (2) information regarding local companies' KM practices (from corporate websites); (3) curricula of 50 leading Russian universities (over 800 KM-related courses at the bachelor, master and PhD levels have been identified); (4) profiles of 67 knowledge leaders / KM experts who actively popularize KM; (5) selected scientific articles which describe cases of KM implementation in Russia; (6) 20 KM-related national standards (some of which are direct translations of open-access international ones). We further sought guidance from the community of practice, consisting of 83 KM experts, who actively call for KM legitimacy.

4. Empirical results and conclusions

This research explores an interesting phenomenon – the emergence of KM in a transition economy – through the conception of legitimacy, and with a contextual focus on Russia. The case of legitimization of KM in Russia differs from the one which can be observed in other fields. There is no consecutive and smooth shift from easy-to-establish pragmatic legitimacy to the durable cognitive one. Within an access to the international experience and knowledge of external experts, KM practitioners employ all strategies for legitimization simultaneously. With the following table we depict the multiple sources of legitimacy and strategies employed by KM practitioners.

Type of legitimacy		Business (provides finance)	Education system (provides people)	Researchers (provide knowledge)	International regulators
PRAGMATIC	Exchange (*)	** Report valuable outcomes	* Present outputs of the practices to students	-	* Report implemented practices
	Influence (*)	* Promote the strategic approach to KM	* Develop partnerships with universities	* Cooperate in research and development	-
	Dispositional (***)	*** Promote KM as a practice which creates Intellectual Property	*** Provide KM studies in HR & IT departments (see Appendix 1)	*** Ground KM research in IT and IC (see Appendix 2)	-
MORAL	Consequential (*)	* Promote knowledge sharing as a socially desired behavior	-	* Declare knowledge the key value of society	* Comply with internationally accepted values (openness and sharing)
	Procedural (**)	*** Establish a record of technical success	* Promote KM practices in terms of process management	* Share experience, request expertise	** Follow established procedures
	Personal(**)	*** Invite international experts (i.e. Nick Milton, Ron Young, Larry Prusak) as speakers, educators and consultants	** Invite professors to educate staff in how to effectively apply KM practices	* Invite Doctors of science to develop KM systems	* Gain accredited education
	Structural	*** Organize professional conferences	* Invite students to participate in professional conferences	* Invite researchers as experts and speakers	-
COGNITIVE	**Comprehensibility (***)**	*** Popularize practices	-	*** Enhance comprehensibility of new practices through international research	*** Comply with international standards
	Taken-for-grantedness (**)	** Appropriate national standards from related business-fields	-	* Establish validity through research	** Appropriate international standards and practices from related fields

Note: - No evidence found in the available data set; * Little evidence found; ** Medium evidence found; *** Strong evidence found.

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Towards Conceptualization of ISO Standards for Knowledge Management in Organizations

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Abstract:
In order to be competitive and survive in knowledge economy, enterprises must be knowledge-driven nowadays. It means that knowledge must be a key value-creating resource for such organizations and knowledge management system must be embedded into overall enterprise management system. Knowledge management now is not only a possible best practice of industrial leaders and a topic of academic research, but also a "must have" element of every company. It is reflected in recent inclusion of knowledge management within ISO 9001:2015 and in ISO 30401 standard, which specifies requirements for knowledge management systems. Now ISO requirements for knowledge management are distributed between these standards and are not conceptualized, so usage of these standards is complicated. This paper conceptualizes and merges knowledge-related requirements from ISO 9001:2015 and in ISO 30401 standards. Such conceptualization may help companies to develop their own knowledge management framework. The paper also establishs links between ISO 30401 standard and two theoretical models – PDCA cycle from total quality management and SECI model from knowledge management.

Keywords: *Knowledge-Driven Organization, Knowledge Management, Knowledge Transformation, ISO Standards, ISO Requirements Management System*

1. Introduction

Knowledge became the key resource in contemporary economy. Companies need to learn how to create value and make money out of knowledge. Key capabilities of a company of XXI century – acquiring new knowledge, applying current knowledge, retaining current knowledge and handling outdated or invalid knowledge. Knowledge management (KM) – a rather new discipline – helps companies to establish these capabilities. "The inclusion of Knowledge Management within the recently released ISO 9001:2015 marks a huge change within the world of KM. For the first time, one of the global business standards explicitly mentions knowledge as a resource, and specifies expectations for the management of that resource. This provides a long-awaited level of legitimacy for KM which could be a game-changer." [Fry, 2015] Even more, in previous autumn ISO 30401 was published, which provides requirements for knowledge management system (KMS). So now many companies are starting to implement knowledge-related ISO requirements.

The current paper starts from informal description of knowledge-related ISO requirements, then transforms these requirements into the specification of required knowledge-related elements of organizational management system in the form of concept map.

2. Informal description of knowledge-related ISO requirements

ISO 9001 was revised in 2015. The revised standard, ISO 9001:2015, includes the new clause 7.1.6 Organizational knowledge. The requirements of this clause are:

"Determine the knowledge necessary for the operation of its processes and to achieve conformity of products and services.

This knowledge shall be maintained and made available to the extent necessary.

When addressing changing needs and trends, the organization shall consider its current knowledge and determine how to acquire or access any necessary additional knowledge and required updates.

NOTE 1: Organizational knowledge is knowledge specific to the organization; it is generally gained by experience. It is information that is used and shared to achieve the organization's objectives.

NOTE 2: Organizational knowledge can be based on: a) Internal Sources (e.g., intellectual property, knowledge gained from experience, lessons learned from failures and successful projects, capturing and

sharing undocumented knowledge and experience; the results of improvements in processes, products and services); b) External Sources (e.g., standards, academia, conferences, gathering knowledge from customers or external providers).”

As Nick Milton of Knoco Limited notes, “this new clause is not a Knowledge Management standard, nor does it require an organization to have Knowledge Management in place as a formal requirement. As a clause in a Quality standard, it simply requires that sufficient attention is paid to knowledge to ensure good and consistent quality of goods and services.” [Fry, 2015]

ISO 30401:2018 “Knowledge management systems – Requirements” was published in November 2018.

“The purpose of this standard for knowledge management is to support organizations to develop a management system that effectively promotes and enables value-creation through knowledge” [ISO30401, 2018].

This standard is led by principles – it starts from KM guiding principles: Nature of knowledge; Value; Focus; Adaptive; Shared understanding; Environment; Culture; Iterative.

Main KM definitions in ISO 30401:2018 standard:

“Knowledge – human or organizational asset enabling effective decisions and action in context” [ISO30401, 2018].

“Knowledge management – management with regard to knowledge” [ISO30401, 2018]. Where management is considered as “management process of planning, organizing, directing and controlling the outcomes of people, groups or organizations” [ISO 30400:2016]

“Knowledge management system – part of a Management system with regard to knowledge. Note 1 to entry: The system elements include the organization’s knowledge management culture, structure, governance and leadership; roles and responsibilities; planning, technology, processes and operation, etc.” [ISO30401, 2018]. Where management system according to [ISO30401, 2018] is a set of inter-related or interacting elements of an organization to establish policies, and objectives and processes to achieve those objectives.

According to [ISO30401, 2018] “the organization shall establish, implement, maintain and continually improve a knowledge management system, including the strategy, processes needed and their interactions, in accordance with the requirements of this international standard.”

3. Theoretical background for knowledge-related ISO requirements

ISO 30401:2018 includes KM-specific part and universal part, which is applicable for all management systems. The description of a KM system is a specific part, while management activities, which “establish, implement, maintain and continually improve” KM system, are universal.

Management activities, which “establish, implement, maintain and continually improve” KM system (or any other management system), correspond to steps of classical PDCA-cycle [Moen, Norman, 2009] (see Table 1).

Table 1. Alignment between PDCA cycle and standard structure for management system establishing, implementing, maintaining and continually improving [BSI, 2012]

Required management activities according to ISO 30401:2018	**PDCA-cycle**
5 Leadership 5.1 Leadership and commitment; 5.2 Policy; 5.3 Organizational roles, responsibilities and authorities	PLAN
6 Planning 6.1 Actions to address risks and opportunities; 6.2 KM objectives and planning to achieve them	
7 Support 7.1 Resources; 7.2 Competence; 7.3 Awareness; 7.4 Communication; 7.5 Documented information	DO
8 Operation 8.1 Operational planning and control	
9 Performance evaluation 9.1 Monitoring, measurement, analysis and evaluation; 9.2 Internal audit; 9.3 Management review	CHECK

10 Improvement 10.1 Nonconformity and corrective action	ACT

Knowledge conveyance and transformation types, which structure KMS according to ISO, look very similar to knowledge transformations from SECI-model [Nonaka, Takeuchi, 1995].

Table 2. Alignment between ISO Knowledge conveyance and transformation types and knowledge transformation types from SECI model

Knowledge conveyance and transformation types (ISO)	**Knowledge transformations from SECI model**
Human interaction	Socialization
Representation	Externalisation
Combination	Combination
Accessibility & Internalization	Internalisation

4. Specification of required knowledge-related elements of organizational management system

Required knowledge-related elements of organizational management system were taken from textual requirements and represented in the form of concept map (Fig. 1).

Main groups of knowledge-related elements are:

1. KM principles
2. Knowledge needs (necessary knowledge and organizational context, which defines it)
3. Knowledge management system
    a. Knowledge development activities
    b. Knowledge conveyance and transformation types
    c. KM enablers
4. KM culture
5. Management activities to establish, implement, maintain and continually improve KMS (or any other XXX management system)

5. Conclusions

The paper provided a conceptualization of knowledge-related ISO requirements, which can be used during the development of knowledge management framework for specific companies.

The paper also established links between ISO 30401 standard and two theoretical models – PDCA cycle from total quality management and SECI model from knowledge management.

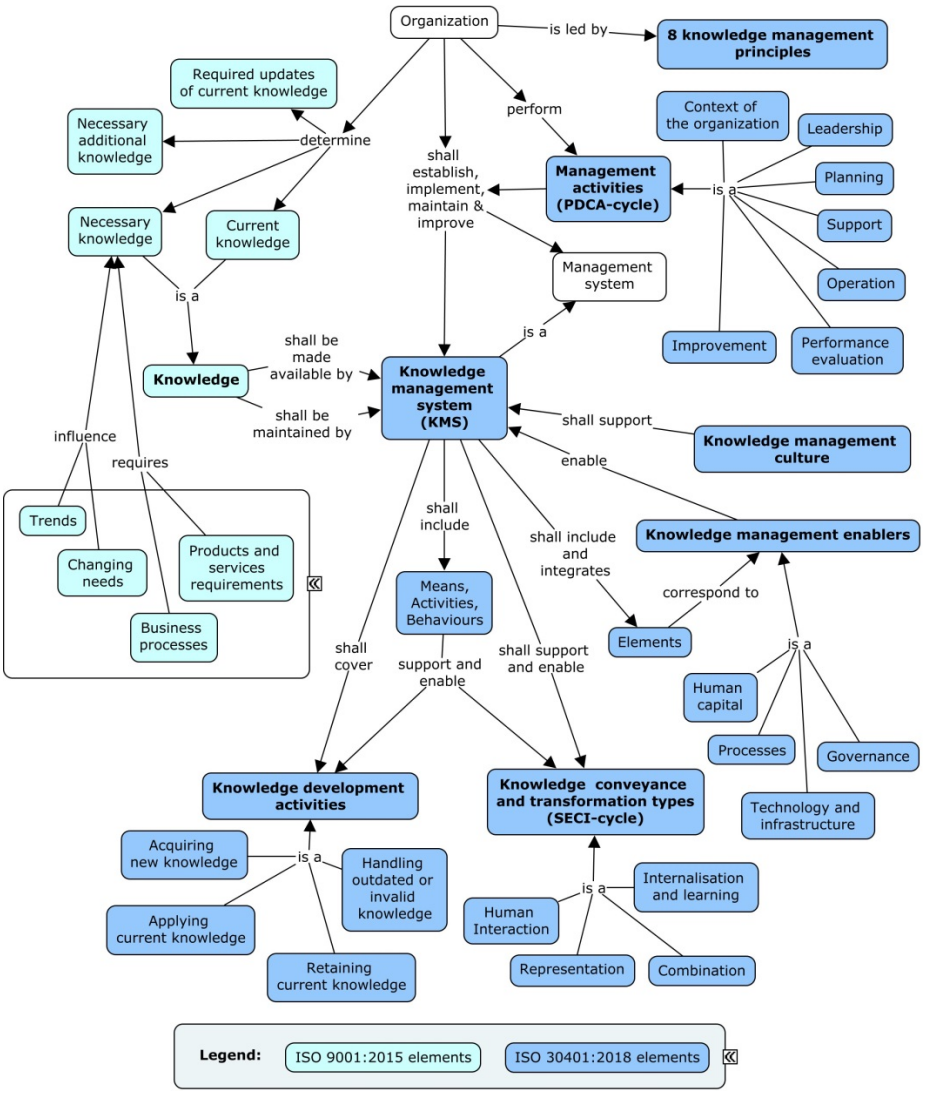

Fig. 1. Concept map of required knowledge-related elements in organization according to ISO

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A Knowledge Graph for Course Modules as an Efficient Information Management System for HEI

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Abstract:
During the overall digital transformation, Information Management Systems are also gaining in importance at HEI. Semi-structured descriptions of course modules, so-called module catalogs, are among the essential constituent and quality-assuring information artifacts for study programs at HEIs. In addition, they meet the valid information needs of a wide range of stakeholders. Basic quality and structural requirements for module descriptions are defined by European and national guidelines, which, however, leave the local actors a great deal of leeway. The systems currently in use provide inadequate support for academic processes. The paper suggests a Knowledge Graph-based Information Management System to overcome the shortcomings observed. The results are derived from a qualitative research and a prototypical implementation in a German HEI.

Keywords: *Digital Transformation, HEI Domain Ontology, Digital Module Catalog, Knowledge Graph-Based Information Management System, It Support of Academic Processes*

1. Introduction

Many academic processes are based on module catalogs as central information documents. In addition to formal accreditation processes of a degree program (comp. European Union, 2015), these include e. g. the personal management of a study course by students, the organization of a semester abroad, or the recognition of achievements acquired outside the HEI. To make matters worse, module catalogs are living documents, because study programs are constantly improved by the responsible faculty. Consequently, in times of digital transformation, there is a significant need for powerful Information Management Systems (IMS) for course modules.

The examination of such IMS at HEIs is proving problematic in several respects. Some manufacturers of Campus Management Systems (CMS) offer support for module catalogs as part of their portfolio (Auth, 2017). However, empirical data on the extent to which these offerings are accepted in HEIs is not available in the literature. Knowledge Graph-based Information Management Systems (KGIMS) can be expected to provide a high support quality as they represent the entities and their relations in a knowledge-intensive domain in the most effective way (Singhal, 2012).

2. Research Objectives

From the above stated three research objectives can be derived:

1) To clarify, which kind of IMS are in use for managing module catalogs at HEIs.
2) To analyze the quality of process support of different types of IMS used at HEIs.
3) To proof the quality of process support of a KGIMS for course modules.

3. Methodology

To get empirical data about the range of IMS in use at HEIs (research objective 1), a qualitative research was performed. First the state of the art at own university were scrutinized in-depth. Afterwards, HEIs in the federal states of Berlin and Brandenburg were analyzed on a high management level. For research objective 2 a classical requirements analysis with stakeholder workshops was carried out. Research objective 3 was addressed with a prototypical development.

4. Results

It was found that six different types of IMS are used by various actors in the own university: two different web-based Content Management Systems, a Document Management System (DMS), a spreadsheet application, a CMS and, finally, a self-developed database system. The systems are not integrated. Hence, data and documents are kept redundant. The research comprising all public HEIs in Berlin and Brandenburg with an overall amount of 140.000 students revealed the following: File systems are used with 45 %, followed by CMS (40 %). Significantly lower shares (10 %) were observed for DMS, the rest (5 %) for others. Fully integrated KGIMS are not used at any HEI.

The requirements workshop was attended by 30 representatives of five different types of stakeholders: quality assurance, program management, examination office, teaching staff, and students. The more than 30 elicited requirements were ranked according to priority and complexity. Afterwards, the IMSs used so far have been analyzed whether they meet the six top-ranked functional (FR) requirements along the life cycle phases of document management: creation, maintenance, use, and archiving (Meister & Beckert, 2018). Table 1 shows that none of the evaluated IMS offers high support quality.

Table 1. Evaluation of support quality of IMS for course modules

Type of IMS	Support quality of IMS with respect to top-ranked functional requirements				
	Document management life cycle phase evaluation		+	O	–
File system	Creation	simple and flexible	FR2	FR3 FR4	FR1 FR5 FR6
	Maintenance	problematic, error-prone			
	Use	versioning difficult, individualization not possible			
	Archiving	insecure			
DMS	Creation	simple and flexible	FR2 FR3 FR4		FR1 FR5 FR6
	Maintenance	problematic, error-prone			
	Use	versioning is supported, individualization not possible			
	Archiving	secure			
CMS	Creation	and adaptation very costly	FR3 FR5	FR1 FR4 FR6	FR2
	Maintenance	possibly high learning curve, license costs			
	Use	versioning is supported, individualization through queries			
	Archiving	secure			

The prototype development comprises the following components:

- Architectural design for the KGIMS (see Fig. 1),
- Extensible knowledge schema as backbone of the KGIMS (see Fig. 2),
- Processes for the knowledge graph population,
- Concept for data editing services for subject matter experts,
- Publication service for module catalogs.

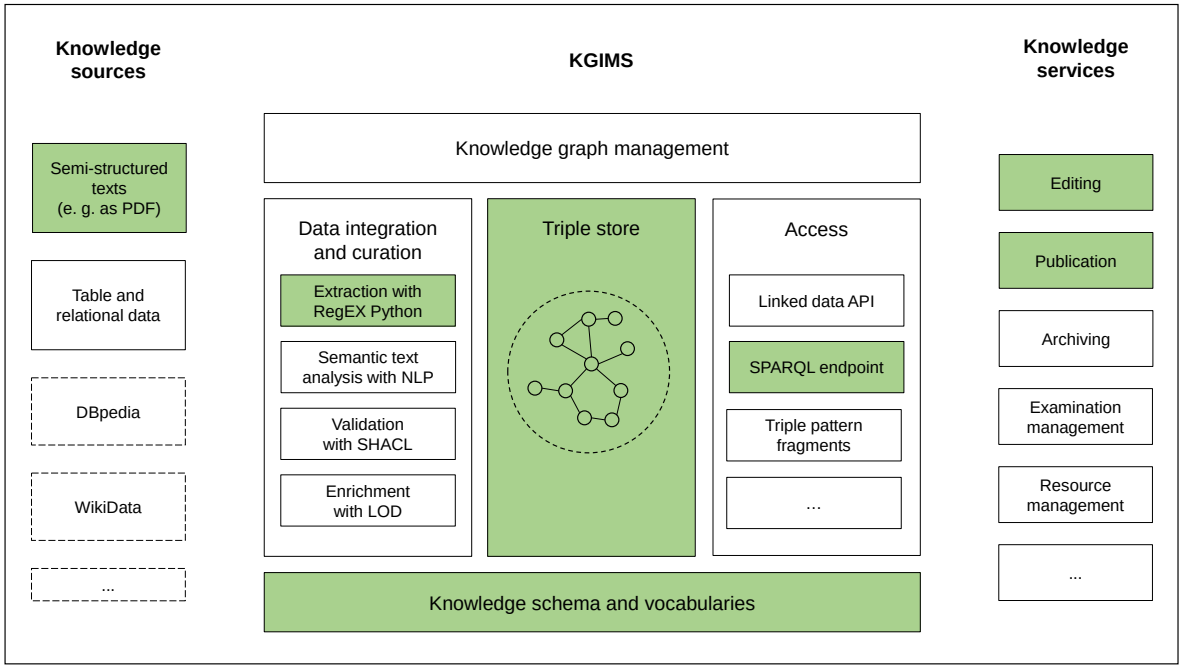

Figure 1. Abstract architecture model of the KGIMS for course modules - the shaded elements show implemented components (following Meister et al. 2017)

5. Future Work

Currently available IMS based on documents or relational databases do not fulfill the requirements adequately or with disproportionately high effort. The assumption that an KGIMS would offer stakeholders substantial added value was initially confirmed. For a final statement, further developments according to the outlined architecture (Fig. 1) and a comprehensive stakeholder evaluation are necessary.

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Study of Hotel Satisfaction of Visitors Based on Booking.com`s Online User Reviews

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Abstract:
The present paper describes a study of customer satisfaction of hotels based on online-reviews of users of Booking.com. The main object of the research is to study the aspects of satisfaction with the characteristics of hotels and to create recommendations based on the study for companies that own hotels and hotel-like formats. The research includes theoretical part which contains studying of theoretical aspect of customer satisfaction and literature review of previous studies of customer satisfaction based on online reviews, and empiric research based on methods of machine learning and natural language processing. The database for the research was obtained from reviews of European hotels from the online platform Booking.com which contains 515,000 customer reviews and scoring of 1493 hotels across Western Europe. As a result, we will create a study design that will be used to analyze feedback from hotel industry and related industries.

Keywords: *Guest Satisfaction, Hotels and Tourism, Machine Learning, Natural Language Processing, Online Reviews*

1. Introduction

The hotel industry is a highly competitive industry with many players on the market. The market is characterized by revenue growth and average occupancy rates [14]. The reputation of the hotel on the online platforms began to affect the workload of the hotel and the resulting revenue. In order to maintain and enhance the hotel's reputation, we must research customer satisfaction and online customer reviews. But, due to a large amount of data received, it is almost impossible to conduct such research manually.

2. Literature review

A large amount of research [2, 4, 5, 6, 7] in modern marketing literature focuses on the study of dependencies between consumer satisfaction and results of the company: financial indicators, sales figures, other targets depending on the field of activity of the companies are investigated.

The main issue in such studies was the laboriousness of data collection: it was necessary to interview a large number of respondents manually. With the penetration of the Internet into people's lives, it became possible to conduct a content analysis. Content analysis, emerged in the 1950s [3], it received a new impetus to development in the 90s with applying statistical and mathematical methods for processing information [9]. By the end of the 2000s, Internet platforms actively showed themselves, on which users posted their reviews, evaluated products, shared opinions on special forums or on social networks. A large amount of data has been accumulated that could be used in surveys of satisfaction of goods and services. In the 2010s, a large number of studies [8, 11] were aimed at studying the patterns between satisfaction and hotel performance indicators: for example, sales [11] or the number of bookings, creating a consumer portrait from user preferences [10]. Methods of machine learning are used for the natural processing of the language. For example, Jing used in her work [12] the methods of ML in the task of clustering words, which made it possible to automatically determine the moods of users in the reviews they wrote.

3. Data

The empirical part consists of content analysis of online reviews from the public database Booking.com, consisting of 515000 reviews for the 2016-2017 year [15]. The data set includes 16 parameters, which relate directly to the review, to hotel and user information.

4. Results

The study was used exclusively texts user reviews. The following technologies were used to process feedback: lemmatization, removal of stop words. Using the methods of natural processing of the language, the words were translated into vector values. With the help of the WordCloud method, the main words used in the context of satisfaction and dissatisfaction were identified (see Exhibit 1). Most often, users leave feedback on the room in which they live, the location of the hotel, the hotel staff, breakfast, bathroom, bar, Wi-Fi.

With a deeper analysis and use of the n-grams method (n = 2), the CountVectorizer method, which allowed to convert words into token matrices and calculate the vector distances between the most common words forming phrases.

As a result of the sentiment analysis, the most important words from the semantic point of view were identified (see Exhibit 2).

The main problem areas are the quality of the room: its cleanliness, silence, room size. In addition, people are often not satisfied with the breakfasts and drinks / food offered by the hotel. People may not be satisfied with the quality of hot water. They are also concerned about the lack of free Wi-Fi, broken appliances in the rooms, problems with parking. In the positive comments, users are satisfied with the location of the hotel. Also, visitors to hotels emphasize the quality of service from the staff, namely their friendliness, responsiveness and willingness to help the visitor. Less than the rest are used in the positive feedback phrases related to the number and number attributes.

Conclusions

In accordance with the purpose of the study, a design of a study of online reviews was created, an empirical study was carried out, where aspects of the formation of consumer satisfaction, most frequently encountered in the feedback from visitors, were identified. Sentiment analysis by aspects revealed common problem areas, among which there are results that are difficult to identify with traditional formalized interviewing methods (for example, poor-quality tea / coffee is more often the cause of dissatisfaction of visitors than problems with equipment in the room). In addition, you can follow the trend that the main problem area is the number zone, in which most of the attributes are used in a negative sense.

Understanding the Phenomenon of Innovation Labs

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Abstract:
Innovation is a high-risk process that hides various uncertainty factors and several barriers. The key challenge is how to innovate successfully and to cope with the innovation pace, rather than decide if it is worth innovating or not. Since the last decade, Innovation Laboratories are increasingly emerging as creative environments in support of innovation processes of organisations. The interest on Innovation Labs is growing in economic markets. However, to date there is a lack of exhaustive studies on the topic and the term Innovation Lab does not have an agreed definition. Moreover, definitions found in the academic literature, all refer to structural and functional traits, leaving aside aspects referring to a management philosophy based on approaches, mindset or tools. This paper aims to investigate the role of the creation and use of Innovation Labs to support organisations' innovation. Drawing on a literature review and through a taxonomy that compares the most relevant studies describing Innovation Labs adopting different perspective of analysis, this research proposes an exhaustive working definition of Innovation Laboratories.

Keywords: *Innovation Lab; Innovation Development; Collaborative Innovation, Taxonomy Framework, Open Innovation*

1. Introduction

In the new business landscape companies are confronted to become more and more flexible, and creative in order to face the increasing complexity, and unpredictability of the competitive environment. More and more organizations have to face unclear scenarios and to undertake unpredictable challenges that, to be faced, requires the development of new competences by leveraging intuition and creative capabilities. In the same way, in such a mutable landscape, the way to develop innovation has also had to adapt over time. Originally, innovation was conceived as a synonym of invention. So, the output of an innovation process was the result of the individual creativity of the inventor. Then, with the emergence of theory such as Taylorism, Fordism and then Knowledge Management, the codification and management of innovation process become even more relevant. Therefore, innovation at that time was conceived at an organizational level and organisations adopted in-house R&D centres, in which experienced team work to produce innovative output. But many internal or external factors can prevent organisations' innovations, particularly in SMEs, such as the lack of qualified internal technical resources, the lack of knowledge and knowledge management practices, the difficulties in finding financial resources, the capacity of assessing the market, the conceptual barriers or dynamics that can inhibit the employees' creative thinking (Hadjimanolis, 1999; Memon et al., 2018). In this regard, and to overcome some of the barriers and risks associated to innovation management, open innovation theories are emerging, and consequently, the closed walls of R&D centres have been torn down in order to generate collaborations among stakeholders, other businesses, even competitors and/or institutions in order to combine interdisciplinary skills and assets into the innovation process (Memon et al., 2018). Moreover, another fundamental aspect that is affecting the current scenario is the change of consumers' and stakeholders' habits and needs. Cause of the easy availability of information, they are even more aware of what they want and they aim to live experience and get involved in the various phases of the innovation process, rather than gain just a finished product. In this regard, the shift from a product-centred model to a

human-centred one (Giacomin, J., 2014) become basic in order to create and deliver value to stakeholders. Therefore, open innovation philosophy and human-centred new methods and approaches, are becoming enabling and differentiating factors for innovation. In this regard, from the last decade, in order to adopt such approaches and to enable the implementation of effective innovation processes and dynamics, many organisations are paying attention to Innovation Laboratories. Despite the growing attention in the business context to these kinds of laboratories, the concept is still not structured and well explored (Burger, T., & Hermann, S., 2010). Moreover, most definitions tend to focus on structural and/or service-based aspects, and none of them seems to consider the management philosophy that is on the basis of an Innovation Lab. For this reason, this research aims to address the following leading research questions: how can an Innovation Lab be fully defined? What is the management philosophy behind an Innovation Lab?

Drawing on a taxonomy of literature review, this research proposes a comprehensive working definition that helps to advance the understanding in this field.

2. Defining Innovation Lab: a literature review

In the academic literature there are various definitions and different terms that refer to the concept of Innovation Lab. In this regard, this section shows the results of a literature review carried out by analyzing the most relevant academic studies in the field of Innovation Labs. The analyzed studies are based on desk researches, case studies, surveys or interviews (Callaghan, V., et al., 2016; Gey, R., 2013; Van Golden, R., et al., 2014; Lewis, M., & Moultrie, J., 2005; Magadley, W., & Birdy, K., 2009; Memon, A.B., et al., 2018; Meyer, L.P., 2014; Schmidt, S., et al., 2016).

The results are categorized in a taxonomy framework (figure 1) according to *definition* of Innovation Lab provided, *nature* (creative/physical/virtual spaces, hybrid/internal/external to an organization), *key components* that characterize an Innovation Lab (structural and infrastructural, in terms of human agents, facilitators, space, technologies), *value proposition* that motivates the implementation of an Innovation Labs.

Study	Definition	Components	Value Proposition
Lewis, Moultrie 2005	An Innovation Lab is a dedicated facility for encouraging creative behaviors and supporting innovative projects that support innovative activity through the provision of appropriate resources, visualization and model making facilities and the ability to reconfigure for new projects.	Structural and infrastructural	Create an environment in which strategies for business growth could be developed in a fun, dynamic, rapid and novel way
Magadley, Birdy 2009	An Innovation Lab is a dedicated physical environments or facilities with collaborative workspaces in which groups and teams of employees can engage with each other in order to explore and extend their creative thinking beyond and above normal boundaries	Time, Space and Technologies	Enhancing creativity and to explore user's attitudes; Facilitate individual and team creative thinking such as thinking of existing problems in a new way, generating new ideas and thinking about how these ideas could be implemented
Gay, Thieme 2013	An Innovation Lab is a dedicated physical environment where suitable tools and methods are applied to assist in the process of idea creation or innovation development	Human agents: designer, operator, user and Material artifacts: space, tools and methods	Increase the capability of new product development and decrease time to market
Meyer 2014	An Innovation Lab is an ideal physical or virtual collaborative work environment where companies can develop, test and enhance innovations		Develop, test and enhance innovations
Van Golden et al., 2014	An Innovation Lab is a collaborative meeting ground between SMEs and business schools with a twofold objective: to stimulate business model innovation in SMEs and to develop a systematic approach for innovation processes		Stimulate business model innovation in SMEs; develop a systematic approach for innovation processes, adjusted to their limited financial and marketing resources
Callaghan et al., 2016	An Innovation Lab is a location-independent collaborative ideation spaces ... that requires three interlinking components namely the environment, the technology and the facilitation mechanisms to make it suitable for ideation and innovation activities	Environment, Technology and facilitation mechanisms	A specially designed environment that is conducive to creative thinking and to brainstorm future possibilities
Schmidt et al., 2016	An Innovation Lab is a physical space for testing innovative ideas, alternative business models, new economic practices or flexible cooperation structures.	Spaces which temporally unite specialized competencies in a single place. Alongside technology and providing space, innovation labs also give the users time for creative thinking	Fields of experimentation and crystallization points for temporary practices that generate product, process, and organizational innovations ... New spatial configuration that gains access to specialized expertise/knowledge, equipment, software, technologies and networks
Memon, et al., 2018	An Innovation Lab is a dedicated physical or mobile structure which mediates the innovation process and enables the effective development of innovations through the provision of collaborative services and necessary resources (equipment, methods and tools)'.	Physical environment, Resources: soft skills such as the knowledge, technical and methodological expertise, hardware including the tangible operational and technological resources, and finance	-Enable the innovation process: generation of creative ideas; identification of the problem or need of innovation; exploration of market opportunities; assessment of end users' and/or market needs; analysis of the success or failure of innovation in marketplace -InnoLabs appear supporting innovations in three domains: product development, business processes, and service development

Figure 1. Taxonomy of Innovation Labs

3. Final remarks

The literature review highlights several definitions of Innovation Labs. Most of them present common traits, but at the same time none refers to management philosophy aspects. As discussed in the introduction, in the current competitive landscape, in order to produce valuable innovations, adopting human-centred and open innovation approaches based on innovative methodologies is highly recommended. Therefore, the paper provides a definition of Innovation Lab based on the above-discussed perspective and on the results of the literature review. In this regard, *an Innovation Lab is a creative and interdisciplinary organizational initiative of short or medium-long term, based on the creation of a physical or virtual environment, promoting and supporting a human-centered and open innovation approach, to facilitate innovation stakeholders to understand users' needs, technology transformation, imagine and identifying innovation opportunities, and to generate new solutions to capture and deliver value.*

This is a first attempt to define an Innovation Lab considering its management philosophy. This aspect opens the possibilities of new and in-depth research in this field, aimed at providing a generic and ideal *process/model/logical framework* that represents the key tools, models and approaches required to lead and manage an Innovation Lab.

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Usage of Design Thinking and project-based learning for soft skills development

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Abstract:
The article discusses the importance of developing soft skills in the education of students-managers. Changes in the economy and the labour market have increased the demand for skills such as communication, general decision-making, negotiation, cooperation, critical thinking, etc. The extensive development of multinational companies and the creation of multinational teams of employees determine the importance of developing the soft skills of employees in multicultural groups. The article discusses the usage of the Design Thinking method for the development of such soft skills as collaboration, teamworking, decision making, communication and negotiation. The fact of the development of soft skills is confirmed by the results of a survey of students.

Keywords: *Design Thinking, Soft Skills Development, Project-Based Learning, Multicultural Environment*

1. Introduction

Changes in the economy and the labour market have increased the demand for skills such as communication, general decision-making, negotiation, cooperation, critical thinking, etc.

Big companies such as IBM (Leaser D., 2019) and universities think about what requirements are demanded by the business to employee in the 21st century, what he or she needs to know and be able to do. IBM places demands on both personal skills (such as critical thinking) and interpersonal interaction skills (communication, teamwork, etc.). In addition to technical and technological skills, interpersonal interaction skills have a special place. The reason these skills are becoming more and more important is because of the changing nature of work and the rapid pace of change. The extensive development of multinational companies and the creation of multinational teams of employees determine the importance of developing the soft skills of employees in multicultural groups.

Basically, universities introduce a course of design thinking for the development of innovative skills and creative thinking of students. At the same time, cooperation, negotiations, listening to each other, consideration of all the ideas of the participants become the basis for the development of soft skills. As noted on the UNESCO website, in the 21st century special attention is paid to the development of soft skills of students.

The development of soft skills is especially important in the education of future managers. Recently, the use of Design Thinking method in learning courses has become popular among the approaches to the training in business school. Some researchers declare that this method is successfully used for the development of the soft skills (Ewin N. et al, 2017).

2. The Design Thinking method in education

The Design Thinking was originally widely used in the technical fields, than it was successfully applied in humanities, including education (Melles G. et al, 2015). The special recommendation is to use the Design Thinking in the business school (Matthews J. and Wrigley C., 2017). This recommendation is based on the fact that usually the students in the business school study the business case targeted for the result, at the same time the Design Thinking is a process-oriented defines the process that is also very important in management.

The main characteristics of this method are human centered design, integrative thinking, design management and design as strategy. It should mark, all of these characteristics are important for the manager education. In this paper the design thinking method is considered according to the Stanford University design school which defines the five steps in this method: empathize, define,

ideate, prototype and test. The process is iterative, the number of iterations depends on the information update. At any stage of the process, the group members, having received new information, modify and refine the preliminary concepts to come to the final solution of the task.
The usage of the Design Thinking method to study the processes of collecting product and project requirements in a project management course allows us to notice the importance and role of the empathy phase for obtaining the expected result, namely, a better understanding of the specifics of the task (Strakhovich E., 2018). The other scenarios of using the Design Thinking method in the learning courses with the inclusion of the different method steps were tested. In the case when the first "empathize" step was skipped and students were given an instructions with the description of the business case and scenario of its usage and they were offered to determine the necessary functionality, the proposed solution turned out to be limited in comparison with the possible one, the questions to the potential users of the system were non-specific and did not reflect the features of the business case. In the case when the "empathize" step was included, but the testing step was skipped, the proposed business cases were diverse in topics and functions. Thus, based on this observation, it can be summarized that the inclusion of the 'empathize" step opens up the opportunities for the creative approach to the problem solving and allows to get the most interesting cases.
The Design Thinking method was used for the course of information technology in public administration held for master students. Students enrolled in this course had different education backgrounds (i.e. managerial, financial, geographical education as basic one) and were from the different countries. So a developing of a business case for the educational project was done in multicultural and multidisciplinary environment. The students were organized in groups of 5-7 people. Before starting the assignment, the following conditions were agreed: all participants in the group should be heard and everyone's opinion should be taken into account, the decision should be integrative. The most heated discussions took place at the first stage of empathy, when it was necessary to narrow the area of project development and decide what needs of the target audience will be considered. The business cases development results demonstrated the different experiences of the project participants and were fruitful. After discussing the completed educational projects, a survey of students was conducted to evaluate work in accordance with the applied method.
13 students took part in the survey. All students note the focus of the method on the development such soft skills as collaboration (“strongly agree” – 30% and “agree” – 70% of the survey participants), teamworking (“strongly agree” and “agree” – 65% and “neutral” – 30% of the survey participants), integrative thinking (100% of respondents were “strongly agree” and “agree”), most notes characteristics such as the ability to listen to each other (more than 50% of respondents were “strongly agree” and “agree”, others responses were “neutral”), opportunities for creative search for solutions (about 85% respondents replied “strongly agree” and “agree”, others were “neutral”).

3. Discussion

The usage of the Design Thinking method in the training project showed the following advantages:
• it develops cooperation to perform the task and human orientation in following the method of the Design Thinking, allow to develop the soft skills, including emotional intelligence, the increasing role of which is noted in the literature,
• the students involvement in the learning process increases, their interests in the result of work grow through participation in the process of creating this result, students actively approach to learning,
• the students learn the Design Thinking method, that is becoming increasingly popular in the business.
The examples of application of the Design Thinking method in education considered in the paper showed good results when using the project-based learning and this fact motivates the further use

of the method. Application of the method develops the skills and competences demanded in the modern world.

This particular example of using the Design Thinking Method in education has shown the potential of this method and encourages its further use.

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Institutions and Comparative Advantage in Services Trade

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Abstract:
Recent studies have highlighted the role of human capital and good economic institutions in establishing a comparative advantage in trade in complex institutions-intensive goods. We show that the effect of institutions on comparative advantage in services trade is quite different: in fact, countries with bad institutions rely significantly more on service export. More specifically, as the quality of institutions deteriorates, the share of information technology sector (ICT) services export in total ICT export increases significantly and countries with worse institutions get a substantial comparative advantage in the provision of ICT services. This is especially applicable to transitional economies characterized by high, arguably exogenous, human capital at the level of most advanced countries.

Keywords: *Service Trade, ICT Services, ICT Goods, Human Capital, Economic Institutions, Transition Economies, Comparative Advantage*

Introduction

Resent research in international trade has demonstrated that institutions influence the determination of comparative advantage in trade of goods. Countries with strong domestic institutions have a significant comparative advantage in producing complex, institutions-intensive goods while countries with weak institutions tend to specialize on less complex goods. Through this channel weak institutions can hinder growth and development (Nunn and Trefler, 2014).

We argue that the role of institutions in services trade can differ significantly from the one in trade in goods. The intuition behind it is that services provision often relies less on institution-driven factors, such as public infrastructure, availability of large number of inputs, property rights and capital investments than production of complex goods.

We show in the case of information technology sector (ICT) that, countries with bad institutions rely significantly more on service export even after controlling for human capital input requirements and availability. We focus on ICT sector to isolate the differences in the role of institutions in determining comparative advantage in goods and services. Both ICT goods and services provision are equally intensive in human capital and thus present a good opportunity to study differences between goods and services provision.

Our study is motivated by high ICT services exports (e.g., software development) and low ICT goods exports (e.g, computers, phones, etc.) of transition countries which are known to have high human capital and low institutional indicators.

Institutions and ICT Services Exports

Figure 1 illustrates high human capital availability of transitions economies and weak domestic institutions relative to other countries. Specifically, we categorize countries into four groups: 23

most developed economies (e.g. USA, Canada, Japan and Western European economies); new members of the European Union (a group of 13 countries including Poland, Slovakia, and Baltic countries); transition economies group consists of 17 mostly post-Soviet countries including Russia, Ukraine, Belarus; the most numerous fourth group includes more than hundred other developing countries.

Figure 1. Institutions quality and schooling by country groups

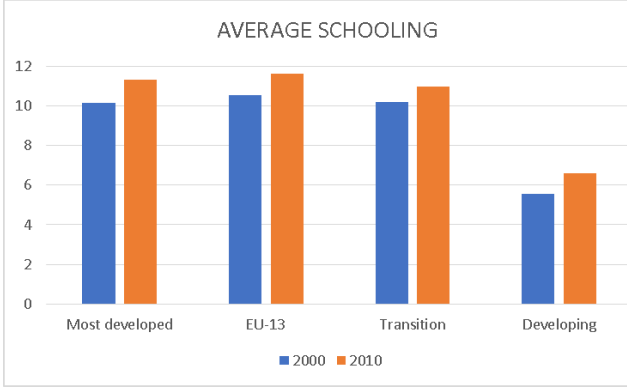
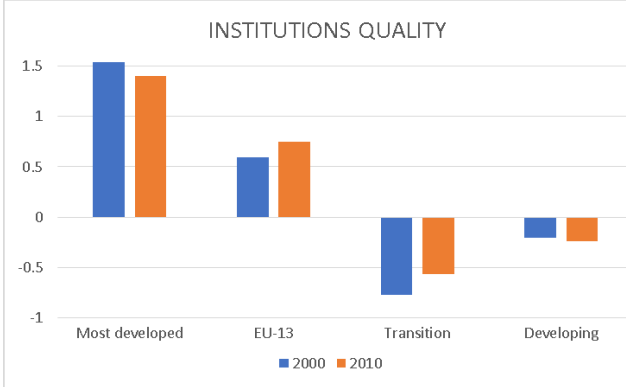
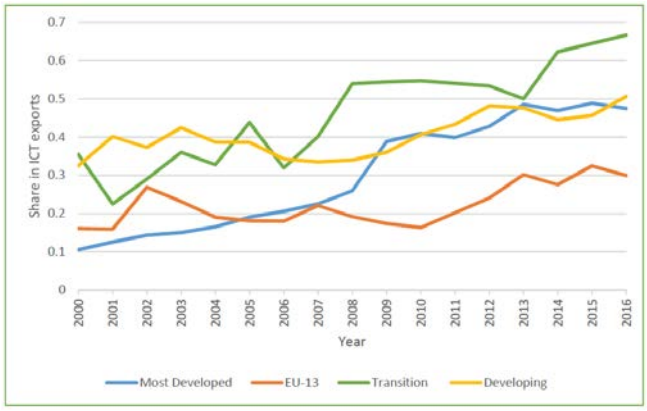
Figure 1a: average schooling	*Figure 1b: institutions quality*
	

Figure 1a presents average number of years of schooling, our measure of human capital, for each country group in 2000 and 2010 (the years are chosen based on data availability). The human capital is at a similar level in the most developed economies, EU-13 and transition economies, but significantly lower in other developing countries. Figure 1b illustrates average institutional quality for each group in 2000 and 2010. Institutional quality for each country is calculated as an average of six indicators, distributed approximately from -2.5 to 2.5: control of corruption, government effectiveness, political stability, rule of law, regulatory quality, voice and accountability, with lower value corresponding to worse institutional quality. In contrast to education, the average institutional quality of transition economies, although improving from 2000, remains on average lower than the institutional quality of other developing countries.

Consistent with the literature on institutions and comparative advantage in relationship- and investment-intensive goods production, ICT goods export from transition economies is significantly lower than in other countries. In contrast, ICT services export is at a higher level and faster growth in transition economies than in other countries.

The importance of ICT services exports in transition economies is seen in Figure 2. The figure presents share of ICT services exports in total exports of ICT goods and services. To obtain values for each country group, we average ICT services shares across countries within each group.

Figure 2. Share of ICT service exports in total ICT exports



As Figure 2 shows, average share of ICT service export in transition economies is higher than share of ICT service export in all other groups of countries. Transition economies, characterized by high human capital and weak institutional quality, specialize in exports of services over goods in their ICT exports. This descriptive evidence suggests that abundant human capital, inherited from USSR and arguably exogenous, shifts to services within the human capital intensive ICT sector when facing weak institutions.

Empirical panel analysis confirms the descriptive evidence. To test our hypothesis, we use share of ICT services in ICT export as a dependent variable and we show that quality of institutions is a significant determinant of it. Our regressions show that the higher is the quality of institutions the lower will be the share of ICT services in total ICT export. Moreover, regression analysis allows us to quantify this dependence: as the quality of institutions increases by 1, which is approximately the difference between Belarus and Georgia (as can be seen in figure 3 below), the share of ICT goods in total ICT services increases by about 20%.

Institutions as a source of comparative advantage in services

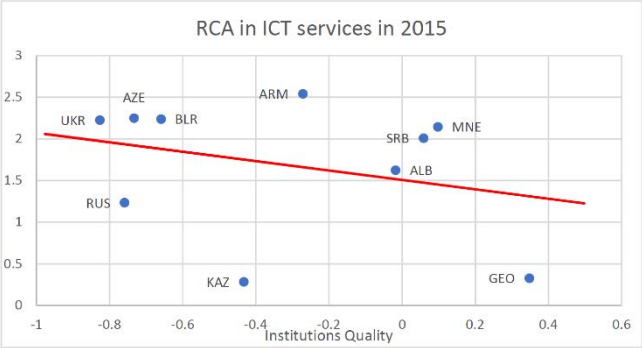
To explore the role of institutions in the relative services provision within a sector further, we look at comparative advantage in exporting ICT services. We incorporate a measure similar to Relative Share measure used in Levchenko (2007) for the analysis of comparative advantage in goods export. The measure effectively compares the share of ICT services export for a given country with the world average. The index of revealed comparative advantage in ICT services over ICT goods is computed for country i in the following way:

$$RCA^{i}_{ITserv} = \frac{ICTSERV^{i}_{sh}}{\frac{\sum_i ICT\ serv\ Exp^i}{\sum_i Total\ ICT\ export^i}}$$

where $ICTSERV^{i}_{sh}$ is share of ICT service export in total ICT exports for country, $\sum_i ICT\ serv\ Exp^i$ is the export of ICT services for all countries, and $\sum_i Total\ ICT\ export^i$ is the total ICT export (goods plus services) for all countries.

We look at the revealed comparative advantage index across our group of transition economies in figure 3 and see that even within this group we there is a negative correlation between institutions quality and revealed comparative advantage in ICT services.

Figure 3. Revealed Comparative Advantage and Institutions Quality



Countries with high institutional quality, like Georgia, export relatively more goods compared to services. Countries with low institutional quality, like Ukraine and Belarus, have a comparative advantage in ICT services exports.

We hypothesize that the main mechanism responsible for this is as follows. Poor institutional quality, resulting in, e.g., corruption and impossibility to create binding contracts does not allow the countries to produce complex goods in IT industry while presence of high human capital in these countries allows them to produce ICT services that much less depend on corruption and contracting inefficiencies but as intensive in human capital as ICT goods.

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Empirical Analysis of Factors Affecting the Choice of Bank for Firm Exports

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Abstract:
In this paper, we investigate whether firms choosing internationalized banks to export have higher export intensity than firms working with non-internationalized banks, keeping other factors constant. Our hypothesis is based on the transmission of foreign market knowledge from banks to firms, which helps to decrease information barriers of international trade. Most of the papers focus on financial influence of banks on firms. Our research hypothesis is that exporting using internationalized banks increases a firm's export intensity. We test the hypothesis using instrumental variables (IV) regression based on the data of the Federal Customs Service of Russia. The data on banks is gathered from RUSLANA database and Spark-Interfax database. Increasing export intensity might be effective for firms because it leads to export expansion. Therefore, supporting international banks and their relationships with exporters could be valuable. We expect to find a positive relationship between a firm's export intensity and internationalization of the firm's financing bank while considering a number of firms'and banks' characteristics.

Keywords: *Internationalization, Firm-Bank Relationships, Export, Export Intensity, Foreign Banks, Russian Economy*

Literature Review

The new theory of trade of Mark Melitz (Melitz, 2003) asserts that the companies that export are more productive than those that do not. Any company that decides to export is likely to face large sunk costs and information asymmetry. The decision to export is determined by several factors: size of the firms, innovations, FDI, previous export experience, import of the components (Fedyunina & Averyanova, 2018; Gorodnichenko et al., 2010; Wagner, 2001).

Even considering literature that studies firm's characteristics that determine export, firm-bank relationships in connection to export are studied rarely. From the financial prospective, firms that are financially constrained are unable to reach foreign markets, according to Guariglia (Guariglia, 2008). Claessens suggests that international banks facilitate trade in emerging markets by increasing the availability of external finance and helping overcome information asymmetries (Claessens, Hassib, & Horen, 2017).

Looking from a different perspective, Bronzini found a positive relationship between the presence of the branch of the firm's financing bank in a foreign market and firm's decision to export to this market (Bronzini & D'Ignazio, 2017).

Methods

Our research is based on the data of the Federal Customs Service of Russia, the data on banks is gathered from RUSLANA database and Spark-Interfax database. The sample contains 2.000 observations.

We use the instrumental variables (IV) model to test our hypotheses. The model tests the influence of international banks on export intensity, therefore, the dependent variable is export intensity, measured as a ratio between the cost of export and revenue (dummy: 1 if more than 15%, otherwise 0).

We use the following control variables representing firm's characteristics that are likely to affect export activity:

Age - the age of the company;

Size - firm size indicator (calculated using the RUSLANA database methodology);
Int_f - an indicator of the form of ownership of the company;
profitperemployee - profit per employee;
ok - firm OKVED, 2 characters;
ht - are prducts exported by the company high-tech;
d_market - 1, if the main export market is nearby, 0 otherwise (the countries of the near abroad include: Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Uzbekistan, Ukraine, Latvia, Lithuania, Estonia);
imp - the share of the import value of the total foreign trade turnover is more than 50%;
The following variables are used as variables reflecting information about banks:
Int_b - a binary variable, whether 1 is the main bank foreign (in this case, the foreign bank is considered to be the bank that, according to the OKFS classifier, is foreign property);
i_m is a binary variable, 1 is the presence of foreigners among company managers, 0 is different.

Export intensity model

The model is organized by the following way:

$$\Pr(export\ intensity) = \alpha + \beta * int.bank(dummy) + \beta * X + \varepsilon$$

where X is a vector of control variables, ε is a normally distributed random error with zero mean and unit variance. We measure the probability of export intensity being more than 10% as modeled above. Assuming that at least one of the regressors is endogenous or jointly determined with the dependent variable (internationalization of the bank and export intensity may be jointly determined), we face possible endogeneity which leads to inconsistency of estimates.

To address the issue of endogeneity, the instrumental variable that we use is presence of foreigners among company managers. We expect these instrumental variables to determine the banks' internationalization activity.

Results

There is a positive influence of financing bank's internationalization on firm's export intensity. In general, it can be concluded that there is an influence of foreign banks on the export intensity of companies, but it cannot be said that the influence is rather strong, as the coefficient is statistically significant in one specification. Other regressors in different specifications show a stable result, for example, the export of high-tech products has a positive effect on the intensity of exports in all specifications, exports to neighboring countries also have a negative effect on all specifications.

Conclusion

In this paper, we investigate the influence of a financing bank internationalization on a firm's export intensity. Using a data set of 2,000 Russian exporters, we contribute to the research on firm-bank relationships by estimating the effect of bank internationalization on export intensity, measured as the ratio of the cost of export to revenue of the firm. We focus on whether bank internationalization influences the probability of the firm to increase export intensity based on the idea that an international bank may transfer its' knowledge of foreign market to exporters. To eliminate endogeneity, we use the two stage least squares instrumental model while considering a set of firms' characteristics.

The results are significant for state economic policy since it affects export expansion. It is also important for entrepreneurs since cooperation with foreign banks helps them to boost their export intensity. This suggests an important finding for industrial policy, because it may be more cost-effective to increase export productivity through a bank-firm relationship rather than stimulate the firm to enter a new market. Further research should to be conducted to find which specific factors of bank internationalization influence exporting firms, how exactly banks share their knowledge with firms and what role intangible assets play in bank-firm relationships.

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AI Impacts on Sustainability Strategies of Energy MNEs from Emerging Economies

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Abstract:
Digitalization is expected to play a significant role in the transition towards low-carbon energy systems, to respond to climate change, environmental pollution and natural resource constraints challenges. The paper examines the factors underlying the use of AI in the sustainable strategies of energy MNEs, possible short term and long term direct and indirect benefits, problems that MNEs are facing while pursuing these strategies. The research method is based on deep interviews. For the research the energy MNEs from emerging markets are considered. Our intention is to provide a holistic study of AI impacts on competitiveness of energy MNEs, with a specific focus on sustainability performance.

Keywords: *Artificial Intelligence, MNEs, Sustainability, Strategy, Competitiveness, Energy, Emerging Economies, Russia*

Research approach and methodology

The research method is based on deep interviews. For the research the energy MNEs from emerging markets are considered.

The research questions are the following:

- What factors affect the use of AI in sustainability strategies?
- How do AI applications affect resources use and capabilities of energy MNEs?
- What are the AI implications for sustainability performance of energy MNEs?
- How do state environmental policies affect AI adoption in energy MNEs?
- Do the home state programmes for Digital economy development support the adoption of AI technologies?
- What are the challenges for AI technology implementation for energy MNEs?

Expected results

Sustainability strategies of MNEs rely on the adoption of new technologies, of which AI is one of the most promising. Energy MNEs from emerging economies start to develop and integrate AI in their strategies, including partnerships with ICT companies.

These companies are adopting AI technologies to support the decision-making. Relying on local supply of the AI technologies they depend on the comprehensive mid-term state policy in IT market development.

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Strategy Management of Fisheries, Livestock and Agriculture Resources as a Leading Sector in Supporting the Indonesia and Timor Leste Border Area Development Program in Belu Regency

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Abstract:
The concept of Nawacita which builds Indonesia from the periphery has become a passion for local governments in planning their regional development by optimizing rural resources to improve the economy and welfare of rural communities. Belu border area has a low HDI of 59.72 and the percentage of poor people reaches 14.58%. Therefore, the economic acceleration in Belu can only be done through optimizing the management of superior sectors through technological innovation, so as to have an economic impact for the region and its people. The economic contribution in Belu is dominated by agriculture, livestock, fishery and forestry sectors. The purpose of this research is to find resource management strategies from the leading sectors of fisheries, livestock and agriculture so as to provide economic benefits for the community, especially in the border area.

Keywords: *Strategy Management, Fisheries, Livestock, Agriculture, Border Region, Leading Sector, Belu Regency, Indonesia, Timor-Leste*

1. Introduction

Belu regency, as one of the the regencies in East Nusa Tenggara Province, has a nationally strategic value because it is a border district that still faces various complex problems. Data shows that Belu regency has a low human development index of 59.72 and the percentage of poor people reaches 14.58% (BPS, 2017). Belu Regency's economy is still dominantly contributed by the agriculture, livestock, fisher(7) development of processed diversification of superior commodities such as corn, peanuts, cassava and bananas ies and forestry sectors, namely 24.70% of the total GRDP of Belu (BPS, 2017). The fact shows that the high rate of poverty in rural areas is not only caused by scarcity of resources but also because the pattern of available resource management is not optimal, so the productivity of these resources is still low and has not encouraged the improvement of the welfare of rural communities (Laynurak, 2008). Further stated that although the community had access to these resources, it did not have a significant effect on the welfare of the community, for this reason, efforts to optimize natural resources management are needed (Paulus et al., 2019). The challenge of development in the border area is find a model for more optimal use of agricultural resources so as to provide economic benefits to the community, especially in border and rural areas.

Common Problems and Challenges of Fisheries, Livestock and Agriculture Resource Management

Figure 2 Common problems in the management of fisheries, livestock and agricultural resources in the border region of Indonesia-Timor Leste

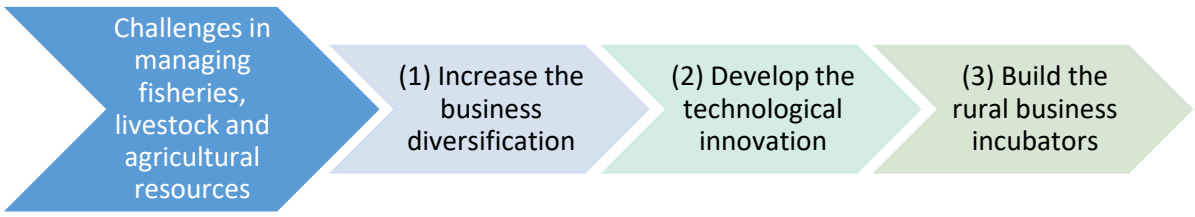

Figure 3 Challenges in managing fisheries, livestock and agricultural resources in the border region of Indonesia-Timor Leste

2. Research aim

The aim of this research is to find the resource management strategies from the leading sectors of fisheries, livestock and agriculture so as to provide economic benefits for the community, especially in the border area of Indonesia-Timor Leste in Belu regency.

3. Method

The study is carried out using both primary and secondary data. Primary data were obtained from discussions, questionnaires, interviews, and field surveys by respondents, experts and

communities in the study area, while secondary data obtained from several sources of literature and documents from several institutions associated with the research.

4. Results and Conclusions

Results

Tabel 1 Strategies for managing fisheries, livestock and agriculture resources in the border region of Indonesia-Timor Leste

	SUB SECTOR OF FISHERIES	SUB SECTOR OF LIVESTOCK	SUB SECTOR OF AGRICULTURE
STRATEGIES FOR RESOURCE MANAGEMENT	(1) Increase the fisheries production, which include catching Tuna and milkfish cultivation.	(1) Improved the quality of superior pork seeds. The availability of superior pork seeds is an absolute requirement for the development of the pig industry. For this reason, it is necessary to build nursery units through rigorous parent selection so that they can produce superior quality pig seeds and are developed by farmers	(1) Increasing quality rice and corn production as the leading agricultural sector in Belu regency
	(2) Increasing the production of processed products with high added value in fishery products, which include processing of shredded tuna, milk fumigation, presto milkfish processing, and various processed variants of Tuna and Milkfish	(2) The development of diversified processing of superior pork products in order to obtain added value for pork products in Belu regency	(2) Introduction of superior season-appropriate seeds, including the procurement of agricultural production facilities
	(3) Improvement of regulations and policies in implementing general strategies for increasing production of Tuna and Milkfish fisheries	(3) Development of adaptive cultivation technology with the Belu community, accompanied by technological assistance for increasing the capacity of farmers	(3) The application of adaptive food crop technology
	(4) Meeting the infrastructure needs in order to increase connectivity to support increased production of tuna and milkfish	(4) The implementation of certification and ISO to improve the competitiveness of pig products in Belu	(4) Increasing farmers' access to capital and markets
	(5) Development of resources and science and technology from Tuna fishermen and Milkfish farmers	(5) Development of Integrated Farming "Sonis Laloran". The veterinary office region of Belu makes the ranch	(5) Encouraging productive institutional patterns and farmer partnerships

	area of “Sonis Laloran” a place to provide feed for farmers around the area	
(6) Development of community salt business from household scale to industrial scale	(6) Developing a holistic livestock business infrastructure ranging from upstream to downstream, including: construction of animal feed factories, construction of livestock products processing plants, and marketing infrastructure for livestock products	(6) Development of organic farming systems, ISO certified and labeled Eco-labeling
(7) Establishment of rural business incubators in capture fisheries, processing of fishery products, and salt in order to create sustainable Village Owned Enterprises (BUMDes)	(7) Developing a partnership pattern with various parties to facilitate the provision of livestock business capital for farmers, so that it can increase the scale of business to a more economical level	(7) Development of processed diversification of superior commodities such as corn, peanuts, cassava and bananas

Conclusions

Based on the literature review and preliminary studies that have been conducted, it can be concluded that the acceleration of rural economies can be done if all available potential resources are managed optimally through business diversification, utilization of adaptive technological innovations, and foster productive economic businesses in the countryside as locomotives to accelerate the independence of the rural economy in the border region. The strategies that will be carried out require collaboration from various parties such as higher education institutions (universities/polytechnics), non-governmental organizations, community groups, cooperatives, banks, central and regional ministries (governments), technical institutions related to regional development.

5. Acknowledge

The authors wish to acknowledge the Ministry of Research, Technology and Higher Education for providing the funding for this research through the 2019 national strategic research scheme.

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Success and Specifics of Market Entry Strategies of Swiss SME's to the Russian Market in 2011 and 2019

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Abstract:
The paper investigates the success of market entry strategies of Swiss SME's to the Russian market in 2011 and 2019. Not only multinational Swiss companies are present in the Russian market but also small & middle sized ones which have specialized in certain market niches.
Based on qualitative descriptive analysis, this paper compares various market entry strategies used by Swiss companies in 2011 and 2019 for the Russian market, considering the different economic environment in Russia since 2014.

Keywords: *Market Entry of SMEs, Internationalization of SMEs, Cross-Cultural Management, Market Barriers, Russian Economy after 2014, Emerging Markets*

1. Introduction. Internationalization: Swiss SME & Russian Market Entry

Economic integration (e.g., EU, WTO), technological progress (Internet) and lower transaction costs are the main drivers of internationalization. According to Luostarinen & Welch (1990), internationalization can be described as "the process of increasing involvement in international operations". Therefore, the barriers that segment national and international markets and separated companies have been removed.

The Swiss economy is characterized by SMEs. Thus, 99.7% of all Swiss companies are SMEs and they employ about 60% of the Swiss working people. With a small domestic market Swiss SMEs have no other option but to compete abroad and to internationalize. As a result, Switzerland has a high export quota of 60% (Swiss International Entrepreneurship Survey, 2016).

Russia is considered due to its big market potential and large number of consumer as an attractive export market for Swiss companies. To realize the market entry the choice of the right entry modes and marketing mix is necessary.

2. Data & Sample

Quantitative and qualitative research are the two methodological approaches to analyze Swiss SMEs entering the Russian market. The main aim of the quantitative research is to find out the most important factors for a success market entry. In 2011 and in 2019 about 250 Swiss companies doing business in Russia were surveyed. The qualitative research (case study or interviews) aims to cross-check the findings of the quantitative research.

3. Empirical Results

The empirical quantitative results show that Swiss SME's are still careful and choose mostly to export to Russia by local distributors. Localization or direct investments in Russia are rather seldom. Russia is attractive through its large consumer market and future market potential. The most important issue in the market entry procedure is to find the right local business partner. Bureaucracy is the biggest obstacle in doing business with Russia. If the market entry was done successfully high margin can be achieved which covers also the high business risks. Cross-cultural differences were not considered as a problem. The comparison of results in 2011 and 2018 does not show big differences. Nevertheless, due to the worse political environment and economic crisis Russia became less attractive for Swiss SME's in comparison with other foreign countries.

Conclusion:

Swiss SME's companies are forced to export to foreign markets like Russia. Despite its big market potential, a market entry depends mostly on the local business partner. When the right business partner is found, a successful business can be established through step-by-step localization. The risks of market entry can be compensated by clear market leadership in a specific niche where many Swiss SME's are doing business internationally.

The comparison of the successful factors of market entry of Swiss SMEs shows that local distributor was mostly the right strategy in 2011. This has not changed considerably in 2019 because Swiss SMEs are very cautious with further investment and localization in Russia but localization can be a successful long-term strategy for the Russian market.

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Resource Harmonization in Subsidiary Mandate Earning and Gaining in China

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Abstract:
This paper focuses on the responses of the dynamic changing eco-system in China of how foreign MNE subsidiaries have gained or earned their mandates over time. This continuous transformation has been accompanied by willingness of foreign MNEs to internationalize R&D and innovation activities in search for new knowledge and capabilities outside of their home market. Until now, research has not focused on differentiating the role of internal resource distribution in relation to mandate gaining or earning. We take into consideration the national context of China, the different industry context between B2B and B2C, and the resource allocation within the corporate network. Furthermore, we differentiate between the proactivity and passivity of foreign MNE subsidiary mandate development. Based on 75 semi-structured interviews from two in-depth case studies collected during two sequential four-months research stays, this study investigates the difference in the evolutionary subsidiary mandate development processes either by earning or gaining. The two different processes have impact on how resources are available, distributed, harmonized, and utilized between the subsidiary and the corporate network. This study is subject to some limitations and potential for future research. For example, only the subsidiary perspective has been taken into consideration. This means that there is a potential for future research to focus on the headquarters' perspective on the evolutionary mandate process by earning or gaining.

Keywords: *China; Earning; Evolutionary Process; Gaining; Multinational Enterprises Resource-Based View; Subsidiary Mandate*

1. Introduction

In the past decades, China has risen from a global center for low cost labor and production, challenging the status quo to become the main global source of innovation (Ding & Li, 2015). This continuous transformation has been accompanied by willingness of foreign multinational enterprises (MNEs) to internationalize R&D and innovation activities in search for new knowledge and capabilities outside of their home market (Nieto & Rodríguez, 2011).

Given the rewarding eco-system in China, many foreign MNEs have moved along different subsidiary mandates. The subsidiary mandates have developed from an initial listening post and localization center that is focused on the local market to a mandate, which roles comprise an international development or even an integrated R&D center over time (Gassmann & von Zedtwitz, 1999). The R&D subsidiary mandate development increased the capability to capture the resources provided by the China's environment facilitated by internal MNE integration and local external embeddedness (Ciabuschi, Holm, & Martín Martín, 2014). Foreign MNEs have chosen to invest in R&D in China despite the risks of intellectual property rights management and previous requirements to enter the market in technology-intensive industries through a local joint-venture partner (Schotter & Teagarden, 2014). The subsidiary mandate upgrade can be initiated by the headquarters in which the subsidiary passively gains a new mandate or it can actively engage with the headquarters to negotiate and earn a new mandate. Following the

resource-based view, the aim of this research is to explain the two different processes surrounding subsidiary mandate evolution in China.

2. Literature review

The evolutionary process of subsidiary mandate upgrade process is multi-layered and varies based on different variables. Previous studies identified variables such as national context (Jones & Davis, 2000), industries (Gupta & Govindarajan, 2000), and the resource allocation within the corporate network (Jha, Parulkar, Krishnan, & Dhanaraj, 2016).

Necessary resources for a subsidiary mandate upgrade can be either gained orchestrated by corporate strategy or earned by means of subsidiary's entrepreneurial efforts (Birkinshaw, 1996). Two evolutionary processes differentiate whether a new subsidiary mandate is gained or earned. The proactive part in the evolutionary mandate process can shift between subsidiary and headquarters. Until now, research has not focused on differentiating the role of internal resource distribution in relation to mandate gaining or earning.

In this study, we distinguish between competence-exploiting mandate and competence-creating mandate (Cantwell & Mudambi, 2005). A subsidiary with a competence-exploiting mandate primarily serves a limited geographical market scope with responsibilities for adaptations and to achieve cost advantages i.e. listening post and localization center, while a competence-creating mandate serves an extended geographic market scope that contributes to the overall innovation output within the corporate network (Awate, Larsen, & Mudambi, 2015). In accordance with existing literature, we are focusing mostly on mandate earning rather mandate gaining from subsidiary perspective (Birkinshaw, 1996).

3. Methodology

This paper is based on two in-depth case studies and qualitative data collected during a four-months research stay in two companies. 75 semi-structured interviews are used to explain the different processual specifications involved in the resource allocation within the corporate network. For comparative purposes, we have chosen two case studies to each illustrate a process of how mandate earning and gaining differs. Case A is a Danish knowledge-intensive company with an earned competence-creating mandate, while Case B is a German knowledge-based company with a given competence-exploiting mandate, which is on the way to become competence-creating.

4. Implications

The study provides two separate processes on how foreign subsidiary mandates are either earned or gained in China depending on how resources are available, distributed, harmonized, and utilized between the subsidiary and the corporate network. This explanatory research offers insights into how multinational corporation are able to allocate their resources in the best possible way to upgrade subsidiary mandates and conduct global innovation.

5. Limitations and avenues for future research

This study is subject to some limitations and potential for future research. For example, only the subsidiary perspective has been taken into consideration. This means that there is a potential for future research to focus on the headquarters' perspective on the evolutionary mandate process by earning or gaining.

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Russian Food Products Penetrate Chinese Market: A Strategy to Overcome the Liability of Foreignness

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Abstract:
At the end of the 20th century China has opened its domestic market to imported food. Considering the fact that in 2019 China has increased import duties for 128 goods for the USA, Russian food producers have a great potential to serve Chinese consumers. At the moment, Russian goods are poorly represented in non-border cities, however, due to the development of e-commerce, state support of Russian import and the activities of various intermediaries, Russian entrepreneurs have lots of opportunities to take their niche in the Chinese market. Through the survey of Chinese consumers, the study identifies major drivers and obstacles for market penetration by Russian producers and develops a set of practical recommendations to stimulate these processes.

Keywords: *China, Food, Import, Liability of Foreignness, Russia*

1. Introduction

As a result of Russian-Chinese relations improvement, in May 2015 the leaders of the two countries announced the unification of the Eurasian Economic Union and the Silk Road. In 2018 the export of Russian goods to China for the first time since 2006 has exceeded the import. Despite the fact that oil and gas are still leading export goods, there also positive trends in the volume of food export. For example, the export of animal and vegetable fats and oils increased by 51%, fish and other seafood products - by 37% comparing to 2017 (Feinberg, 2019). The growth of interest in Russian goods is caused by changes in Chinese society. The middle class in China is steadily growing, and they pay great attention to the quality of products, considering that imported products are more tasty, healthy and high-quality.

The Chinese market is more welcoming for the companies and manufacturers that are either supported by the Russian government or operating within some cooperation programs. A vivid example is the case of “33 penguin” ice cream brand, which became extremely popular in China after Vladimir Putin has presented a box of Russian ice cream to Xi Jinping.

2. Research aim

The study aims to identify major drivers, premises, and barriers for Russian food producers entering the Chinese markets. It particularly focuses on the role of various intermediaries that assist Russian companies in penetration the Chinese market, and also considers the influence of state support on the success of internationalization process of Russian producers.

3. Theoretical background

The study is theoretically framed within the liability-of-foreignness (LOF) framework. The concept of liability-of-foreignness is based on the consideration of extra costs of doing business abroad for the foreign firms on host markets compared to the national firms in their home markets (Hymer, 1976). These costs perform as barriers to overcome using a firm’s specific competitive advantage.

The four possible causes of LOF was suggested by Zaheer (1995) and included costs directly associated with spatial distance, such as the costs of travel, transportation, and coordination over distance and across time zones; firm-specific costs based on a particular company’s unfamiliarity with a local environment; costs resulting from the host country environment, such as the lack of legitimacy of foreign firms and economic nationalism; costs from the home country environment, such as restrictions on high-technology sales to certain countries. Not all of them

could be identified in the case of Russian food producers entering the Chinese market, but this classification might serve as a starting point for further discussion.

4. The data and method

To identify the drivers and barriers of the Chinese market penetration the study combines the data from primary and secondary sources. The data on the customers' perceptions of the Russian products were collected though the online survey focusing on the food habits of the customers, their incentives and concerns. The data on companies' incentives and concerns were collected from secondary open sources and published interviews of companies' representatives.

5. Results and conclusions

Russian companies have a number of firm-specific advantages that provide them benefits in penetration he Chinese market. Among them, comparably high level of food product safety, wide variety of distribution channels, quite large consume base, simple and convenient channels of product delivery.

Among the major challenges we identified are unequal market development within the country, small variety of Russian products and producers that are familiar to Chinese consumers, fierce competition and weak competitiveness of Russian food products, the specificity of Chinese consumers tastes, low effectiveness of traditional promotion instruments and bureaucratic difficulties aggravated by the lack of knowledge of Chinese low and certification procedures by Russian businessmen.

Chinese and Russian cooperation in food industry has a great potential: Russia has wide range of products to offer and Chinese has a huge consumer market, so a crucial task is to find the most appropriate ways for market penetration to take the most advantage.

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Alternative Managerial Strategy to Finance Company Based in Developing Countries (by the Example of GAZ Group LLC)

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Abstract:
This paper investigates the international strategy of lean production used by most Japanese enterprises in automobile industry. The strategy of lean production becomes the part of a comprehensive managerial strategy which was developed and proposed by the author to GAZ Group LLC in the process of undergoing research and practical training. The author added a lever for financing the company's projects to this complex strategy that aims to attract funds from the company's employees and managers salaries. The results of the research show that implementation of this strategy of financing the company's projects is possible and has quite promising outcomes in the period of economic decline such as liquidity trap or economic sanctions.

Keywords: *liquidity trap, developing countries, managerial strategy, lean production, automobile industry, GAZ Group LLC*

1. Introduction

Ben Bernanke's recommendations [1, p. 422-23] consider that Central Bank will succeed in achieving the country's economic stability if it keeps the prices of goods produced unchanged even though the inflation takes place. However, how to do this, knowing that growth in the amount of money in the market increases the prices of goods appropriately, he did respond. From here, it is no longer macroeconomic institutions start to take massive action but the economic agents themselves — enterprises and companies. Each of them entities have specific management models in order to adapt as quickly as possible to changing economic environment. Of course, they (models) differ in terms of country where company based on. To consider on international level, the differences are absolute since different countries have different value systems. Some adopt cost savings by dismissing company employees while others effectively manage raw material costs.

The second chapter discusses the perspective of a management strategy model developed by the author. The third chapter describes the content and structure of given management model that includes, on the one hand, an experience of international strategy in lean production and, on the other hand, a tool to finance company's projects through its own resources raised from employees' salaries. The fourth chapter presents the empirical results and conclusion of the model during research internship in the GAZ Group LLS where the management model was eventually proposed as an alternative method to finance the company's projects in the period of economic stagnation.

2. Prerequisites of the management model

When a Japanese company faces a difficult period the first person to cut wages is its president. If the case of company's security becomes even more serious it is the president who first resigns. Japanese companies do not begin with the dismissal of ordinary employees: they believe that there are no bad soldiers, but bad generals [2, p. 27-8]. SONY founder Akio Morita says that the best Japanese companies have no ordinary techniques, secret formulas or recipes for achieving business success, and no theory, program or government policy can guarantee a company success, but human capital is capable of it [3, p. 74-5]. Therefore, the main task of the Japanese manager is to establish strong and trusting relations with the workers, create a family-

like environment in the corporation, create an understanding that both managers and workers are in the “same boat”. Based on the experience of the Japanese companies' management styles, this management approach can be adapted and implemented for companies based in developing countries.

The next chapter proposes a management model that is founded primarily on the employees of the enterprise.

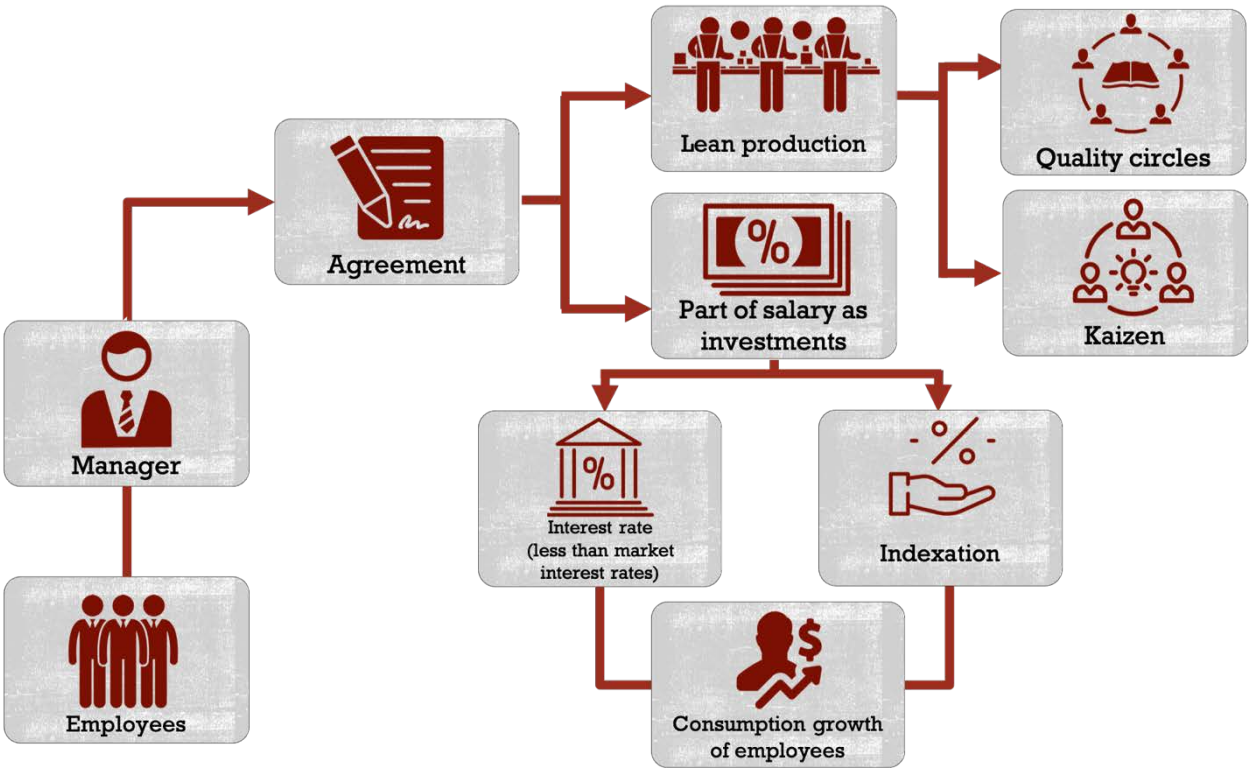
3. Model sample

The company's employees are the main factor why it grows, and the head of the company may conclude an agreement with his employees during critical conditions of the company's stable operation. By such actions the manager saves not only the company but also the socio-economic situation of his workers. By this very action he makes it clear that the teamwork of the entire state as a single machine will allow the company not only to survive the economic crisis but also reach a new level of productivity including innovative monitoring and production (see Fig. 1)

The agreement to be concluded between employees and the head of the company needs to stress two main points:

1) Lean production where every employee will be involved in a continuous product improvement process to minimize costs.

Figure 1: The management model of alternative way to finance company’s projects.



Japanese technology is worldly known only for one reason - high quality. Lean production in every Japanese enterprise does not occur without the so-called “quality circles” where any employee of the company can participate. This internal informal organization allows them to share freely their own knowledge and improve their skills and the skills of colleagues. Naturally, the quality monitoring is widely practiced by Toyota Motors LLC where the quality of the product can be traced at every stage of production. It is also known that if the previous workshop provided the products (detail) with the defects then the downstream workshop is not entitled to accept it and refine the shortcomings. Japanese managers support such an opinion that

it would be better if the defect is detected at the initial stages of production than found in the already released product. The main purpose of such approach is not to increase the quantity but the quality of production and reduce costs of the final product.

2) The second point of the agreement (developed by the author) is the attraction of a certain percentage of employees' salaries as investments. Here, of course, one nuance should be noted - each country and cities have their own average income per capita.

During the economic downturn commercial banks will naturally attract new lenders with great concern which reduces the chances to get production loan more easily. In this case, each employee of the enterprise becomes a shareholder for a short period of time. Naturally, this agreement should be valid for no more than two or three years when there will be a significant economic effect from the human resources involved who create the value of the product using kaizen. Further, after the end of the collective agreement employees will be returned their taken salary parts with indexation to have no opposite effect of using the workers' funds. Remuneration will be provided for being shareholders. The returned amount of money with indexation will also be charged with interest rate slightly lower than real market interest rate.

4. Empirical results and conclusions

During the research internship in GAZ Group LLC the author proposed to use the developed model as one of the alternative ways to raise funds. It’s important to take into account the region’s subsistence minimum, purchasing power parity and average inflation per month to calculate the most optimal percentage of the company's salary investment (author suggests 15% for ordinary employees, 30% for plant managers and structural divisions managers, and 45% for top managers). It is necessary to note that the effectiveness of the model depends solely on the collective agreement between manager and employees in the company.

The result of this paper is the adoption of this model by GAZ Group LLC as one of the management solutions to reduce the financial products cost and strengthen the corporate spirit of the company's employees.

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Risk in Internationalization: Literature Review and Research Agenda

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Abstract:
The paper synthesizes key themes on risk in international business (IB) research with the aim take stock of integrated knowledge on internationalization and risk that can help identify avenues for future research and inform management decisions. Based on an in-depth review of 134 internationalization risk-related studies, we develop an integrated framework highlighting the interdependencies between risk and internationalization, illustrating strategies for minimizing downside risk when expanding internationally, and identifying factors that shape managers' assessment of risk in international contexts. Finally, we discuss the directions for future research on risk implications of international expansion, the impact of risk on internationalization strategies, and the ways in which firms identify and deal with risks associated with internationalization. Accordingly, our study contributes to extant knowledge by presenting a systematic accumulation of existing research through identifying and discussing contested findings, developing an integrated framework, and drawing out promising future research avenues on risk in internationalization.

Keywords: *Risk; Risk Management; Internationalization; Multinationality; Systematic Review; Narrative Synthesis; Bibliometric Analysis; Bibliographical Coupling, Risk Mitigation*

1. Introduction

Drawing upon the theoretical perspectives of situated cognition, the purpose of this study is to contribute to our understanding of how SME internationalisation decision-makers' risk perceptions are shaped by contextual embeddedness. The cognitive processes of sense making in SMEs, which give rise to distinctive perceptions of risk in SME internationalisation are then arguably shaped by the interplay of contextual specifics in which firms exist and operate.

2. Methodology

We adopt a mixed method sequential qualitative-quantitative analysis approach to analyse the data. As a first step, we employ qualitative data analysis to elicit individuals' perception of risk, identify contextual effects, and consider the range of contextual dimensions. We created a list of inductive codes to identify the different types of risk mentioned during the interviews and used NVivo to review the list to unveil similar thematic aspects across interviews. To facilitate the identification of themes, we used pattern coding to reorganise and re-analyse the data to condense them into a smaller number of analytic units, develop major themes for further analysis. The analysis resulted in identification of higher level themes. To explore the influence of context, we used logistic regression analysis, which is appropriate when the dependent variable is dichotomous. This allowed us to explain the presence or absence of the identified risk themes and identify similarities and differences in the perceived risks involved in internationalisation across contexts.

3. Findings and conclusions

The thematic analysis identified four main themes in relation to the main risks faced when engaging in international business, including: (1) Legitimation and compliance, (2) Change and volatility, (3) Opportunism and betrayal, and (4) Strategy making and execution. In addition, each theme contained several sub-themes.

Multicollinearity is not an issue. Variance inflation factors (VIFs) range from 1,16 to 8,92 with a mean of 2,92. This is below the common cut-off threshold.

The contribution of each level of contextual factors to the logistic regression models is examined. The model including country-, industry, and firm-level factors provides the best fit for the data. Our results show that the presence of the legitimation and compliance theme is heavily influenced by the country context. Organizational contextual factors - firm size) and geographic scope have a significant impact. Industry context does not appear to have any significant impact. With perceived risk associated with change and volatility all three levels of contextual factors matter. Organizational factors, i.e., geographic scope of international operations and intensity of internationalization activities are statistically significant. Concerning the perception of risk associated with opportunism and betrayal, none of the contextual factors were significant. The perceived risk may not depend on the country of origin of a firm, neither on the industry or organization it operates. The perceived risk associated with strategy and execution is contextually bound and determined by context on all three levels to a great extent. The more open an economy is to international trade, the more likely it is that firms will develop appropriate strategies that should foresee and minimize risks. In the clothing industry, decision-makers are much more likely to see these types of risk as important compared to firms in biotech. The bigger the geographic scope in terms of number of countries, the less likely it is to see strategy and execution as a risk.

Our findings indicate that SME internationalisation decision-makers should develop an understanding of the context in which their firm is embedded in order to identify, systematise, evaluate and track risk in internationalisation.

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Language and Communication in Times of Digital Transformation: Business Education Perspective

Business Communication and Self-Disclosure as Aspects of a Second Language Teaching (Stating a Research Problem)

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Abstract:
The paper states a problem of business communication and language teaching in the times when technological advances in communication inevitably exert their influence on the way people speak. Efficiency of business negotiations heavily relies on the speech etiquette and level of self-disclosure while negotiating. While business communication prescribes a specific code of linguistic behavior, the necessity to establish a relationship of mutual trust between the parties brings about the desire to self-disclose. A proper level of self-disclosure and business style of verbal communication are equally important, along with grammar and vocabulary of a second language. It seems imperative to take these facts into account while teaching English to university students majoring in management, international relations and other fields.

Keywords: *Business Communication, Self-Disclosure, Speech Etiquette, Second Language Acquisition, Foreign Language Teaching*

In the modern time it becomes crucial not only to teach students so as to help them acquire necessary linguistic competence in a second language (demonstrated in reading, writing, listening and speaking skills), but also educate them in etiquettal niceties and cultural differences between languages – a native one and acquired. In the era of fast developing technological advances, the task of language teaching turns into even a more challenging one than it used to be, since modern technologies in communication exert great influence on people's speech behavior.

The language of text messages, Internet chats and blogs is gradually leaking into our everyday speech. The principle of economy leads to various kinds of reductions, contractions and abbreviations, which, in turn, tend to be increasingly used in writing and affect the way the words of a language are spelled and pronounced. The classroom situation shows that it is happening more and more frequently, setting a new task to a language teacher, a task of explaining what is appropriate in business communication and what should be avoided. Such etiquettal aspects of a language acquisition are hard to teach, practise and make them automatic, though not taking them into consideration seems to lead to negative results in any formal or business setting.

As business communication is mainly performed for the commercial benefit of the organization represented by negotiators, it is even more goal oriented than people's everyday social interaction. Moreover, it imposes stricter restrictions on what people should or should not say and how they should verbalize ideas, statements and proposals. On the other hand, establishing mutual trust is hardly impossible without creating a discursive identity on the sides of negotiators and disclosing themselves. In relation with this, arises the question of how much communicators can reveal their personalities in business communication.

According to Newstrom and Keith Davis (2002), Business Communication is a multi-dimensional, dynamic and interactive process that involves the effective transmission of facts,

ideas, thoughts and systematic understanding of scientific theories and practical aspects. To achieve their goal, speakers should be (1) specific, (2) clear, (3) simple, (4) logical, (5) objective, (6) politically correct, to name just the most important moments. However, while the rules of business communication etiquette are well-established and clear-cut dictating us to minimize the usage of personal pronouns and expressions, effective communication, on the other hand, can be achieved by establishing affiliation with one's interlocutor, which means that communicators cannot avoid self-disclosure in business communication.

Some attempts have been made to formulate rules of self-disclosure which can be applied to Western societies. For example, Berger and Bradac (1982) emphasize that we should not disclose (1) intimate information, (2) negatively-valued information and (3) should not disclose excessively. Breaking these rules in an inappropriate situational context can lead to a serious loss of face and impede effective communication, let alone business interaction or negotiations.

Even bearing these facts in mind, a speaker cannot help disclosing him(her)self through speech, which can be done both unconsciously and intentionally. We disclose ourselves unintentionally as ethnicities (by the language we speak), as males or females, as residents of different regions and localities, as members of specific social groups, cultures and subcultures. Such self-disclosure is hard to control, though its control in business communication might be important, if not vital, for the positive outcome of negotiations, especially in a multicultural environment.

On the other hand, intentional self-disclosure plays a major role in establishing relations and contributes to building effective and lasting business contacts. The concept of self-disclosure is interdisciplinary, it lies within two fields – social-psychological and linguistic – and can be considered within these two frames. From the linguistic point of view self-disclosure is connected with pragmatics and the theory of speech acts, namely with disclosive speech acts such as self-praise and third-party complaints. Self-disclosure through self-praise and complaints in microblogging is shown by D.Dayter (2016), who based her research on the Ba-Twit corpus. However, there are no studies available at present that aim at considering self-disclosure in business negotiations, let alone researching into a proper balance between self-disclosure and business etiquette.

Hence a question which deserves serious field study is how much we can disclose ourselves without negatively affecting the results of business communication. The first step might be to identify and characterize "universal" pragmatic structures which lead to self-disclosure (e.g., excessive usage of pronoun "I" or verbs expressing a strong opinion of a speaker). Having compiled the corpus of linguistic means of self-disclosure, we can go on to evaluate their functional value in Russian and English business speech. Parts of different corpora, both monolingual and bilingual, which contain talks and even blogs of prominent businessmen can be used as the source of practical material. Finally, contrastive analysis of the ways to self-disclose in the two languages can show cultural and linguistic differences, which the language teacher will be able to bring into the classroom setting.

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Internet Resources Introduction for Business German Teaching

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Abstract:
This paper investigates the perceived benefits and pitfalls of internet recourses introduction within the framework of the language-specific business German course, oriented at professional communication skills development. The usage of internet resources is described from the point of view of the shift to online education as a new paradigm in learning, proceeding by the era of digital transformation. The aim of this research is to determine existing problems and highlight perspectives of the further usage of this method of education. The work analyses students' feedback on the classroom and homework activities, based on the usage of internet resources in many forms. The article concludes by discussing the signposts to future advances in the internet resources introduction.

Keywords: *Internet Resources, ESP, Digital Transformation, Student Survey, Online Testing Platform, Quiz, Application*

1. Introduction

Digital transformation in education is an essential part of the modern foreign language teaching, for this reason the internet has become one of the constituent parts of the educational process nowadays. The aim of the digital transformation is seen from our point of view, in the first line, as the possibility to update our methods of teaching. However, in order to make the education fruitful for both the students and the course-developers, who teach foreign language to them, one needs to make a long way reviewing the system of education and depicting those components, that remain effective and those, that need to be replaced.

2. Problems and perspectives of the internet recourses introduction for business language teaching

To start with, internet recourses can be introduced on all the stages of foreign language education, because they serve to break psychological barrier, help the students to get closer acquainted with the everyday language, contribute into the development of the phonetical, lexical, grammatical skills and develop all the types of the speech skills, needed for the successful foreign language communication.

However, during the foreign business language classes the necessity for the internet recourses usage significantly increases. This is connected, in the first line, with the comparatively high level of foreign language mastership, already achieved by the business language students, serving as a prerequisite of the future successful knowledge and skills acquirement. On the other hand, introduction of the internet resources into the business German teaching is determined by the fact that, owing to them, the access to the authentic materials in many forms, such as texts, audio- and video-podcasts is being opened.

Indisputable advantage of the internet resources introduction within the framework of language specific business German course is that it provides the students with the most up-to-date information, existing in their professional field, allowing them to see the language not only as a goal, but also as a source of education.

Examining the existing correlation between the online learning activities, used in the process of foreign language teaching with the educational programs of the Graduate School of

Management, gives us the right to state the fact of high demand in the internet resources introduction for the formation of the foreign language communicative competence, necessary for both successful educational and professional activities in the context of the international academic environment and foreign language business communication for the particular professional sphere.

Apart from this, as the desired learning outcomes the following new components of the foreign language communicative competence can be developed: ability to find, filter and sort out the required information in the web, ability to act and react spontaneously in form of the messages in the digital format, ability to easily adopt to the new communicative situations and to discuss professional topics, as well, in the internet.

Moreover, this approach allows the usage of different elements of gamification, that help to increase the students motivation. In comparison with the traditional ways of teaching they seem to be more fascinating and encouraging.

What needs to be emphasized, is that the requirements imposed on the knowledge and abilities of the students, as well as the complexity of the tasks and the volume of the material, should be chosen, depending on the particular language level, that we desire to achieve.

3. Data and sample

For the purpose of the improvement of students teaching quality, we have conducted a questionnaire among the students. The results obtained confirm our idea of the importance of the internet resources introduction. The answers of the students show there is the need towards using them in the educational process. The majority (84,4%) estimated the practice of using internet resources positively. At the same time, the remaining 15,6% voted for rather positively, than negatively.

The key objective of the survey was to depict those internet resources, that are considered to be among the most effective ones from the point of view of the students studying business German language. The results showed that 87,5% of the students find video-podcasts effective, 84,4% named quiz among their favorite online activities, 53,1% preferred online testing, the 4-th place in the rank of popularity was given to doing research with finding information in the internet with 48,3% of the votes. Along with that, 3,1% of the respondents find the idea of online tasks, attractive.

Moreover, students were asked about their favorite online websites, used for translation. The results were as following: Google translator (78,1%), Yandex-translator (37,5%), Multitran (21,9%), other variants included Context reverso, Wooordhunt, Reverso Context, PROMT, Linguee, https://www.verbformen.ru/, babla.ru.

62,5% of the students admitted that the usage of internet resources increases their motivation of foreign language learning and helps to improve their personal achievements. Among the educational platforms and applications attention received such as Duolingo/Mondly (resorce for studying lexis), forvo.com (used to repeat pronunciation of the words after the native speakers), sokrative.com/ kahoot (online testing platforms), YouTube (video platform).

4. Empirical results and conclusions

To conclude, we would like to emphasize that the internet resources introduction offers the teacher a great opportunity to improve their management of the education, to increase effectively and objectivity of learning, to save the time costs, to improve the motivation of students and encourage them to get the new knowledge, to excite the curiosity of the students for learning the foreign language, that will positively affect the educational outcome. That is why,

this concept remains in-demand and modern business language education needs to be seen from this perspective.

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Teaching Auditing in the US and Russia Simultaneously through Telepresence Technology

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Abstract:
Necessity and opportunity came together to produce the idea of teaching auditing simultaneously to undergraduate students at Babson College in Wellesley, Massachusetts and at St. Petersburg University, Russia. This paper discusses the planning and development of the initial course offering, the structure of the course, the opportunities and challenges for the students, the professor and the institutions, and the Babson students' assessment of the unique course experience and teaching format (as opposed to a traditional auditing course) based on their Student Opinion Surveys. The paper concludes with specific recommendations for faculty who may be considering similar opportunities to teach innovative accounting courses to international audiences from multiple academic institutions.

Keywords: *US-Russia Joint Course; Blended Learning; Education Technologies*

1. Introduction: Planning and structure of the first joint course

The auditing professor at Babson was engaged in teaching a study abroad program in Russia at the time of his auditing course in Fall 2010. Babson explored utilizing its telecommunication technology to enable the auditing professor to teach the Babson on-campus auditing course from St. Petersburg, Russia. This led to discussions with Babson's academic partner in Russia, St. Petersburg University and its Graduate School of Management (GSOM), about the capability of their telecommunication structure and whether they would be willing to allow Babson to use it to teach the Babson auditing class from Russia. Both Babson and GSOM quickly came to realize the possibility (and advantages) of jointly and simultaneously teaching an auditing course to undergraduate students from both institutions. Babson decided to offer two sections of auditing in Fall 2010, one section would be taught as auditing traditionally had been and one section would be experimental by jointly teaching the course with undergraduate students from GSOM. Babson and GSOM had to invest time and personnel from their technology staff to make the joint class work.

GSOM faced unique challenges in this first iteration of the course in Fall 2010. One challenge was finding students who would be willing to enroll in this course. Not only was it unique in format but also in content. Another challenge for GSOM students was that the course language would be English. GSOM students would have to be close to fluent in English in order to be successful in the course.16 GSOM students enrolled and successfully completed the first joint Babson/GSOM auditing course in Fall 2010.

GSOM students would have to fully accept and adjust to the requirements of a Babson auditing course. Both Babson and GSOM felt that it was important to hold both sets of students to the same expectations and requirements. That meant that GSOM students would have to complete the same graded assignments as the Babson students.

In the joint Babson/GSOM section, a group paper was assigned. The groups were formed by the professor and they consisted of two to three Babson students and three to four GSOM students. The topic of the group paper was to compare and contrast the US and Russian business environment with a specific emphasis on how those business environments could be expected to affect the risk profile of audit engagements.

2. Opportunities and challenges for students, the professor, and the institutions

Since the simultaneously taught experimental course in Fall 2010 proved to be a success, the course was made permanent and offered each Fall from 2011 to 2014. The enrollment numbers of students from each institution are noted in Table 1. Enrollment in the course at GSOM increased substantially in Fall 2011. Enrollment at Babson remained largely unaffected because every accounting concentrator is required to take auditing and after 2010, the only option was to enroll in the joint Babson/GSOM course.

The joint Babson/GSOM auditing course presented numerous opportunities for students from both institutions. The most obvious opportunity was the chance for Babson and GSOM students to work together. Although not the same as studying abroad, the joint Babson/GSOM auditing course nevertheless provided the students with opportunities to work closely with students from another country, to learn about and accept cultural differences, and to gain intercultural competencies.

To further enhance collaboration, the instructor rethought and changed some of the course requirements for the Fall 2011 course. Two joint Babson/GSOM group projects were assigned. The first group project was to compare and contrast the US and Russian business environment with a specific emphasis on how those business environments could be expected to affect the risk profile of audit engagements. The second group paper was to examine a company that operated in both the US and Russia and compare and contrast how an audit of that company would differ between auditing the US company versus the Russian company. This assignment allowed the students to consider specific factors faced by the same company in the US and Russia.

In Fall 2010 the professor reached out to one of the Big Four accounting firms to organize a joint presentation by a partner from the Boston office and a partner from the St. Petersburg office. The topic of the discussion, audit risk assessment, tied in with the students' first group project. It helped students think about their first group assignment as it illustrated common elements of performing an audit, regardless of where the audit was conducted. It also reinforced a characteristic of modern-day auditing – the fact that audits often entail working in and collaborating with international teams. As more audit firms learned of the course in Boston and St. Petersburg, the professor received requests to speak to the class. From Fall 2012, two guest lectures per semester with auditors from Big Four firms in both St. Petersburg and Boston. The auditors enjoyed teaching the class, engaging the different groups of students, and meeting and working with colleagues from the other office.

Recruiters at the Big Four firms emphasized different strengths of the joint course in each country. In the US, they stated that the course was valuable in teaching the students how to work in international teams. Babson students reported that they were regularly asked in job interviews about the course and about what it was like to be working with Russian students. For the GSOM students, the effect was greater. GSOM students and the Big Four Russian audit firms all said that this course gave GSOM students a decided advantage over students from other Russian universities for three reasons: First, they had taken an auditing class as auditing was not widely taught in business schools in Russia. Second, being taught by an American professor, the GSOM students had acquired a western perspective on both auditing and general business practices. Third, since Big Four firms in Russia conducted many audits of Russian subsidiaries of western companies, the audits required working closely with teams from the company's home country. GSOM students who had gained experience in collaborating with their colleagues from Babson were much more prepared for work in international audit teams.

Babson and GSOM have cultivated a relationship since GSOM's founding in 1993. The joint Babson/GSOM auditing course deepened the relationship as it involved not only professors and students but also administrators and staff from both institutions. Logistical and technological issues had to be overcome, support from both institutions were needed to run the course and time and expense was incurred to make the course successful.

For GSOM students who wanted to pursue graduate studies at universities in the West, usually in Europe, the joint auditing course assumed additional importance. By taking the course,

they could demonstrate their abilities to succeed in a class taught in English by an American professor in a western academic style. GSOM students reported that the course was often prominently featured in their application materials and discussed in their interviews with graduate school admission officers.

There were numerous challenges faced by students from both Babson and GSOM, the professor, as well as the respective institutions:

For both the Babson and the GSOM students, the format of the course was different from anything they had ever experienced before. The Babson students had never taken a course in which the professor was teaching remotely for roughly a third of the semester. They never had experienced a joint course with a cohort of students from another academic institution.

It was even more challenging for the GSOM students. They had to adapt to the course being taught remotely for two-thirds of the semester by a professor in the US in a language foreign to them. The Babson/GSOM auditing course expected active participation from all students. The course focused on the practical application of theoretical concepts. The case materials discussed real issues faced by existing companies in audits. Accordingly, class discussions were grounded in practical examples and applications, especially when exploring how an auditor performed an audit of a specific account. Finally, because it was extremely difficult to obtain materials that provided insight into Russian companies, much of the course was grounded in examples from the US. Because the course had to meet the needs of the Babson students who would be taking the CPA exam, US-based laws had to be taught. While the Russian students gained insights into US laws, the Babson students benefitted from the Russians' observations on differences between US and Russian laws, and both American and Russian students engaged in valuable class discussions.

All students had to engage in team projects and complete two group papers throughout the semester. Both the Babson and the GSOM students complained about the difficulties of communicating and working with each other. A common problem was the 8-hour time difference. The professor emphasized that students would be routinely facing similar situations in their professional lives, and that it was good practice to experience these situations first within an academic setting.

The biggest challenge for the professor was engaging the students who were taking the course via telepresence. Initiating class discussions turned out to be a daunting task, no matter which group of students, those at Babson or those at GSOM, was joining the class remotely.

3. Babson student opinion surveys

While both institutions firmly believed in the merit of the course, it was uncertain how the course would actually be received by the students. A risk was that Babson students might assess the course negatively at the end of the semester. It was important for the Accounting Division Chair and the Dean of Faculty at Babson to explicitly support this initiative with the understanding that any negative consequences would not be held against the faculty member. Taking the risk of developing a new course would be acknowledged and appreciated by the institution regardless of the actual or perceived outcome.

It was important to establish clear expectations among both the Babson and the GSOM students. It was crucial to frame this new course as an experiment in innovative teaching, where the students would be "pioneers" who shape the course and contribute significantly to its success. Letting the students know as early as registration and orientation that they were going to be part of not only something new and innovative but also something potentially risky turned out to be a good strategy.

For GSOM, marketing for the course could be directed toward accounting and finance students who had the requisite English language skills. GSOM regards itself as an innovative school within Russia, and this experimental course fit the institution's existing culture of innovation.

A statistical analysis compared the student opinion survey results of Babson students who took a traditional auditing course in 2009 and 2010 with that of Babson students who took the

joint Babson/GSOM course in 2010 and 2011. An independent-samples Wilcoxon rank-sum test was conducted, which examined for equality of distributions of each of the student evaluation questions between the two student groups.

Table 2 shows the results of the Wilcoxon rank-sum test. The student evaluation consisted of eight categories of questions with a total number of 26 questions. The responses can take values from 1, "strongly agree," to 5, "strongly disagree." The number of observations ranged from 51 to 78, depending on the question. The number of observations by groups were close to the same. For example, for question 7.1, which assessed the overall teaching effectiveness of the professor, there were 37 responses from Babson students in the joint Babson/GSOM course and 38 responses from Babson students in a traditional auditing course. The rank sum test suggests that there was a statistically significant difference in how students evaluated the professor across the two groups. The responses indicate that the overall teaching effectiveness of the professor was perceived as lower in the joint Babson/GSOM course. Students attending the joint Babson/GSOM courses rated the professor lower in every statistically significant category: Question 2.1 revealed a perceived lower degree of structure and organization. Question 3.1 assessed the professor's availability outside of class, and the results were rarely surprising because the professor was absent for an entire month and could only be reached through email when teaching in Russia. Question 3.2 rated the instructor's success in encouraging class participation, and a crucial factor here may have been the fact that the professor had to constantly divide his attention between two sets of students in an effort to promote participation from both. The results for question 4.2 regarding the professor's fair evaluation of the students' work is troubling because the only obvious difference between the traditional and the Babson/GSOM course was in assigning joint group papers. However, in the joint course, the Babson students may have felt negatively impacted by the work of their GSOM colleagues. Question 5.3 regarding the professor motivating the students to work to the best of their abilities is also troubling and can be attributed to the divided attention of the professor and his absence during part of the semester.

4. Recommendations and conclusion

The benefits of teaching a combined auditing course similar to the Babson/GSOM course outweigh any real or perceived costs associated with such a course. At an institutional level, the course strengthened the bonds between Babson College and the GSOM at St. Petersburg University. At the student level, the benefits of such a course may not have been immediately apparent, especially for American students. It is likely that many students will realize the full value of the course experience only after graduation when they become part on a professional workforce that requires working in international teams. However, feedback from both students and recruiters indicates that having completed the course proved an asset during job interviews, and there is no doubt that the intercultural competencies developed by taking such a course are highly valued by professional firms.

Although difficult to measure, this course illustrates that there are many benefits in opening up the world to the auditing students. By interacting with international students, the Babson students acquired a new perspective on life, not just from a business perspective but from a personal perspective as well. What they learned through their close interactions with the Russian students was how difficult life has been for their classmates, who have experienced a 50% devaluation of their currency in one day and hyperinflation, who have felt the dramatic effects of a total change in the social and economic fabric of their country, and who have seen their own and their families' lives upended by substantial political, economic, and cultural transformations. Through the course the Babson students came to appreciate the perspectives of their Russian colleagues just as the Russian students came to appreciate the perspective of their Babson colleagues. Appreciation of different perspectives is important when times are good, but it is even more important during periods when relations between the United States and the Russian Federation are at an all-time post-Cold War low. That is something that cannot be captured in student opinion surveys.

It is recommended that colleges or universities seize any opportunity to work with an institution in another country to design and deliver a joint course. Two facts, however, are crucially important: first, the support of both the division chair and the administration to ensure that whatever happens will not adversely affect the professor's annual evaluation or promotion opportunities, and second, that the students not only be thoroughly informed about the course but also encouraged to take responsibility for its success and do their part to shape and improve the learning experience.

Table 1: Student Enrollment by Semester

	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014
GSOM	16	33	44	48	36
Babson	11	38	25	40	37
Babson only	30				

Table 2: Results of Wilcoxon Rank-Sum Test

Questions in the Student Evaluation Survey	Traditional Course	Joint Babson/GSOM Course	z-stats	p-value
1. General Information				
1.1 Before the course/stream started, I was interested in the subject.	38	37	0.53	
2. Organization & Clarity				
2.1 The instructor was well organized in presenting the class material.	38	38	-1.886	***
2.2 The instructor's presentations of the assignments were clear to me.	39	39	-2.444	**
2.3 The instructor provided clear explanations of the material.	39	37	-2.168	**
3. Instructor-Student Interaction				
3.1 The instructor was available outside of class to answer questions.	39	37	-2.052	**
3.2 The instructor encouraged class participation.	38	38	-2.013	**
3.3 The instructor created a class atmosphere that promoted student learning.	35	37	-2.19	**
4. Fairness & Concern				
4.1 The instructor showed concern about my understanding of course/stream.	39	37	-1.514	
4.2 The instructor was fair in the evaluation of my work	39	36	-1.932	***
4.3 The instructor has realistic expectations of student performance.	38	36	-2.471	**
5. Enthusiasm				
5.1 The instructor was enthusiastic about teaching this course/stream.	38	38	-0.903	
5.2 The Instructor stimulated my interest in the subject.	39	38	-1.062	
5.3 The instructor motivated me to do my best work.	37	38	-1.813	***
6. Student Learning				
6.1 I learned valuable skills and/or knowledge from this instructor.	39	38	-2.218	**
6.2 The instructor's feedback helped me improve my learning.	38	37	-2.222	**
6.3 Examples and handouts prepared by this instructor enhanced my learning.	36	38	-2.409	**
7. Overall				
7.1 Overall, the teaching effectiveness of the instructor was high.	38	37	-2.816	*
7.2 I would recommend this instructor to other students.	39	38	-2.923	*

7.3 This course/stream was challenging.	39	37	0.287	
8. OPTIONAL SECTION - Course/Stream				
8.1 The text book for this course/stream was useful.	23	33	-1.264	
8.2 The additional reading materials (i.e., cases, articles, etc.) were useful.	24	32	-1.555	
8.3 Course/Stream assignments helped me understand the subject.	23	32	-2.103	**
8.4 I learned valuable skills and/or knowledge in this course/stream.	22	29	-1.224	
8.5 After taking this course/stream, my interest in the subject area(s) has increased.	21	32	-2.575	**
8.6 I would recommend this course/stream to other students.	22	30	-2.613	*
8.7 The grade I expect to get in this course is:	31	35	0.259	

Note: ***,**,* medians are statistically different at 1%, 5%, and 10% significance levels

Creating Balance Between Digital Resources and Collaborative Work in Teaching English

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Abstract:
The research focuses on three approaches of teaching English with various ways of digital resources implementation. The experiments carried out show levels of efficacy in developing professionally significant qualities along with soft skills in university students. The approaches in question have been aimed at creating conditions for increasing teaching/learning quality and making graduates more competitive in the labor market. Evidence-based research was conducted with 72 students majoring in psychology. Research methodology included pedagogical observation, analysis of test results, questionnaire and psychodiagnostic surveys. Different amount of DR application in the study characterizes methodology approaches, the course design including 80%, 60% and 45% of digital study time in each case. Results of the study show that efficacy of each approach mostly correlates with lexical and grammar material. The questionnaire survey along with test results show that students groups involved in this experiment prefer blending approaches in the study process, and consider digital resources as a "supplementary aid" rather than the basis for the study.

Keywords: *Digital Resources, Soft Skills, Open Pair/ Group Methodology, Class Management, Course Design, University Students*

Introduction

Digital resources (DR) have become increasingly important within the context of university education, mainly due to the support they give to students/ teachers. Considering the diversity of DR available, it is highly important to research on optimal balance of communicative approach with that implementing DR in the development of professional and soft skills. Researchers claim that the use of DR in education leads to changes in the way teachers/students and students/students relate to each other. Moreover, focusing on intensive usage of DR can cause a bias to a negative tendency in developing soft skills [2].

It is proved that acquisition of social competences can be conducted only when an educational environment for collaborative education is created. Harvard University, the Carnegie Endowment researches confirm that professional success is shaped by the level of soft skills by 75-85% and only 15% are related to hard skills [3,4]. Organization for Economic Co-operation and Development highlights the importance of developing a balanced set of cognitive, social and emotional skills to achieve a success in professional life [5]. Consequently, recognizing and evolving the importance of soft skills acquisition has been a challenging task for educationalists and curriculum designers [3,1].

The research questions underlying this study intended to find out the optimal balance of DR implementation as an integrated part of a course design, as well as what value students assign to DR in their learning process. Along with this, the focus was made on the methods of language teaching aimed at developing soft skills. By administering a questionnaire on language acquisition satisfaction to students and conducting psychodiagnostic tests, it was possible to identify which approaches benefit students and comply with the educational requirements.

Methodology and experiment

The research methodology included pedagogical observation, analysis of test results, the questionnaire for students and a psychodiagnostic survey. Class activities were conducted as per

open-pair/group methodology presented in works by N. Medina Brakamonte, E. Kitaeva, O. Senichkina [4].

72 undergraduate students majoring in psychology (SPbU) participated in the experiment; they were placed in groups according to the proficiency level A2, B1, B2.

Three strategies were applied, each incorporating different amount of DR implementation, i.e. 80%, 60% and 45%. Monitoring of achievements, data collection and analysis were performed. The experiment was conducted during 2 semesters.

The research was focused on establishing an optimal balance of DR implementation in the course design aimed at acquiring necessary language skills along with developing soft skills.

Strategy 1 (80%). The teacher explains the goal of the module, gives tasks and deadlines. Students work independently with DR. Tutor hours are available for students, or they are able to contact their teacher on-line.

Strategy 2 (60%). The teacher briefs on the topic of the module. Every student chooses sub-topics and masters it using assigned DR. Then, the work continues in a class-room in mini open-groups [4].

Strategy 3 (45%). Students work independently with recommended DR, two ways of class management or combination of both are possible, they work either in mini groups or open pairs performing "Teacher-Student" roles [4].

Within each strategy, on completion of a module students take a test.

Results and Conclusions

The students' questionnaire survey showed that:

1. 82.46% of all students consider St 3 to be the most efficient; however, each group identified the priorities: 92.3% of B1 group and 81.8% of A2 group claimed their vocabulary extended significantly; 83% of B2 mentioned improvement in academic language skills; 81.8% of A2 group wrote that they broke the language barrier.

The data correlates with test results. The mode, median and mean of test grades shifted to a higher value in all groups exposed to St 3 as compared to St 1 and St 2.

2. 88.97% of all students consider St 1 to be a supportive strategy, the main failures of the latter being lack of involvement in educational environment and low motivation for regular studies.

3. St 2, as students say, shows some advantages as compared to other strategies, i.e. communication is encouraged, however, it is not as extensive and demanding as in St3.

The questionnaire survey and psychodiagnostic test showed that St 3 creates the most favorable conditions for developing soft skills, though the combination of all three is applicable depending on the goals of the module to be studied.

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Corporate Language Training at an Oil and Gas Company: from Framework to Implementation

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Abstract:
This paper examines approaches and practices that contribute to configuring an effective system of corporate language training delivered to the employees of a large oil and gas company (Gazprom's case). Corporate language learning is an intrinsic element of the company's HR development and an important means of increasing the employee's cross-cultural awareness as well as enhancing their professional competencies. Being one of the company's main training and development arms, Gazprom Corporate Institute has been running a wide range of English for special purposes programmes since 2010, and it has succeeded in shaping a consistent and coherent language learning system. The system features unique learning facilities, including specialist ling-term and short-term courses implemented both in the classroom and online. The company's employees can also benefit from an integrated LMS which provides a wide range of eLearning solutions designed specially to assist students in setting up their independent work. The corporate language training system has been implemented across Gazprom Group and proved its effectiveness through continuously performed assessments and audits.

Keywords: *Corporate Language Training, Syllabus Design, Learning Management Systems, Elearning Solutions, Language Assessment*

1. Introduction

As a global energy company, Gazprom pursues the strategic objective of establishing itself as a leader among global energy companies. This ambition has been reflected in the company's human resource training and development policy, which is aimed to enhance employees' competencies in accordance with the requirements of their job descriptions. There are three classes of corporate competencies as laid down the Company's Catalogue of Competencies: personal, managerial and professional, language skills falling into the last of them.

Given a high priority that Gazprom is putting on the employees' language skills development, the company's top management initiated 'The Framework for Corporate Language Training of Gazprom's Employees', which was officially approved by Deputy Chairman of Gazprom's Management Committee in February 2011 [1]. The document sets out the fundamentals of corporate language learning policy and shortly after its formal adaptation Gazprom Corporate Institute as the company's main T&D arm was authorized to develop and facilitate an effective system of corporate language training across the company's head office as well as its regional and international affiliates.

2. The implementation of the Corporate Language Training at Gazprom Group

2.1. Product range

The Institute's methodologists designed a complex and coherent corporate language training system, including:

– A model of corporate language training with a specification of internal requirements to levels of ability and key principles of pedagogical design applied in course development;

– General Language and Language for Specific Purposes (LSP) courses of varying duration (24-160 academic hours);

– Immersion-based intensive learning programmes (1-week, 10-day and 2-week courses, 40-100 academic hours);

– Multi-modular language training programmes;

– Language skills support programme ‘Business Club’;

– eLearning solutions integrated in the corporate learning management system (part of Gazprom’s Corporate Knowledge Management System);

– the system of independent language skills assessment;

– a comprehensive system of academic management including enrollment administration, academic affairs management, and teacher recruitment.

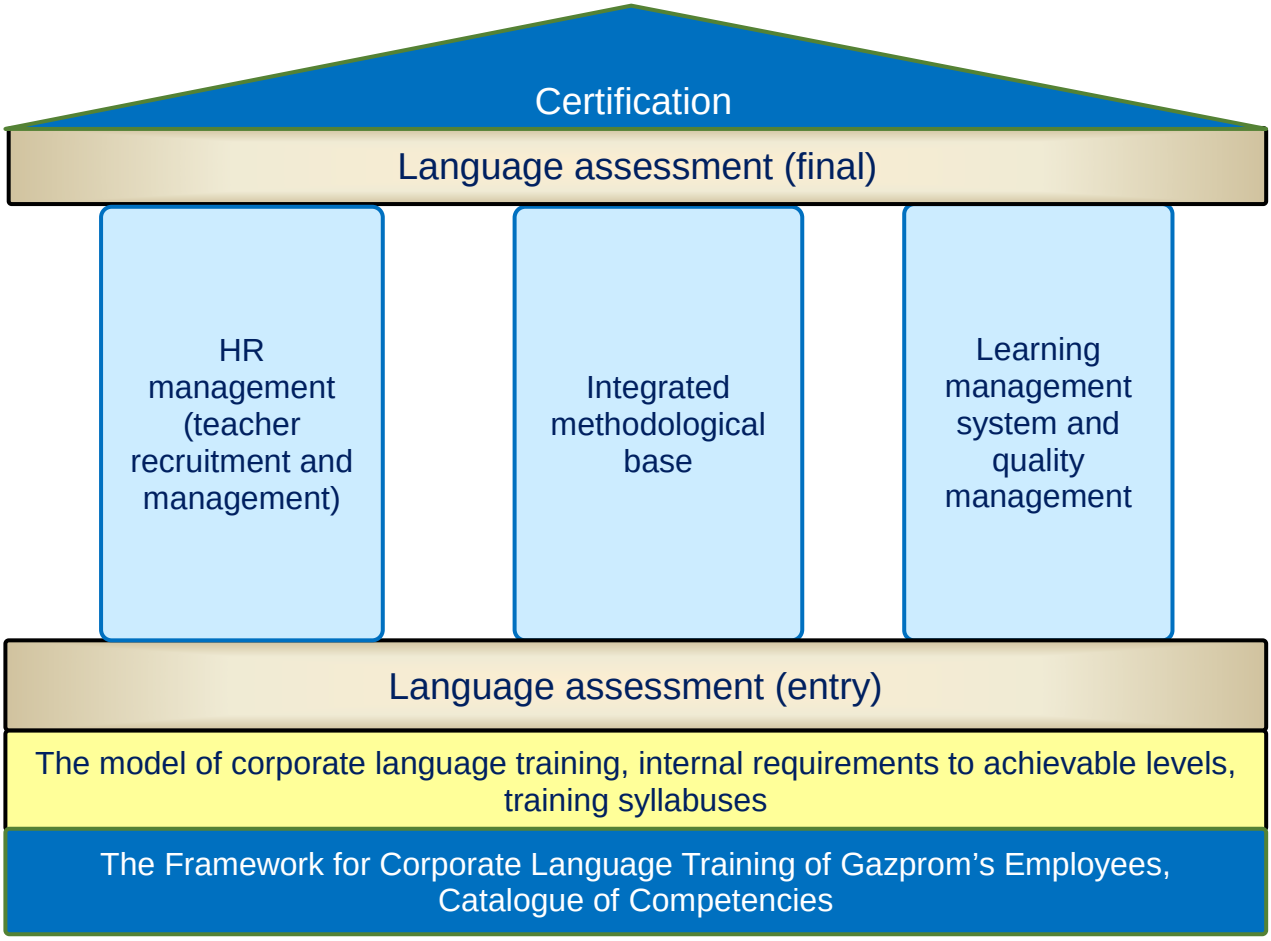

Figure 1. Corporate Language Training at Gazprom Corporate Institute

2.2. Content development

Since the adoption of the Framework, the Corporate Institute developed more than 50 language learning programmes aimed to address the industry’s trends and meet the employees’ needs in times of rapid socioeconomic and technological change.

In order to provide for the learners’ tighter involvement in the corporate Knowledge Management infospace, the Institute developed a bundle of eLearning solutions with a user-friendly interface and high-quality content, which create an effective environment for language skill enhancement both within regular classroom training and through self-study. These solutions include the following eLearning courses:

– Professional Communication in the Global Energy Business in English;

– Foreign Economic Activity, a course intended for the employees of Gazprom Export and international business units of Gazprom and its affiliates;

– Preparation for International Exams in English for the Personnel of Offshore Drilling Rigs, a course intended for the employees of Gazprom Group's production units and divisions engaged in offshore oil and gas development projects.

Apart from extensive eLearning development activity, the Institute's teachers and methodologists have also authored a number of manuals and numerous handouts and worksheets to cater for the accurate and appropriate reflection of specialized oil and gas terminology and industry realities in the students' course materials.

2.3. Language assessment

The Institute has also succeeded in setting up an effective system of corporate language skills assessment based on the guidelines set out in 'The Regulation on English Language Assessment' (approved by Deputy Chairman of Gazprom's Management Committee in October 2016) [2]. Validity of the results obtained in multiple periodic and final assessments of the company's employees has been confirmed by renowned national experts in professional language assessment, including the Lomonosov Moscow State University and the Regional Public Organisation 'United Independent Teachers' Association' (Moscow). Both institutions issued their conformity and recognition certificates for the Corporate Institute in 2016. The system of corporate language assessment has been running continuously since then to date, providing reliable data to measure the students' performance and enabling the Institute's academic managers evaluate the quality of the language training delivery across the company.

3. Data and sample

The breakdown of levels achieved by the students who have completed language training programmes at Gazprom Corporate Institute represents a gradual quality transformation in the structure of students' ability and reveals a continuous progress in their skills.

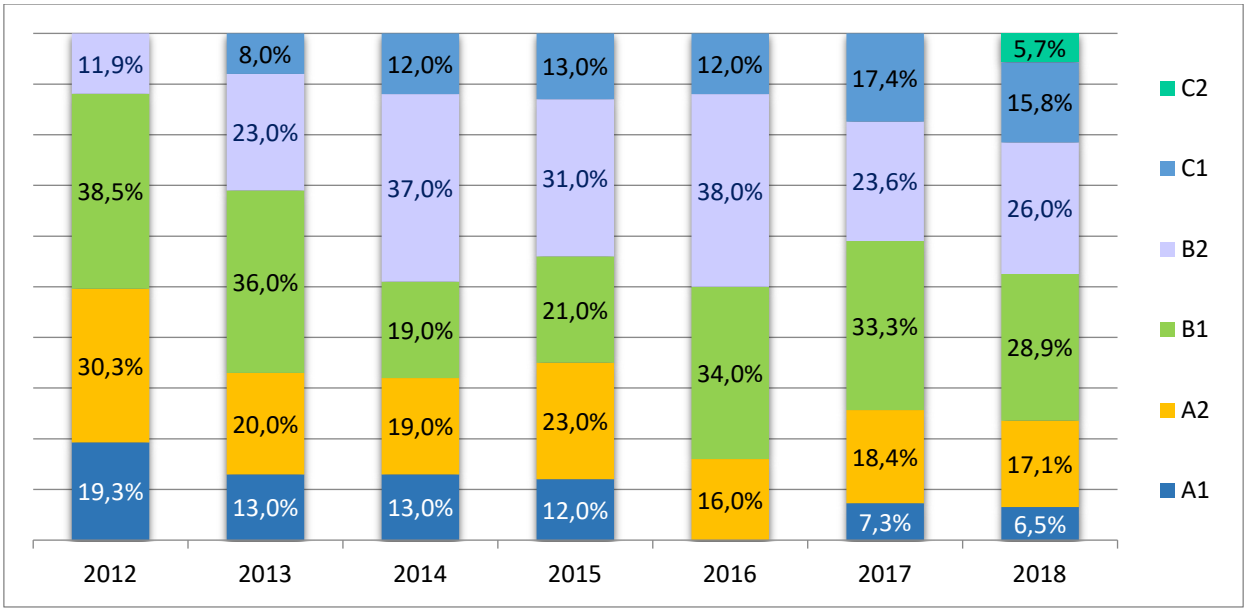

Figure 2. Breakdown of language levels achieved by the students of Gazprom Corporate Institute, 2012-2018

4. Empirical results and conclusions

The complex of learning aids and eLearning system were successfully approbated during the implementation of the Framework for corporate language training at Gazprom Group's subsidiaries and affiliates, including Gazprom PJSC (PAO Gazprom) and such majors as Gazprom Export LLC, St Petersburg Branch of Gazprom EP International B.V., Gazprom Dobycha Yamburg LLC. Since 2010, more than 3,000 employees of Gazprom Group have benefited from in-house language training services delivered by Gazprom Corporate Institute. More than 400 employees of regional subsidiary companies have attended specialist courses in English for the oil and gas business intended for the participants in

training and internship programmes for young professionals (the so called ‘The School of Gazprom’s Young Professionals) at partner companies abroad (Wintershall Dea GmbH, Uniper SE). More than 200 employees are involved in conformity certification assessment annually in order to ensure that their language levels are in line with the job description requirements.

The results of the approbation proved that the implemented system of corporate language training effectively serves it purposes and contributes to the continuing professional development of Gazprom Group’s employees, which is evidenced not only by positive trends in students’ performance, but supported by highly positive feedback from trainees and their immediate supervisors and recognized by the company’s management on the corporate level by several corporate awards.

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Supporting online course Russian as a foreign language as an effective methodic additional tool to the Crash-Course

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Abstract:
The paper investigates the importance of creating of the online course Russian as a foreign language for international GSOM students. The course should play a supporting role for the offline Crash-course, thus both courses are aimed at the development of the professional communication together with the intercultural communication skills. The necessity of the supportive online course is based on the pedagogical experience of instructors of the Crash-course. A learner centered, interactive and flexible environment of online learning is aimed to support students in their learning process, offering an individual student-oriented approach and integration of different kinds of feedback. The analysis of the success factors of the course helps to construct the system of evaluation of learning outcomes results, thus measuring the effectiveness of the course.

Keywords: *Intercultural Education, Language Teacher Education, Intercultural Competence, Foreign Language Teacher Education, Professional Competence, Pedagogical Innovation, Culture, Intercultural Dialogue, Communicative Language Teaching, Effectiveness, Language, Online Learning, Skills*

1. Goals and tasks of the supporting online course.

On the one hand, e-Learning implements an appropriate qualification together with motivation of the learners, on the other hand e-Learning offers various tools to promote motivation and encourage students in their learning of a foreign language (Romanova, 2018)

The goal of the supporting course is to enhance the effectiveness of acquisition of communicational skills. The course will focus on all four language skills (reading, writing, listening and speaking), as well as on grammar and vocabulary. At the same time it has language learning objectives, culture-learning objectives and general learning skills objectives.

2. Analysis of students needs (according to the experience of the Crash-course implementation)

- different social-cultural codes
- different sublevels within the level defined by introductory test
- specifics of the course: too intense (risk of increasing absence and thus frustration of the students as they feel they cannot keep up with the further material)
- multimedia and the use of authentic materials were highly supported by students (according the feedback given by questionnaires)

3. Brief presentation of the supporting and the main Crash-course of Russian as a foreign language for GSOM foreign students.

3.1 Structure analysis. Types of the tasks.

3.2 Analysis of the success factors of the course

- interactive learning (student-teacher)

- flexibility (students choose appropriate time for the learning and define their individual tempo of the language acquisition by themselves)
- covering the learner's needs
- personalized learning (individualized learning trajectory and its implementation in the course)
- motivation
- use of authentic materials (the authentic materials form the basis of task-based learning)
- integration of different kinds of feedback (automated feedback, teacher-student feedback, peer-feedback)
- intercultural component

3.3 Analysis of students feedback regarding specific tasks and the structure of the course

3.4 Challenges and perspectives of the course.

One of the main challenges in the foreign language learning consists of communication mistakes, that reflect the lack of knowledge about the rules of the communication act itself within the sphere of another, foreign language culture. Language course with the intercultural approach deals with the communication situations, letting student reconstruct and live through the situations of real communication, (every-day situations, small talks, introducing yourself for beginners, motivation letters, job-interviews, management of mistakes, for advanced). Additionally, students have a chance to live through such situations in practice, to test their knowledge in every-day situations they face, living in the country of the language they are learning.

4. Conclusions.

Supporting E-Learning course together with the Crash-Course represents an educational tool, that covers the needs of learners and enhance their motivation. Communicative competence and intercultural understanding are represented in the integration, not as separate skills or competences.

The learning happened on the individual and on the social level, students learn to analyze and reflect on situations with different cultural codes and their capacity of avoiding of the communication mistakes. They can test and use their practical skills right after leaving the classroom (virtual or not).

Students take responsibility for their learning, defining their needs and evaluating their results. better integrated and prepared for their further studies of Russian language during their semester at GSOM.

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Classroom-based Assessment of Oral Mediation: Challenges and Opportunities

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Abstract:
The paper examines the classroom-based assessment of collaborating in a group from the perspective of oral mediation when communicants use one language, English and mediation constitutes part of the test task. The main goal of the paper is to analyse B1 and B2 discussions and their special features which would be typical of students' performance at these levels. Even though group work is extensively used in the modern English language classroom, it is still a problem to find an adequate way to assess it. The paper shows the advantages and challenges of using group discussions for formative and summative assessment of students of management and suggests that it can be done by giving students Global Achievement marks for mediation on a par with Analytical marks. The conclusions are based on the psychometric analysis of data from tests and are used to work out recommendations for some effective teaching techniques. The challenges of the method, including group format and reliance on peer and self-assessment, are discussed.

Keywords: *Oral Mediation, Collaborating in a Group, B1-B2 CEFR, CEFR Descriptors, Global and Analytical Assessment, Managerial Skills*

1. Introduction

Group discussions in the workplace are becoming increasingly important, especially in management and engineering. *Mediating concepts, collaborating in a group and leading group work* are professional tasks of a manager or an engineer, which gives group discussion a prominent role in teaching ESP. This brings up a question as to how to assess group discussions.

Mediation, as it is defined in the CEFR Companion Volume, implies "passing on new information in an appropriate form; collaborating to construct new meaning; encouraging others to construct or understand new meaning, and creating the space and conditions for communicating and/or learning." (CEFR/CV, 2018: 99). Also, we adopted the approach to learning as described by B. North and E. Piccardo (North, Piccardo, 2016: 9), who state that learners, and especially those who learn a foreign language, usually are confronted with the unknown, having to mediate new meanings to each other and thus find themselves challenged by situations that require reformulation of a text or *mediating a text.* They have to *mediate concepts*, e.g. do problem solving, brainstorming and concept development.

In education it is important to know how students perform at each particular level of language proficiency. Hence, the importance of this paper lies in detailed examining of how group discussions differ at B1 and B2 CEFR levels (CEFR, 2001) so that challenges which students may face were responded properly by the teacher.

The practical relevance of the paper is that it offers a test in the format which is commonly used in the classroom and provides criteria for its assessing.

2. Research methods

The backward design method implies that CEFR descriptors set the goal for teaching mediation skills. Having this goal in mind, tasks and tests aiming at developing and assessing the aforementioned skills were created.

Another method used in the research was comparability. The simultaneous use of the global and analytical marks rises the reliability of assessment and makes it possible to intercompare one kind of assessment against the other giving raters a tool for self-monitor. Five analytical criteria are: interaction, discourse management, range, accuracy and phonological control. The global achievement mark for mediation consists of two components: relaying information and collaborating. While discussing a topic, students reformulate, summarize or streamline information and at the same time they build a rapport within the discussion group. Thus the global achievement mark for mediation evaluates relaying information and collaborating to facilitate discussions and construct meaning.

3. Project description

The empirical research features 91 undergraduate students of the Graduate School of Management, Russia. The level of their language proficiency varies from B1 to B2 CEFR.

The procedure of the oral test involves written or video input, preparation, group discussion and self and peer assessment. Marks awarded by two professional raters are mapped onto peer and self-assessment.

Aligning the assessment scales to the CEFR is essential for this research. This is achieved by careful study of the CV CEFR (CEFR/CV, 2018) mediation descriptors for facilitating collaborative interaction and then using those for the Global Achievement scale for Mediation. The Analytical scales are based on the CEFR Oral Assessment Scale (CEFR, 2001). Tasks used in the research are also linked to the CEFR in terms of their abstract / concrete content and the complexity of communicative situations.

The instruments that are being used include classroom observation and test results analysis with classical methods of statistics ITEMAN (ITEMAN, 2019) and the many-facet Rasch model (FACETS, 2019).

4. Conclusions

Group format and the absence of interlocutor can cause a problem for shy students; however, these factors can be views as opportunities if they are approached as teaching objectives to improve communicative skills of students.

Peer and self-assessment are aimed at raising self-awareness of students and developing their learner autonomy. The research shows that there is low correlation between raters', peer and self-assessment, that is why we would recommend the use of professional raters marks for reporting formative and summative tests results.

The biggest challenge for students is developing other people's ideas. The results suggest that collaboration at B1 level is quite rudimentary and short and may take up to approximately 20 percent of the total time. Another challenge is the variety of the language functions involved in the discussion. At lower levels students suffice with a few functions, e.g. inviting to speak or asking straightforward questions.

The main opportunity and implication of shifting from teaching communication to teaching mediation is the *increased focus on the collaborative development of new ideas*. By elaborating the concept of mediation and introducing mediation activities into the classroom, we facilitate passing on and receiving knowledge and most importantly, increase the autonomy of learners.

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What are the Challenges of Language-Sensitive Management Research and Education in the Digital Age?

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Abstract:
This paper investigates the challenges faced by language-sensitive management education in the digital era. It argues that the dismissal of language in management education programmes and international companies is due to a wrong conceptualisation of what language really means. The paper first analyses the nature of language, then discusses the impact of the conceptualisation of language on translation issues, on knowledge transfer and ultimately on language learning. To conclude, artificial intelligence opens promising perspectives when it comes to memorise, analyse and deal with billions of data in record time. But at the head of a MNC, one will never find a computer. The human remains at the heart of language interactions.

Keywords: *Language, Education, Tacit vs Explicit Knowledge, Translation, Digitalisation, Recontextualisation, Linguistic Turn*

Introduction

Society and business world are currently characterised by two crucial trends: globalisation and digitalisation. Globalisation tends to erase the diversity of cultures and to standardise business practices around the world under the hegemony of the Anglo-American business culture. Digitalisation imposes the standardisation of the information technology. According to the Cambridge dictionary, the digital age characterizes “the present time, when most information is in a digital form”.

When applied to language and language practices digitalisation may appear as a panacea (see widespread translation programs such as google transfer, digital learning and evaluating tools). The idea that we do no longer need teachers, translators and interprets is taken for granted. In this presentation we demonstrate that these illusions are based on a wrong assumption of what language really is. We analyse the nature of language and communication, then we discuss the impact of the conceptualisation of language on translation issues, on knowledge transfer and ultimately on language learning.

Traditionally, language is a system of signs that can be defined as a linguistic code. This structuralist approach leads to the classical view of language as a code based on Shannon & Weaver’s sender-receiver model of communication. However, with the linguistic turn in social sciences "(Alvesson et Kärremann, 2000) and the development of critical linguistics, there has been a paradigmatic shift in IB and in translation studies. Many scholars have moved away from this positivist view of language to a social constructivist approach which sees translation as a social practice (Chidlow et al. 2014).

Jacques Girin is one of the first research fellows, who showed that the information model ignores important aspects of language in a situation of communication. He draws attention on two neglected factors of this situation: indexicality (ability to point to the elements of the situation) and contextuality, (interpretation patterns and cognitive frames which are necessary to make sense of events).

Girin explains that language is neither neutral nor transparent. Specific language communities share their cognitive patterns and they don’t speak the same language as other communities, even

if they speak the same national language, because of their own identity code, shaped by language. But precisely, the reason why experts of organisations neglect the language issue is linked with Girin's so called "code model". It is interesting to note that knowledge management scholars develop a parallel approach.

Practical applications

In the positivist perspective translation is based on the equivalence paradigm (Chidlow et al., 2014), i.e. there is always a corresponding term in a foreign language with the same meaning as in the source language. The aim of translation is then to achieve a text in the target language that is equivalent to the original source-language version. In this perspective, translation boils down to "the process of walking through dictionaries" (Janssens & Steyaert, 2004). Studies on the empowerment of Russian managers demonstrate the contrary (Outila and Piekkari, 2019). Thus, translation can be considered as the travel of words, practices and ideas across different organisational settings.

The translation process as a "situated practice" (Ciuk and James, 2015) is a creative activity, which shapes a new reality, through which individuals interact in order to jointly construct and negotiate shared meaning. Translation is a form of communicative interaction rather than a narrow linguistic transfer between the translator and the manager (Tietze et al., 2017). Put it differently, translation can be viewed as a process of recontextualisation. (Brannen et al., 2014)

A key aspect is to understand how technology is changing the world of multilingual work. Many employees now use tools such as Google Translate (Sanden and Lønsmann, 2018) in order to achieve a translation in scenarios where speed and convenience, rather than accuracy, are used to assess the quality of a translation.

We also need to better understand the social processes at play in the formation of language communities (Girin, 1990), knowledge boundaries and communities of practice. Given its role in facilitating the flow of meaning, language has been called "the lubricant of the transfer of knowledge, values and experience from one source of common knowledge to others" (Holden, 2002). However, language issues occupy a relatively small place in knowledge management research.

The interconnection between knowledge and language in fields such as organizational and international business studies can be seen in the paradigmatic shift from a mechanical vision of meaning-making to one that sees meaning as co-produced in interaction with others and embedded in the context (Bakhtin, 1981). Both KM and language-sensitive researchers are seeking to better understand how tacit or socially-embedded knowledge can be communicated between heterogeneous groups (Collins, 2010). The notion of codified or explicit communication vs. socially-embedded tacit communication has been applied by researchers in both communities to categorize phenomenon such as companies' language policies (Janssens et al., 2004) and types of knowledge boundaries (Carlile, 2004). They suggest that explicit and tacit communication are interwoven and that the greater the sensitivity and adaptability to local conditions, the greater the ability to share tacit understanding.

To sum up, tacit knowledge scrutinizes the technical approach of the information technology as well as the mechanical approach of language.

The ignorance of what language really means is one of the reasons why language-sensitive research is failing to permeate higher management education. Language issues faced by international companies and managers are not represented in the curricula of business schools.

Many business schools reduce language learning to the acquisition of a linguistic code. It is disconnected from the overall learning objectives in management programmes. Language skills' evaluation is often designed to match the criteria of standardised tests. Language in business schools' educational programmes is still treated as a non-business issue.

In today's digitalized world there is a need for sociolinguistics to "unthink" its classic distinctions and biases and to rethink itself as a sociolinguistics of mobile resources. For educational programmes, this means that in a context of increased mobility there is a need to learn "to move between languages and to understand and negotiate the multiple varieties of codes, modes, genres, registers, and discourses" that will be encountered in the real world. (Kramsch, 2012).

The challenges faced by business schools in order to align their teaching programmes with the research outcomes are threefold. First, language training can no longer be dealt with in separated pedagogical structures, where language teachers are hired on the criteria of being "native speakers". Second, the monolingual orientation of English lingua franca teaching makes no sense given the diversity and complexity of the globalised world. Third, translation should be at the core of the management education agenda.

Artificial intelligence opens promising perspectives when it comes to memorise, analyse and deal with billions of data in record time. But at the head of a MNC, one will never find a computer. The human remains at the heart of language interactions.

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Beyond Traditional Boundaries and Communities. Co-creating Language and Communication Courses in the Times of Digital Transformation

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Abstract:
This paper elucidates the solution to foster the process of co-creation of integrated language and communication courses at business school in collaboration with business and management disciplines as a credible option of new pedagogy in times of digital transformation. The decision stems from the empirical research conducted by program designers at the Languages for Academic and Business Communication department for the Graduate School of Management, SPSU.

Keywords: *Co-creation, Interdisciplinary Language and Communication Courses, Boundary Spanning, Translation, Diversity*

Broad discussions caused by digital transformation have taken us, language and communication instructors, to the necessity of going beyond our traditional boundaries and communities and seek for solutions how language and communication courses can evolve. In search for better decisions recently we have participated in several international conferences, panels, formal and informal talks and thus selected 5 concepts in studies on higher education and social sciences: interdisciplinarity, boundary spanning, translation, co-creation and diversity that have shaped our professional view on the emerging quality and value of our courses for students at business school. We have come to the understanding of importance and relevance of these concepts to language and communication education for business and management students. They help us explain why we need to transform language and communication courses, what we should focus over and how we can implement changes.

The growing popularity of online platforms and digital resources pushes educators and educational institutions to reflect on the changes and re-think the existing approaches and practices. The recent efforts of unseveraliversities and educational online platforms to "apply technologies to re-image business education" have revealed the guiding principles for digital transformation experiments such as:

- put learning and learner at the centre
- be obsessed with relevance and impact
- make no compromise on quality; look for opportunities to delight
- break the polarizing view; collectively imagine the "ideal programme"
- focus on the process more than the outcome itself; pivot as needed and keep improving your solution (Lin, p. 16-17).

From this perspective we raise the questions whether modern digital solutions satisfy the above-mentioned essential rules of designing courses and what can be alternative decisions.

Our previous research on language and communication program transformation (Orlova & Martynova, 2018) has led us to the understanding that the solution lies in the wide and still underexplored and underexploited area of interdisciplinary learning.

We argue that interdisciplinary education can also become a plausible option to a digital way of acquiring knowledge and developing skills due to its capacity to put complex tasks in the centre of the learning process and enhance the development of students' higher order thinking skills. We identified a significant potential in the integration of language and communication courses with business and management disciplines when such way of learning facilitates the process of development of the core communicative competence. Since 2017 we have developed and deliver 2 interdisciplinary courses to more than 170 students of Bachelor's program and 50 students of Master's program.

This new pedagogy approach brings about the necessity to re-think the role of language and communication course designers as well as instructors. Collaboration of experts in different academic areas of knowledge implies working on the boundaries or at the intersection of disciplines when course designers need to go beyond the traditional disciplinary boundaries and integrate own perspective into a bigger holistic picture. The work of boundary spanners – "individuals who are responsible for inter-group contacts or otherwise engage in frequent interactions across group boundaries" (Barner-Rasmussen, 2019, p.335) is multi-faceted and their functions are not well-defined.

We assume that spanning disciplinary boundaries entails the complexities of individual psychological adaptability to the new professional role as well as communication issues of finding the common language with instructors of different disciplinary fields.

Within this context boundary spanning resonates with the concept of translation as a social practice of "movement and development of knowledge across different groups and organizations" (Wæraas & Nielsen, 2016:11). While in organizational studies translation is perceived as a practice when individuals are negotiating meanings and interests to achieve the intended goal, we interpret translation as a process of communicating meaning from one disciplinary language into another. It has become one of our areas of control to empower the interdisciplinary collaboration process and achieve the mutual understanding of the nature and goals of the integrated courses.

The process of transformation of our courses stimulates us instructors and experts with diverse academic and professional backgrounds and expertise to co-create across two and more disciplines and within our common academic community, i.e. the business school, as well as go beyond and attract representatives of business community, employers, and members of professional research associations. The central concept in this process is co-creation.

We share the definition of this concept developed by Co-Creation Studio at MIT (Cizec, Uricchio et al., 2019):

> "*Co-creation offers alternatives to a single-author vision, and involves a constellation of … methods, frameworks, and feedback systems. In co-creation, projects emerge from a process, and evolve from within communities and with people, rather than for or about them.*"

Our integrated courses are the products of co-creating process within academic and business communities during which we get insights and new perspectives how to enhance the quality and value of learning languages and communication to students.

The last but not the least reason for co-creating integrated language and communication courses is their design as an open framework which allows them to be flexible and adaptable to diverse disciplinary perspectives, emerging students' needs and improvements.

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Teaching in the Time of Technological Changes

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Abstract:
Our reality is defined with ongoing technological changes, impacting on our approach to education. This paper gives an overview of technological trends in education, including personalized learning; video-based, game-based and mobile-based learning; using virtual reality, augmented reality and mixed reality; and Artificial Intelligence. Though innovative technologies offer multiple benefits to modern learners, they are not going to replace the teacher. The article tackles the issue of bridging the gap between the preferences and motivations of the digital generation and the traditional views on teaching strategies. The approach that will equip students with the skills they need today is the comprehensive approach using the advantages of both classical and modern methods, developed and guided by contemporary teachers.

Keywords: *Personalized Learning, Video-Based Learning, Augmented Reality, Mixed Reality, Artificial Intelligence, Generation Z.*

1. Technological trends in education

Digital transformation is no longer an option, it has become a necessity. It should be considered as an opportunity to replace familiar and comfortable approaches with new and challenging ones. These may involve smaller changes like creating an eLearning platform or more complicated Internet of Things or Artificial Intelligence.

Nowadays there are numerous digital transformation trends in education. The kind of technology to be used depends on the type of the educational institution and the learning objectives.

1.1. Personalized or customized learning

This trend of learning aims at meeting student's needs and preferences. It creates an impactful learning experience by using interactive elements such as animations, scenarios, stories and gamification to keep learners engaged and involved.

Developing eLearning platforms and providing the students with digital devices like computers, laptops or tablets can create innovative ways to shape the classroom of the future. New teaching models will enable learners to acquire required technological skills, so they will be better equipped for modern working environment.

1.2. Video-based, game-based, mobile-based learning

Unlike traditional and often boring talk-chalk method, this innovative type of learning catches and retains student's attention by teaching through videos and games. It makes complicated learning concepts easier to understand and adds attraction to learning process. Mobile-based learning enables students to access educational content continuously across their digital devices at their convenience.

1.3. Using Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR)

VR puts users in totally artificial digital environment. AR overlays virtual objects on the real-world environment, while MR anchors virtual objects to real-world objects. As defined by Milgram and Kishino in 1994, Mixed Reality is "...anywhere between the extrema of the *virtuality continuum*". Consequently, AR is a part of MR. AR applications are spreading to

various spheres, including education and communications. The learning content can be accessed by scanning an image with the help of a mobile device or by using markerless AR techniques. With Augmented Reality, students can experience places that they would never be able to visit, transporting them back in time or space to deepen their learning experience. This technological trend of VR, AR and MR offers an array of new learning resources and enables students to learn more effectively. These technologies accommodate visual learners and help to overcome language barriers. They offer immersive learning solutions and give new pace to education process.

1.4.Artificial Intelligence

AI offers Speech-to-text (STT) option, which is available in a wide range of digital devices. They are capable of speech recognition and problem solving, so they can help learners to take notes and write faster. Some of the devices are equipped with Natural-language generation (NLG), According to research, texts generated by computer can be more convincing than human-written texts and textual summaries can be more supportive than visuals for making decisions. However, the role of AI in education is difficult to define. This technology has not been designed to replace teacher, but to provide customized learning to offer more benefits to learners.

2. How to teach in times of transformation

Young adults who are currently studying at HEIs mainly belong to Generation Z, who demographers usually define as people born since 1997. The title of the article in *The Economist* devoted to this generation speaks for itself: *"Generation Z is stressed, depressed and exam-obsessed"*. The ubiquity of technology in their lives has influenced the way they communicate and learn. Generation Z has a markedly different and more productive relationship with digital technology compared to their teachers representing previous generations. The challenge of teaching these "connected" students lies in moving beyond traditional strategies and finding ways to stir their imagination, grasp their interest and keep them motivated.

Modern students have more technology know-how than their teachers, so teachers should set up creative classroom environment using a variety of software, digital and technological media. Nowadays students are online connected throughout the day; therefore more technology should be included in teaching to explore the Internet as a communication tool in a group decision-making process and to enhance the interconnectedness of the group. There has been growing interest in online study materials and tests among learners, thus applications and supporting software should be explored to implement the gradual change. Born into the era of the Internet, Generation Z does not understand a different view, which requires professional development support to help teachers move from a traditional to a transformational learning model.

Conclusion

Today universities are offering increasingly flexible learning environments to correspond to changing student lifestyles and fast-developing technology. Traditional classes delivered face-to-face are replaced by online activities, conventional printed textbooks give way to digital resources. Recent study comparing students' experience and learning in these two modalities confirms that though students appreciate the convenience of completing written activities online in their own time, they would prefer to discuss course content with peers in the classroom rather than online. They feel more engaged, and receive more immediate feedback, than in online discussion. Therefore teachers should structure classes so that students can benefit from both the flexibility of online learning, and the greater involvement of face-to-face communication.

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Social Media for Building Intercultural Competence

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Abstract:
This paper investigates use of social media for development of intercultural competence, which is a difficult task for a foreign language teacher, specially, for one teaching German as a foreign language. First, students are afraid of original texts in German which provide the overview of basics needed for the intercultural competence. Second, it is difficult to define what country to teach about as German is spoken in Germany, Austria and Switzerland. The use of modern media as Instagram can facilitate obtaining intercultural competence by students even if they are not majoring in languages. The paper is to demonstrate the examples of the new media use in foreign language class and its outcomes.

Keywords: *Communication Teaching, Digital Transformation, Intercultural Competence, New Media, Social Network, Instagram for German Teaching*

1. Introduction

It is impossible to think of the world without the new media, which are defined as products and services that provide information and entertainment using computers and the Internet. This means that the information, used in the class, come from the new media. Teachers have got used to downloading teaching materials from the web. The Internet is the biggest database of all kind of study materials.

Do students, however, make any use of those? Generation Z has been born not only with the computers but also with the Internet around them. Nevertheless, the Internet is still considered by younger generation as a source of entertainment rather than one of knowledge, at least, not of the *serious* scientific knowledge. The most popular websites are those of social networks.

The situation gave us an idea to make use of the attractiveness of social media for language teaching and run a project, integrating Instagram into the program developing intercultural competence among students of St. Petersburg State University.

2. Goal and Objectives

The research goal is to integrate a social network (Instagram) into the course of German as foreign language developing thus intercultural competence. The project took place in the classes of German at the International Relations Department in falls semester 2018.

During the project we carried out several activities:

- Analysis of the presented Instagram resources for development of intercultural competence,
- Launching the project offering students Instagram posts for reading and discussion,
- Project development offering students follow profiles with cultural and country specific information,
- Outcomes evaluation (what information was useful for students and what profiles they would follow in their routine).

3. Object

There are many sources with information about various countries and regions in Germany in social media. Almost all federal lands, towns and communities have Instagram profile. E.g. we have looked at one of the Baden-Württemberg called *bwjetzt* (BW now). This profile gathers photos of sights and places of interest, both artificial and natural, which are shot by Instagram

users and marked with a certain hashtag. Each picture is commented with a story about the site. Usually, it is short description, giving basic background, meant to raise curiosity of followers (sources of type 1).

Another type of sources are profiles of mass media (newspapers, magazines, etc.) which cover different events in the country. In our case, the Instagram profile of *Berliner Morgenpost* was used as a source of news presenting current situation in Berlin. The source was chosen because the profile is updated regularly and provides pictures of Berlin locations which are worth visiting and short stories with headings of articles on the most recent activities in Berlin (sources of type 2).

Some other profiles, like Visit Lübeck or Mannheim, were also offered to the students but they are similar to those described above.

4. Methodology

Instagram profiles were offered to follow to the students of International relations faculty in September-December 2018. Four groups of students volunteered to participate in the project:

- 2 groups of the 3rd semester (Levels 0 and A1)
- 2 groups of the 5th semester (Level A2/B1)

The latter groups had already been exposed to practice of following the news in German at the website of *Deutsche Welle* in 2017/2018. It had been, however, videos and podcasts but not too many texts. The head of German studies division prof. Elena E. Markova had been integrating country specific information into the course of German which had always been highly appreciated by her students.

5. Main Findings

The students were interested in Instagram as a source of information about Germany. The use of a social network helped to overcome students' restraint and reservedness. Usually, beginners are afraid of authentic texts, and prefer using machine translation to feel sure even if they can understand it on their own. The posts with few words commenting the picture could be read and understood easily.

We offered the beginners and those students of A1 levels profiles of type 1 as the texts there are closely tied with the visual material and give basic information about Germany. Though some parts needed thorough translation, the majority of texts was well interpreted. Thus, the students were learning how to make sentences and write short texts in German. The students could look through the comments by other users and learn how to express their feelings. Style of the comments was close to spoken language. It gave an opportunity to learn some spoken expressions. At the end of the semester, we asked the students to post their own pictures of Germany/Russia and comment them briefly.

The students having A2/B1 level worked with the sources of type 2. After we discussed several posts by *Berliner Morgenpost*, the students were to monitor stories and posts by the newspaper. This was a difficult task for them, because the news texts were not closely tied with pictures, and still they had difficulties with understanding. However, we focused the tasks not on understanding the whole texts but on monitoring and analyzing only headings and highlights dedicated to current situation and events in Berlin. This helped to build intercultural competence which supposes acquaintance with social, economic and political situation in the countries which the study.

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Marketing in the Emerging Markets: Challenges and Opportunities in the Digital Age

The Effect of Online Store Personalization on Customer Loyalty towards Internet Retailer Brand: An Exploratory Study

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Abstract:
The paper investigates the effects of personalization of online stores on customer loyalty towards internet retailer brand. Recently, more and more attention in the research community is paid to automated marketing systems that can increase company's financial performance and as well contribute to the appropriation of intangible assets expressed in goodwill and well-formed positive image of the company. The research is aimed to find how personalization technologies impact brand loyalty of consumers towards online-stores. This study provides an insight on how personalization technologies may contribute to customer loyalty. The model is empirically proven based on online survey data collected in May 2019. EFA and PLS-SEM are used for data analysis. The research results confirm that personalization has an overall positive impact on loyalty through mediation of customer based brand equity components and customer involvement. Negative moderation effects of gender (for men) and presence of children are also observed. The results of the study contribute to general understanding of the role of personalization in brand equity formation and provide some insights for further research.

Keywords: *Personalization, Customer Loyalty, E-Commerce, Internet Retail, Online Retail, Brand Equity, PLS-SEM*

1. Introduction

In recent years, the speed of various technological solutions penetration in marketing is increasing, especially in digital. Such technological solutions as automation, personalization and Big Data analysis are designed to facilitate faster and better work of marketers and help companies achieve exceptional results, especially when it leads to customer experience improvement.

The use of these technologies is not widespread among Russian companies, although they recognize their importance. Demand for the new marketing technologies can be particularly relevant for e-commerce companies, as they potentially have unlimited number of customers. Companies in the market need to deal with large amounts of data about consumers that have low switching costs between online stores. Consumers are informationally savvy, they understand their opportunity to make a choice, and their expectations are growing. Consequently, online stores search for solutions that may lead to formation of strong relationships with their client base and create a more personalized (thus unique) shopping experience for the customer.

This study is aimed at identification on how these personalization solutions are perceived by customers and whether they indeed lead to increase in quality of their relationship with the store and thus to formation of loyalty. We carry out an exploratory investigation through online survey with further PLS-SEM modelling to address the research question and provide reflections for further research.

2. Theoretical Background

Personalization is the process of making a product suitable for the needs of a customer that does not require active participation of the latter [Ziesak, 2013]. Personalization can bring benefits for both clients and companies: the clients get a personalized approach, save time costs for searching the right option, and the companies strengthen relationships with their customers, increase customer loyalty, which has positive effect on company financial performance [Shanahan, 2019].

Personalization is not equal to customization: personalization occurs when the company independently designs elements of marketing mix that are suitable for an individual, while customization takes place when an individual specifies one or more of these elements beforehand [Arora, 2008].

As stated above, one of the benefits of using personalization might be an increased brand loyalty. The term "loyalty" refers to the consumer behavior usually expressed in making repeat purchases [Starov, 2008], however in many researches it also implies emotional and cognitive involvement with the product (e.g., [Sokur, 2015; Starov, 2008]). In brand equity models loyalty is preceded by brand awareness, brand associations and perceived quality, as this corresponds with the customer journey concept and brand equity theory [Starov, 2008]. Prior works also suggest that customer engagement antecedes perceived quality [Shanahan, 2019]. Consequently, we suggest the following hypotheses for investigation:

H1: *An increase in (a) brand awareness, (b) brand associations and (c) perceived quality will positively affect brand loyalty [Aaker, 1996; DiJulius, 2008; Lehmann, Keller, 2008]*

H2: *Increased consumer involvement improves perceived quality [Shanahan, 2019]*

H3: *An increase in attitude towards personalization will contribute to increased (a) consumer involvement, (b) brand awareness and (c) brand associations [Tam, 2006; Tucker, 2014; Ya, 2012]*

H4: *An increase in perceived personalization rate will contribute to increased (a) consumer involvement, (b) brand awareness and (c) brand associations [Shanahan, 2019; Tam, 2006; Tucker, 2014; Ya, 2012]*

3. Data and sample

In order to empirically test the hypotheses primary data was collected in May 2019 through a structured online survey that was conducted on Survey Monkey platform. The questionnaire was distributed in social networks VK, Facebook and Instagram. A non-probabilistic quota sampling approach was used (equal age and gender quotas were combined with filtering questions). The final sample included 282 observations. Approximately 80% of respondents were from Saint-Petersburg, with average (41,5%) or above average (38,3%) income, most respondents reported higher education (69,9%).

4. Empirical results and conclusions

Research model was compiled based on the proposed hypotheses. Key variables were: Perceived Level of Personalization, Attitude towards Personalization, Involvement, Perceived Quality, Brand Awareness, Brand Associations and Loyalty. We also considered respondents' age, gender and whether they have children as moderating control variables. The model was analyzed using factor analysis in IBM SPSS followed by partial least squares structural equation modeling (PLS-SEM) in WarpPLS 6.0 (see fig. 1 for modeling results).

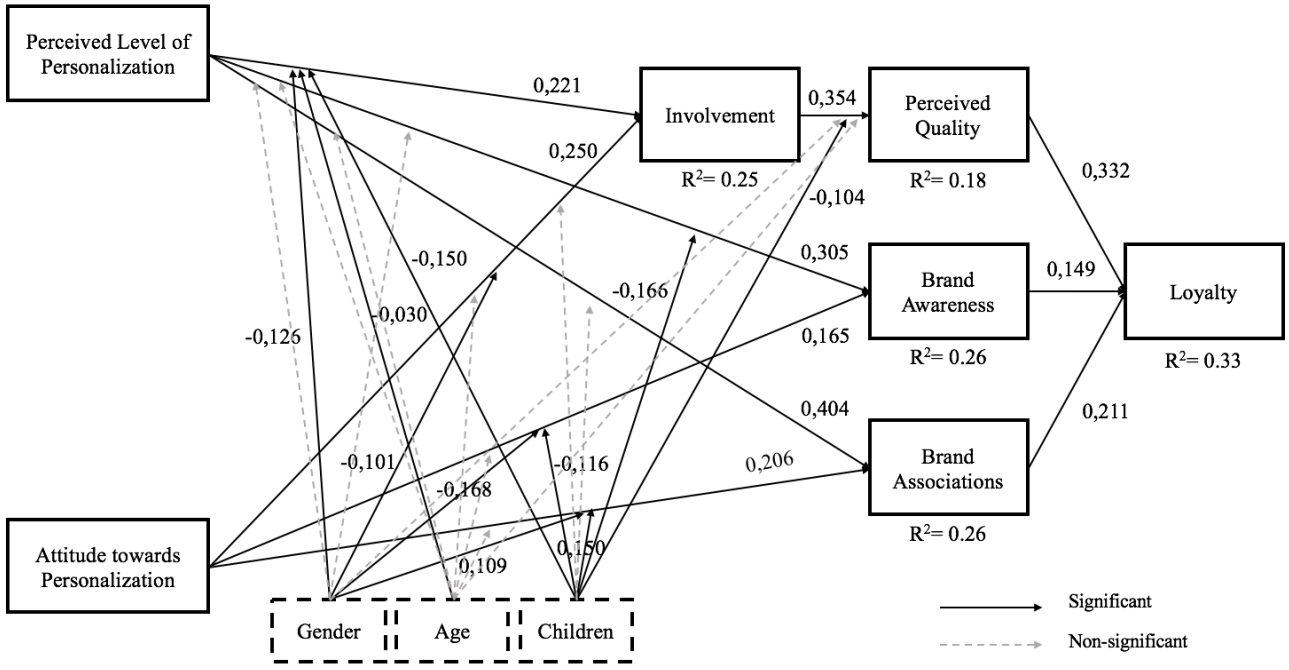

Figure 1. Results of PLS-SEM analysis of the model

All model fit and quality indices met the required value criteria. Factor analysis showed the reliability of latent variable scales. PLS-SEM model demonstrates acceptable though not high R2.

The empirical results confirm that personalization influences loyalty through mediation of brand equity components by increasing brand awareness, improving brand associations and perceived quality. It is important to highlight that attitude towards personalization in general is a significant factor in customer loyalty formation independent of the online store brand. Moreover, we observe high impact of perceived level of personalization on brand awareness and brand associations which may imply that this type of creating individual customer shopping experience may potentially lead to customer brand equity improvement. Another interesting observation is that overall personalization is somewhat less effective with men customers compared to women when it comes to involvement. Similar effect is observed for respondents with children. In both cases it may mean that men pay less attention to personal recommendations whereas customers with children tend to be more selective and prefer to search themselves instead of reactions to recommendations based on prior purchases.

The study results generalization is limited by the chosen research design (non-probabilistic sampling) and characteristics of the sample. We also deliberately simplified the model for the exploratory study and have not included deeper investigation of customer shopping experiences and behaviors which may be the focus for further research.

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Full list of references for the research project may be provided upon request.

The role of online-communities and internet influencers in consumer behavior on the Russian perfumery market

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Abstract:
This study addresses consumers' decision-making process of online-communities participants in the Russian perfumery market through determining important criteria and exploring the role of internet-influencers. The special attention is paid to the impact of community opinion leaders, community members, and non-members reviews on consumer preferences. The purpose of the study is to understand the role of different types of internet influencers in consumers' decision-making process. A structured questionnaire was distributed among Russian-speaking perfumery focused online-communities and communities that have no strong thematic framework. The sample size of the study was 635. Statistical data analyses were conducted in order to identify consumer segments and the difference in decision-making by segments. Based on cluster analysis two segments of consumers in Russian perfumery market were identified: advanced and general consumers. The preliminary results show that is typical to the advanced consumer to use perfumes targeted to men or women audience regardless of their gender and worth the opinion of industry experts higher.

Keywords: *Marketing, Consumer Behavior, Online-Communities, Perfumery Market, Internet Influencers, Consumer Perceptions*

1. Introduction

It is generally accepted that consumers' decisions are influenced by personal and cultural values. In the modern Digital Age online communities and internet influencers take part in consumer preferences forming and play an important role in the decision-making process. The opinions and recommendations provided by bloggers and online-community opinion leaders could make the basis of consumer knowledge in the area of interest and become the main criteria for some consumer segments.

The purpose of this study is to investigate the role of internet influencers in consumers' decision-making process to determine important criteria of consumer choice in the Russian perfumery market. The special attention will be paid to the impact of community opinion leaders, community members, and non-members reviews on consumer preferences.

2. Background of the study

Consumers' decision-making process and aspects that could contribute to consumers' knowledge and affect their choice is an intensive research area. The growing interest of academic researchers is focused on the recent changes in consumer behavior caused by digitalization of the world economy (Cummins et al., 2014; Hagberg et al., 2016; Zhao et al., 2019). Many papers are devoted to models of the consumers' decision-making process (O'Reilly et al., 2018; Prasad, Garg, & Prasad, 2019), some of them paid particular attention to the role of online communities, especially brand communities, (Kamboj & Rahman, 2017; Zhao et al., 2019), e-Word-of-Mouth and influencers (Alon & Brunel, 2018; Arshad et al., 2017; Castellano & Dutot, 2017; Hsu et al., 2013; Kudeshia & Kumar, 2017) in consumer choice. Nevertheless, the research in the field was conducted mostly for advanced economies and for different markets (e.g. (Dessart & Duclou,

2019)), while emerging markets are still not well examined. Moreover, the number of academic research investigating the specifics of consumer behavior Russian perfumery market is scarce.

3. Data and sample

The empirical study is based on an online-survey of 635 respondents. A structured questionnaire was used to collect the data. The questionnaire was distributed among Russian-speaking perfumery focused online-communities and communities that have no strong thematic framework.

Statistical data analyses with SPSS and R were conducted in order to identify consumer segments and the most important criteria of consumer decision-making in the perfumery market.

4. Preliminary results

Based on cluster analysis two different groups of consumers were identified. The first cluster (315 observations) formed by advanced consumers, who demonstrate strong interest to perfumery. They participate in some online communities and have strong preferences on blogs and different sources of information. The advanced consumer tends to use perfumes targeted to men or women audience regardless of their gender and worth the opinion of industry experts higher.

The second cluster (320 observations) formed by general consumers, who are not so familiar with the perfumery blogs and communities. Their decisions are more affected by brand awareness and image, advertising and celebrities' advocacy than the decisions of advanced consumers.

Figure 1 shows the consumers' evaluation of the importance of different fragrance choice criteria. The evaluation was given using 5-point Likert scale.

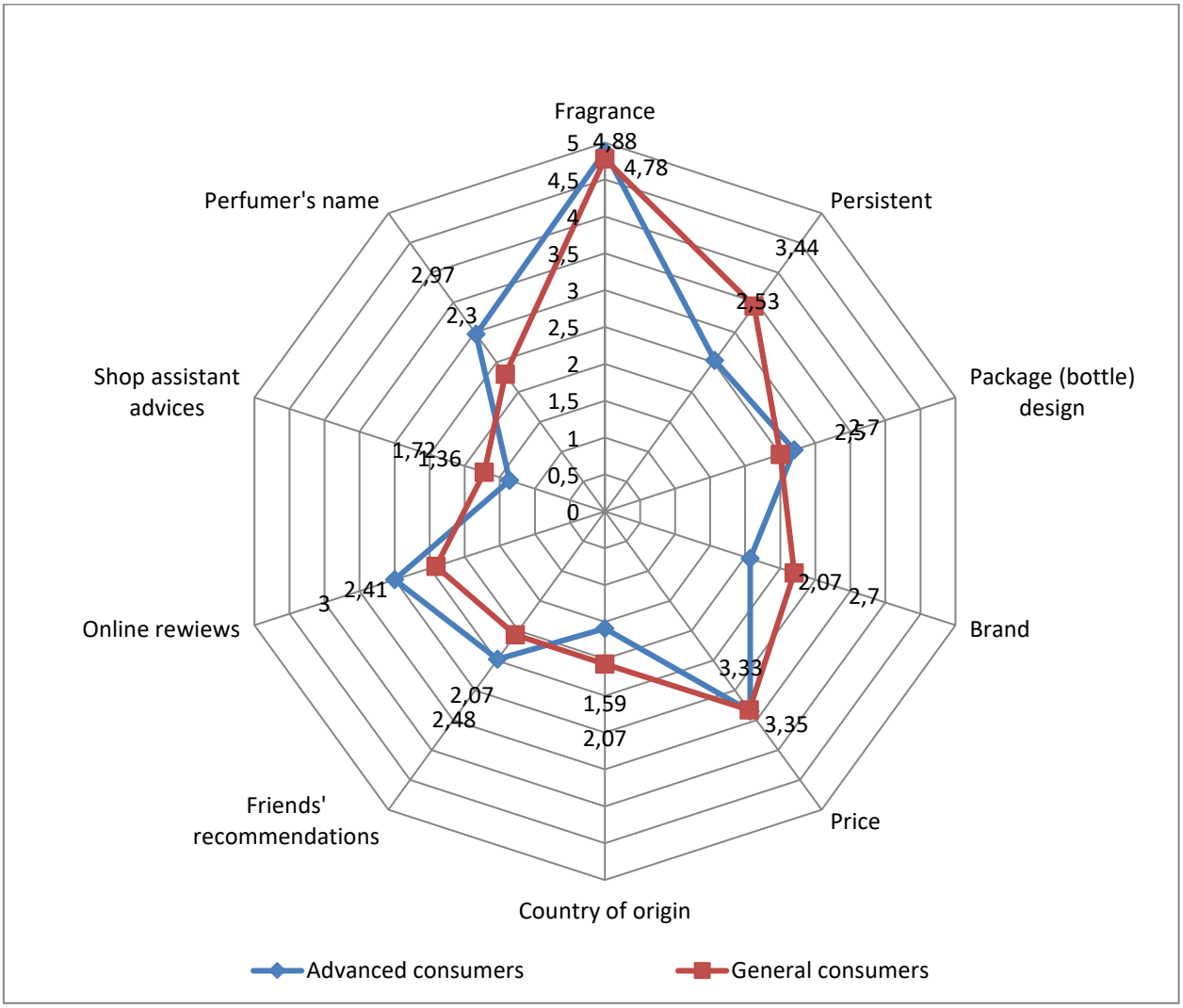

Figure 1. Importance of different in fragrance choice criteria by consumer segments.
Source: survey data.

5. Directions of further research

During the further statistical analysis of the data collected, we are going to determine important criteria and main differences in the decision-making process by two identified consumer segments in the Russian perfumery market. In addition, it is planned to conduct a content analysis of the main blogs and online-community platform which is indicated as the most influential resources in order to investigate its impact on consumer preferences for both clusters.

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The Role of Institutional Entrepreneurs in The Evolution of Modern Retailing in India

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Abstract:
India, with a population of more than 1.3 billion people, a burgeoning middle class, and a business-friendly political environment offers a highly lucrative and largely untapped market for big-box and modern-day retailers. Despite this potential, in recent years the overall experience of such retailers in India has been mixed. Against this backdrop, the research describes the evolution and growth of modern institutional entrepreneurs in India, i.e., retailers that have successfully overcome significant entry barriers and social stigmatization by performing the seemingly paradoxical task of pursuing change while embracing tradition. Using several real-life examples and case studies, this paper offers guidance to practicing managers wishing to transform their firms into institutional entrepreneurs and tap into the vast and mostly unrealized potential of the Indian retail market.

Keywords: *Institutional Entrepreneurs, Institutional Theory, Legitimization, Indian Retailing, Channels of Distribution, Kirana Stores*

This study seeks to better understand how modern *institutional entrepreneurs* in the Indian retailing sector have evolved and successfully achieved the twin goals of social legitimacy and economic gains by deftly reconciling these opposing forces (Battilana, 2009; Handleman and Arnold, 1999). To achieve this objective, the paper draws upon institutional, population ecology, and economic theories to conduct a baseline appraisal of the institutional effects of historically entrenched traditional retailing forms in India. This analysis reveals that until very recently, a plethora of institutions such as government owned channels of distribution, cooperative stores, independent mom and pop (kirana) outlets, and unorganized retail entities produced powerful inertial forces and erected significant barriers for new entrants. In addition, market hurdles for new entrants were cemented and substantially reinforced over time through coercive, cognitive, and normative legitimizing processes operating in the institutional environment (Tracey, 2011). Against this backdrop, the research describes the evolution and growth of modern *institutional entrepreneurs* in India, i.e., retailers that have successfully overcome significant entry barriers and social stigmatization. In particular, the main institutional approaches involve either *tinkering* with an existing institutional belief system to gain social legitimacy or *theorizing*, i.e., a cognitive mechanism that creates incentives for participants to learn and internalize a new meaning (Rao et al. 2003).

The starting point for the analysis is a brief consideration of the overall institutional environment in India and the development of a taxonomy that classifies the current retailing environment in India into several archetypes. Within each archetype, we provide a discussion of institutional and economic forces that have created and constrained efficiency by embracing either a *tinkering* or a *theorizing* perspective. At the same time, we also discuss the broad economic forces that have played an important role in the evolution of modern retailing forms and derivative institutions.

Given environmental diversity and its impact on consumer supply and demand, developing a parsimonious taxonomy involving multiple dimensions such as religion, culture, etc. is a complex undertaking. However, the major forces that the retailing industry has to contend with are: i) a lack of infrastructure and the means to access far-flung rural markets, and b) the yawning gap in purchasing power between the rich and poor. Each dimension, in turn, can

be further sub-divided into low and high regions thereby yielding a 2x2 matrix, with cells described below.

In cell 1, firms cater to markets with reasonably high purchasing power and consumer demand. These urban and semi-urban markets also have access to relatively efficient channels of distribution. However, the role of institutional entrepreneurs in ushering change is significant. For these entrepreneurs, the main challenge for modern retailers is to position their offering as a superior alternative to the neighborhood *kirana* store that has historically offered a familiar and convenient shopping option to customers. Customers in India are often skeptical of large retail stores and feel that they have to pay a high price at modern stores. This thought process has been largely shaped by institutional forces. In particular, historically, the average customer always shopped in spartan environments and associated a bare-bones set up with cost efficiencies. Hence, any environmental change involving luxuries like air conditioning started generated negative connotations.

In cells 2 and 3, firms access demand in low per capita markets adjacent to urban areas and develop optimal routing schedules and journey plans for urban retail stockists. Since the overall demand is not very high, urban stockists visit these adjacent markets relatively infrequently and supply products to retailers. In contrast to cell 2, cell 3 represents a channel form designed to serve high potential markets with relatively poor market access. Here, firms typically appoint rural wholesalers who are in close proximity to these markets. These wholesalers solve the last mile problem by contracting with individuals who carry products using local means of transport such as motorcycles, three wheelers, bicycles, bullock carts, etc. and deliver them to distributors in nearby villages. Firms face challenges in developing detailed stocking and replenishment plans for these channels given lack of access to end customers. In other words, departing from a strong institutional set up is challenging, and retailing entrepreneurs have to embrace tradition.

The final cell represents the bottom of the economic pyramid (BOP) and poses considerable challenges to retailers and it is almost impossible to specify a widely generalizable institutional approach. In reality, BOP markets are located in far flung rural areas where the average per capita income of people is woefully low.

In conclusion, the main idea articulated in this paper is that although the retailing environment in India theoretically offers considerable promise, in reality, firms have met with limited success. Our contention is that firms have not sufficiently considered the role of strong institutional forces on their retailing strategy. Hence, firms or institutional entrepreneurs who have either created new meanings or theorization have been more successful than others who have adopted a simple transplant strategy that mimics the imposition of an alien western retail format on a local culture. In the same vein, some retailers have practiced tinkering to successfully cope with institutional challenges.

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Limiting and Driving Factors of E-commerce Market Development in Russia: Evidence from an Empirical Research

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Abstract:
While trust is a one of the factors that may influence consumer behavior in the e-commerce market, its role depends on the research context. This study examines the role of trust in the consumer behavior in the e-commerce market in Russia. Drawing on the Theory of Planned Behavior (TPB), this research considers the effect of trust on consumer intention to purchase online, on current online purchasing behavior and anticipated behavior. We propose that trust improve more online consumer behavior and repurchase intentions than consumer intention to buy online. Using structural equation modelling, the conceptual model will be tested with a sample of 1093 Russian Internet buyers. Additionally, influence of actual behavior on anticipated behavior will be calculated.

Keywords: *Internet Retailing, Trust, Theory of Planned Behavior, Online Consumer Behavior, Emerging Markets, Russia*

1. Introduction

Electronic environment (EI) is characterised by a specific set of features, among which uncertainty plays the most prominent part (Pavlou, & Fygenson, 2006; Chiu et al, 2012). As online shopping is one of the domains within the EI, uncertainty has a significant bearing on it. A number of features mainly related to uncertainty and its aspects make the process of online shopping markedly different from the more conventional retail practice: the former is characterised by the absence of salespersons, a lack of interpersonal face-to-face contact between the customer and the seller, and spatial and temporal distance between the customer and the seller (Chiu et al, 2012; Limayem et.al., 2000). Overall, these unique differences increase uncertainty and thereby impose a barrier to e-commerce adoption.

Many researchers state that trust plays a crucial role in online shopping (Pavlou et.al., 2006). A high level of trust that a consumer has in a specific seller or online retail in general is capable of reducing the degree of uncertainty in pertinent situations. What is relevant, the level of trust that a consumer has in online shopping may affect the consumer's purchasing behavior (i.e. Chiu et.al., 2012; Kim, & Peterson, 2017). Thus far, the relationship between trust and consumer behavior is becoming a major area of interest within the field of online shopping.

Most of the current studies investigate the relationship between trust and the particular purchasing behavior (for ex. Van der Heijden et.al, 2003; Pappas, 2016; Giampietri et.al, 2018). However, the consumer purchasing behavior can be considered as a set of related behavior where intention, actual behavior and anticipated future behavior follow each other. While the role of trust towards consumer purchasing behavior depends on the research context, there is little evidence of this relationship from the emerging markets, particularly from Russia. To better understand the consumer purchase behavior in an online shopping in Russia, this study focuses on the role of consumer trust with regard to intention, actual behavior and anticipated future behavior united by a linear sequence.

2. Theoretical Background

Theory of reasoned action (TRA) proposed by Fishbein and Ajzen (1975) states that behavior results from behavioral intention, which depends upon a combination of personal attitudes and subjective norms. The subjective norms disclose perceived social pressure from consumers circle of influence (Pavlou, & Chai, 2002). Later Ajzen (1985, 1991) added perceived behavioral control (PBC) as a third determinant of behavioral intention. PBC indicates consumer

beliefs with respect to their access to resources and opportunities required to facilitate an actual behavior (Ajzen, 1991). In that way the model explains the impact of personal determinants and social surroundings on the consumer intention to purchase online and then on its actual behavior. The extended theory of reasoned action gained popularity as the theory of planned behavior (TPB) and used as a theoretical framework of the present study.

This study extends the TBP model in some aspects. Firstly, the PBC construct is conceptualized as a set of three variables: two variables are taken from technology acceptance model (TAM) - perceived usefulness and perceived ease of use, and third variable is a perceived risk. Secondly, the anticipated future behavior is included as consequences of actual behavior. Thirdly, while some researches claim the pivotal role of trust in online consumer purchasing behavior (Gefen, 2002; Pavlou, 2002), the trust is included in TPB model as determinant of intention, actual behavior and anticipate behavior. Figure 1 depicts our proposed model.

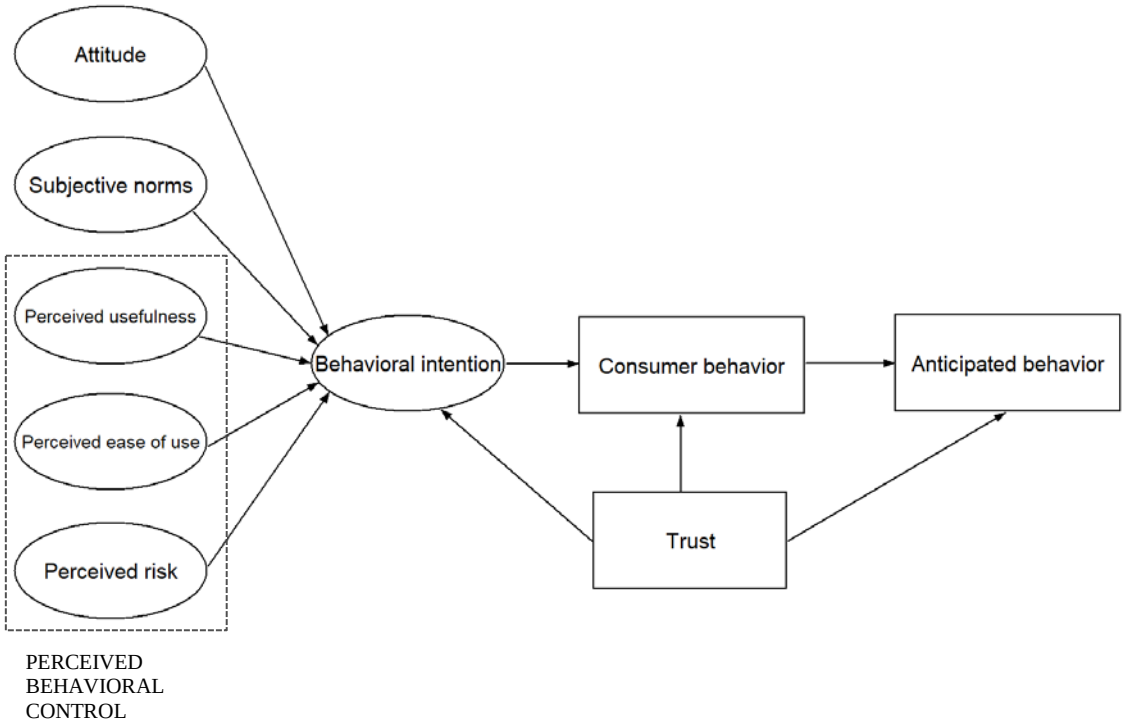

Fig.1. The proposed theoretical model

3. E-commerce Market in Russia

E-commerce[3] market is a relatively young segment of the retail market in Russia: in 2016 the e-commerce market accounted for only 4.4% of the total retail market (Euromonitor, 2017). Despite the small share, e-commerce showed a substantial growth for nearly 20 years: about 30-40% in the 2000s and nearly 25% after the crisis of 2014 (Euromonior, 2017). At the same time while Russia takes the first place in Europe in terms of internet users (more than 84 million people) (GfK, 2016), only 34% of them buy online (Virin & Ovchinnikov, 2015). In developed countries this indicator is equal to 60% (UNCTAD, 2015). What is more notable, the proportion of internet users who make regular purchases and form the core of e-commerce is only 1% in Russia. The e-commerce market in Russia is far from achieving its potential due to reluctance of both internet users who are not shop online yet and who are already purchase via internet. While trust is considered as one of the limiting factors that impede consumer adoption of e-commerce (Yandex.Market, & GfK, 2015; Virin & Ovchinnikov, 2015), the particular role of trust and its influence on consumer intention to purchase online, actual consumer behavior and anticipated consumer behavior in Russia is not studied yet. Thus, understanding the role of the trust in the

[3] In this research e-commerce is defined as any type of purchasing or selling of goods and services in large and small size firms via the internet (Solaymani et al., 2012, p.250).

Russian e-commerce market is becoming crucial for the analysis of consumer behavior in this market.

4. Research Methodology

4.1 Research design

The quantitative data reflecting consumer perspective was collected from a survey of internet users that participated in the online course "Marketing" held on the Russian national educational platform "Open education[4]". The online version of the questionnaire was developed by using "Survey monkey", a survey development cloud-based software. 9,850 internet users took part in the course, and the survey link was sent to all participants of the course. The survey link was sent on 17 April 2016 and during the one week the course participants could complete the questionnaire. Completing the questionnaire was voluntary and free of charge. A total of 1683 respondents from 63 regions of the Russian Federation participated in the survey, with 10 incomplete responses, so the response rate was 12.3%.

Table 1. Research design

Method	Online survey
Sample	1683 respondents
Level	Consumer individual level
Objective	Examination of the role of trust on the consumers' behavior
Timing	November 2016 – April 2017
Methods of analysis	Confirmatory Factor Analysis (CFA), Structural Equation Modeling (SEM)

4.2 Operationalization

The measures of the theory of planned behavior used in the study originate from Ajzen (1991). Perceived usefulness and perceived easy of use is operationalized by Devaraj, Fan & Kohli (2002). Perceived risk is employed from Kim, Ferrin & Rao (2009). Participation experience in internet retailing measures current consumer behavior and anticipated consumer behavior, and adapted from (Corbitt, Thanasankit & Yi, 2003). Trust in internet retailing is operationalized by one statement. A similar operationalization was found in (Pavlou & Fygenson, 2006). As a result, the questionnaire includes 21 questions on theory of planned behavior, and participation experience, and additional socio-demographic questions to describe and classify respondents. The present study measures all items on a seven-point Likert scale ranging from 1 = "completely disagree" to 7 = "completely agree." While using the common scale is a potential source of bias, its effect is calculated in this study.

4.3 Sample description

The total sample was 1,663 respondents. While the sample was determined to the online users, the main respondents' characteristics are consistent with the Russian online consumers' profile (Data Insight, 2014; Awara Group, 2013; Insales, 2015). Table 2 presents the demographic information of respondents.

Table 2. Online survey sample description

Measure	Items	Frequency	Percent
Gender	Male	510	30.8
	Female	1147	69.2
Age	Under 18	5	0.3
	18-25	594	35.8
	26-30	421	25.4
	31-35	294	17.7
	36-40	159	9.6

[4] https://openedu.ru/course/hse/MARK/

	41-50	156	9.4
	51- 60	22	1.3
	Older 60	8	0.5
Education	Incomplete secondary education	6	0.6
	Secondary education	28	2.6
	Vocational secondary education	29	2.7
	Associate's degree	171	15.9
	Higher education	654	60.6
	Two and more degrees	140	13
	PhD	50	4.6
Income of the family	We do not have enough money to purchase food	7	0.4
	We have enough money only for the purchase of food	35	3.3
	We have enough money for the purchase of necessary food and clothing, but we postpone buying larger purchases	481	45
	We can purchase most of the durable goods (ex., refrigerator, TV), however we can't buy a car	341	32
	We can purchase a car, but we can't buy an apartment	173	16.1
	We can purchase all goods that we want.	34	3.2
Marital status	Married/civil marriage	495	46
	Not married	581	54
Children	Have a child/children	377	35.2
	Have no child/children	695	64.8

Source: author's analysis

5. Expected Results of the Study

The paper presents the results of two-step analysis (Anderson, & Gerbing, 1988). During the first step a model will be estimated using CFA, then, SEM analysis will be applied to find the best-fitting model and to test causal relationships. Firstly, TPB model will be tested on the e-commerce market in Russia. Secondly, the analysis allows to determine, whether trust influence on consumer intention to purchase online, actual consumer behavior and anticipated behavior. Thirdly, the impact of actual behavior on anticipated behavior will be calculated.

The detailed results of the empirical analysis as well as key findings and discussion would be presented at the conference.

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Consumer Learning in the Context of Mobile Commerce

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Abstract:
This paper investigates consumer learning in regards of the consumers'competences, cognitive readiness and motivation to engage in the mobile commerce from the points of view of the cognitive psychology and economic theory. This topic hold high value due to the fact that new tools of mobile commercial communication require refined competences and abilities. In order to understand dynamically changing environment, consumer engages in the process of learning. However, due to the increased number of factors influencing the communication between consumer and business, learning interruptions occur. Current academic research recognizes this problem with increasing number of articles, however it remains fragmented and does not refer to mobile commerce. Therefore, this paper's output will lay in the systematization of currently existing concepts and their application to the context of mobile commerce. This paper contributes theoretically by establishing the links between concepts of consumers' competences, cognitive readiness and motivation to engage in the commercial activities, and managerially by offering to the business practitioners an insight into their behavioural patterns.

Keywords: *Consumer Learning; Mobile Commerce; Consumer Behavior; Competences; Motivation; Cognitive Readiness; Learning Interruptions*

The process of "digitalization", which could be defined as "the adoption of Internet-connected digital technologies and applications by companies" (Pagani, 2013, p. 185), enables commerce to take place in a more advanced environment. "Electronic commerce" (further - "e-commerce") is defined as the "sale or purchase of goods or services, whether between businesses, households, individuals, governments, and other public or private organizations, conducted over computer-mediated networks; the goods and services are ordered over those networks, but the payment and the ultimate delivery of the good or service may be conducted on or off-line" (OECD, Report on e-commerce, 2002, p. 89). In addition, mobile commerce (further – m-commerce) and social commerce (further – s-commerce) are essential components of e-commerce due to historical roots of their development (Veijalainen et al, 2006). The possibility to use the smartphones to also get integrated in the commercial activities led to the creation of the "m-commerce", or sometimes this term is known as "mobile commerce" or "m-business", however, several authors argue that "m-business" is the broader notion, covering more than just commercial cooperation (Veijalainen et al, 2006), and with this statement will be followed in this research. Additionally, authors also consider the m-commerce to be the part of e-commerce, and this is quite understandable from the historic point of view (Veijalainen et al, 2006).

In general, analysis of existing publications in the area leads to conclusion that the terms "e-commerce" is slowly replaced with alternative terms, as, for example, "digital marketplace". Digital marketplace is defined in a various manner and contains several dimensions, however, it cannot yet substitute term "e-commerce". The usage of 'e-commerce" reached its peak in 2000 and has been gradually decreasing ever since. This tendency is represented at the Figure 1.

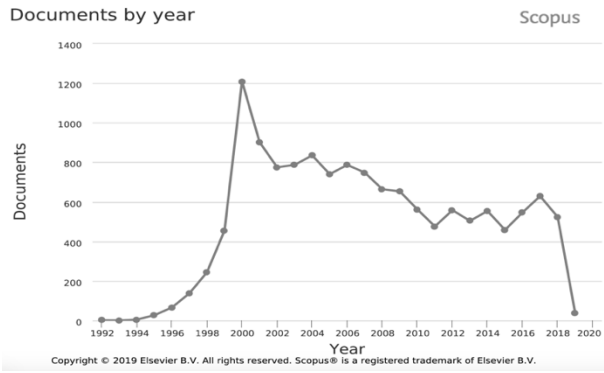

Figure 1. The Document-per-year distribution of the articles with the keyword “electronic commerce”. Source: SCOPUS database

This trend however, does not represent lower interest to the topic, rather, it demonstrates its evolution and transforming nature of the area of studies, whereas researchers acknowledge moving from one type of commercial activity to transformation of the whole marketplace. The m-commerce is currently gaining popularity in terms of academic research and the trend is presented at the Figure 2.

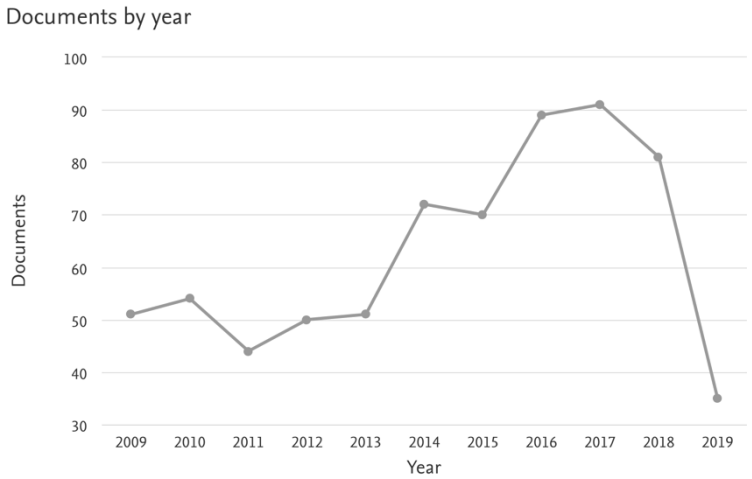

Figure 2. The Document-per-year distribution of the articles with the keyword “mobile commerce”. Source: SCOPUS database

While e-commerce takes place both in business-to-business (B2B) and business-to-consumer (B2C) transactions, in this research the latter is analyzed. While the business environment changes, consumers’ behavior also evolves to comply with the development. New tools of communication require refined competences, new types of knowledge and abilities. In order to understand and react to dynamically changing environment, the term “consumer learning” can be taken into account. The number of the articles with this topic as a keyword have been increasing for the last 10 years. This growth is represented at the Figure 3.

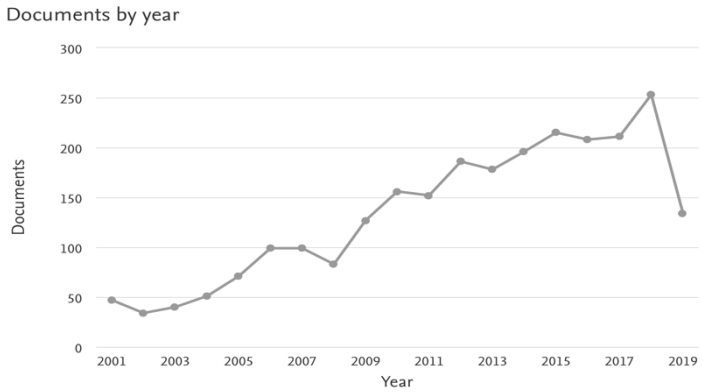

Figure 3. The Document-per-year distribution of the articles with the keyword “consumer learning”. Source: SCOPUS database

Generally, *consumer learning* can be defined as the process by which individuals acquire the purchase and consumption knowledge and experience that they apply to future related behavior (Schiffman, 2008). Earlier discussed economic and cognitive psychology approaches offer the theoretical framework to address the concepts of consumers’ competences, cognitive readiness and motivation to engage in the electronic commerce, which are highly influenced by learning interruptions induced by lack of trust and information asymmetry/unavailability.

There are different approaches to this concept: from the point of view of the cognitive psychology and economic theory. Cognitive psychology offers insights through the theories, which are well-established in sociology and allow recognizing some core patterns of consumer behavior. For example, top journals in the field discuss such topics as motivation and brand attitude (White, 2004; Packard et al, 2013, Sellier et al, 2009, Schwarz, N., 2004, Yoon et al, 2012), consumer learning (de Langhe et al, 2016), cognitive evaluation (Li et al, 2003), learning interruptions (Xia et al, 2002; Sellier et al, 2009), metacognitive experience’s influence (Schwarz, N., 2004), and mindsets (Murphy et al, 2016). Economic theory is more closely related to the contract theory and behavioral economics, particularly bounded rationality (Simon H. A., 1957) in broad topics of decision-making (Duclos, R, 2014, Healey & Hasher, 2009), choice and preferences determination (Dhar & Gorlin, 2013, Riemer & Shavitt, 2011), motivation (Yoon et al, 2009, Baumeister et al, 2008, Cronley et al, 2010); prospect theory in terms of risks and losses assessment (Shavitt, 2018, Gal & Rucker, 2018, Higgins & Liberman, 2018, Leonhardt et al, 2011).

Even though there is a broad literature available, it is majorly fragmented and requires particular attention in terms of mobile commerce for this research.

The research goal of current paper is to analyze consumer learning in regards of the consumers’ competences, cognitive readiness and motivation to engage in the mobile commerce from the points of view of the cognitive psychology and economic theory.

This study is intended to contribute theoretically by reducing the fragmentation of the selected topics by establishing the links between concepts. Evaluation of consumers’ competences, their cognitive readiness and motivation will be developed and derived through the measurable constructs. This approach will require reevaluation of currently existing indices for derivation of the idea on what exactly they are evaluating and how to apply them to the selected constructs.

The practitioners will recognize the underlying problems and peculiarities of utilization of the tools of mobile commerce through the concepts of consumers’ competences, their cognitive readiness and motivation for further optimization of their activities. Therefore, this paper will also provide the practical contribution.

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Increasing Willingness to Participate in Frequency Reward Programs Through Gamification

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Abstract:
This paper examines the effects of gamified frequency reward programs (FRPs) on consumers' willingness to participate in such programs. The results of online survey-based experiment support the notion that gamification may be considered as a valid tool to increase consumers' willingness to participate in FRPs provided that the game nature of FRPs is obvious to consumers. The study shows that communicating a FRP in the form of a story makes it look more like a game than a commercial offer. The positive effect of perceived gamification is achieved through a higher entertainment value of a gamified FRP, which in turn partially derived from a higher reward attractiveness.

Keywords: *Frequency Reward Programs, Gamification, Reward Attractiveness, Entertainment Value, Grocery Retailing*

1. Introduction

Nowadays retailers massively use frequency reward programs (FRPs) to engender customer repeat visits, increased spending and loyalty to the store. FRPs reward customers for higher spending by providing them with special discounts on selected products that are not always relevant and attractive for customers. The ubiquity and similarity of modern FRPs result in their devaluation in the eyes of the consumer and make consumers less responsive to program rewards. To rise to the challenge, marketers attempt "to increase the likelihood of the emergence of gameful experiences by imbuing the service with affordances" (such as badges, points, stories, avatar, character, virtual identity etc.) (Huotari, Hamari, 2017).

Although gamification is a buzzword in a business community, there is still no understanding whether it may improve services to consumers, and through which mechanisms it may motivate desirable consumer behaviors (Hsu, Chen, 2018). Thus, the objective of this paper is to test how gamified FRPs affect consumers' willingness to participate in such programs and examine the underlying psychological processes.

2. Theoretical background and hypotheses development

According to Huotari and Hamari (2017), the gamification is not always carried out through any particular concrete elements alone, and experiences of playing a game and of determining what even is a game are deeply individual. In other words, the use of a game element may lead to a gameful experience for one consumer but not another consumer. This notion brings to the front the concept of perceived gamification which is the individual consumer's subjective perception of the activity as a game.

Perceived gamification has been claimed to positively affect willingness to participate in the activity through heightening its entertainment and economic value (Hsu, Chen, 2018). While the positive effect of gamification on entertainment value is quite obvious, the reasons behind a

higher economic value of a gamified activity are not totally clear, as gamification does not change the reward itself. The possible explanation could be that when the reward (be it a gift of discount) is incorporated into the game context, it gets additional meaning and becomes more attractive to the customer, which in turn drives both entertainment and economic value. The conceptual model that summarizes the above reasoning is presented in the Figure 1.

3. Methodology

3.1. Sample

Study sample was based on an online survey of 212 respondents of 18-55 years old (80% female) who were recruited from the online panel. Respondents are citizens of Moscow and St. Petersburg who are responsible for making grocery shopping in their households.

3.2. Stimulus

A between-subject experimental design with two groups (low vs high gamification) was used. Respondents in the low gamification condition were presented with a description of a fictional FRP that implies that the consumer is given 1 point for each 400 rubles spent in a fictional grocery store, and the collection of 20 points gives the consumer an opportunity to buy an exclusive tea-set with a 88% discount. The high gamification condition was the same with only difference in the FRP communication: there appeared the fictional character (a hedgehog Schtrudel), and customers were asked to help him collect 20 «berries" (instead of points) to prepare for the winter. Afterwards respondents were asked to evaluate the proposed FRP based on a set of parameters and provide general information on their consumption habits. All constructs were rated on 5-point Likert scales.

3.3. Data analysis

A set of t-tests was run first to check the significance of group differences in perceived gamification, reward attractiveness, entertainment value, economic value, and willingness to participate. To test the underlying effects of perceived gamification on willingness to participate, the data were analyzed following a two-step approach. The measurement model was examined first, followed by the structural equations model that resembles the conceptual model (see Figure 1) with control variables (reward relevance, prior experience with FRPs and rule clarity). The measurement and structiral models showed good fit to the data.

4. Empirical results and conclusions

One-tailed t tests showed that the high-gamification condition rated the FRP higher than the low-gamification condition on perceived gamification ($M_{low} = 3.05$, $M_{high} = 3.37$, $t = -2.04$, $p < 0.05$), reward attractiveness ($M_{low} = 3.23$, $M_{high} = 3.58$, $t = -2.08$, $p < 0.05$), entertainment value ($M_{low} = 2.66$, $M_{high} = 3.07$, $t = -1.96$, $p < 0.05$), economic value ($M_{low} = 2.50$, $M_{high} = 2.83$, $t = -1.70$, $p < 0.05$), and willingness to participate ($M_{low} = 2.77$, $M_{high} = 3.14$, $t = -1.73$, $p < 0.05$). There were no statistically significant differences between conditions in reward relevance, prior experience and rule clarity.

The results of structural equation modeling show that perceived gamification increases reward attractiveness ($b = 0.30$, $p < 0.001$) that subsequently positively affects FRP's entertainment ($b = 0.42$, $p < 0.001$) and economic ($b = 0.40$, $p < 0.001$) value. Surprisingly, it is only the entertainment value ($b = 0.81$, $p < 0.001$) that increases consumers' willingness to participate in FRPs, while the effect of economic value on willingness to participate is insignificant ($b = 0.16$, $p > 0.1$).

Consequently, the study results support the notion that gamification may be considered as a valid tool to increase consumers' willingness to participate in FRPs provided that the game nature of FRPs is obvious to consumers (and not to the marketers only). The study shows that communicating a FRP in the form of a story makes it look more like a game than a commercial offer. The positive effect of perceived gamification is achieved through a higher entertainment value of a gamified FRP, which in turn partially derived from a higher reward attractiveness.

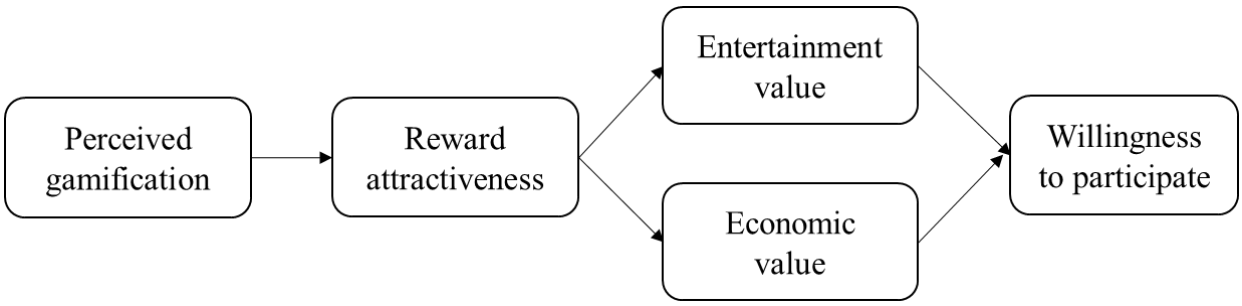

Figure 1. Conceptual model

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AI-Human Cross-Cultural Interaction: Digital Expectations vs Analog Perception

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Abstract:
The article analyses the impact of cross-cultural problem arisen in the dialogue between humans and artificial intelligence (AI) on different spheres of business. Having underestimated the importance of cross-cultural components in human-AI interaction in the beginning, real-life business is currently facing new digital challenges arisen due to the inability of numerous AI systems to process correctly the ethical, moral and other socio-cultural characteristics of the individual. The problem has already attracted serious attention from the governmental bodies of different countries; however, the attempts to find adequate remedies for this situation remain declarative than practical. On the basis of the studies recently performed in several universities (Princeton, Arizona, MIT, etc.), the author identifies several industries with the biggest potential to suffer from the ignorance to such a problem in the near future and presents his opinion about the possible ways to improve human-AI cross-cultural interaction.

Keywords: *Cross-Cultural Management, Artificial Intelligence, Human-Ai Interaction, Communication Traps, International Marketing*

1. Introduction

Today the business community is rather often so carried away by the fascinating prospects of AI that tends to turn a blind eye on numerous contradictions in human-AI interaction, including, among others, cross-cultural misunderstandings frequently ignored even in a traditional dialogue between business people representing different cultures. Putting the technological universality above all, the developers do not seek to delve too deeply into the socio-cultural shades. On the other hand, technological sophistication inevitably results into the complication of communication between the creator (a human) and its creation (AI), and here digital future goes through the filters of 'analog' thinking of both developers various audiences. As a result, the unique technologies of the future turn under even stronger influence of historically established socio-cultural barriers than the humans themselves do.

2. When 'Digitality' Bumps into 'Analogy'

According to a recent study by Princeton University (USA) and the University of Bath (UK), any AI system, along with the information about the properties of the language, inevitably gets a full set of cultural associations and prejudices of its developers [Caliskan, 2017, p. 184]. This idea should not have come as any surprise to the initiators of AI research who attributed to a machine the ability to simulate any feature of intelligence [McCarthy J., Minsky M., Rochester N. и Shannon C. A, 2006, c.12]; nevertheless, modern developers of AI algorithms tend to neglect this approach. At the same time, the norms and values of the target audiences at the other end of the dialogue chain do not necessarily coincide with the cultural specificities of the developers, and, in some cases, seriously contradict them. In the 'traditional' dialogue, such a situation (in most cases) is not an obstacle to productive communication, as the parties, to achieve the desired goals, are ready to ignore the socio-cultural patterns of each other. Unfortunately, AI systems, in their interaction with humans, remain far from any compromises associated with the perceived need to achieve the appropriate result for survival or development.

3. Cross-Cultural Pitfalls are Already Here

Today there are at least two industries in which certain companies have already faced with how the ignorance to cross-cultural issues can turn human-AI interaction into a disaster with subsequent financial and reputational losses. The first one is medicine hwere AI-based chatbots can inform about diagnoses

without considering any cultural sensitivity of the patients [Chakrabotri and Kambhampati, 2017]. Moreover, sometimes the diagnosis can be established on a data corpus based on subjective conclusions about the sociocultural and linguistic characteristics of a person [Fraser et al., 2016]. The other sphere is the auto manufacturing industry, namely the production of unmanned ground vehicles. Here the attempts to match universal AI-based programs with numerous sociocultural peculiarities in road communication in various countries still remain not very fruitful. Furthermore, cross-cultural misunderstandings add new concerns to those trying to find the best solution to the so-called 'trolley problem' (drivers vs pedestrians) with unmanned vehicles (MIT Moral Machine Platform). On the other hand, cultural gaps in AI programs can negatively influence communication not only globally, but also nationally. The numerous accusations of AI-based chatbots (TAY, Alisa, and Siri), crime prevention systems (COMPAS (USA) and HART (UK)), and staff searching engines (Amazon) of racism or gender discrimination have already brought adverse unintended consequences for both developers and owners.

4. Certain Concerns and Uncertain Solutions

The potential growth in the number of areas in which socio-cultural barriers can impede the human-AI dialogue is forcing experts from various fields to look jointly for appropriate remedies. Today, the appeals of certain governments to design AI systems so that their transparency does not allow prejudices from the past to affect their effective functioning (U.S. National Artificial Intelligence R&D Strategic Plan (2017), UK Chamber of Lords (2017)) find understanding and support of the developers expressing a strong desire to reconcile the behavior of AI algorithms with socio-cultural values (AI Asilomar Principles (2003), Partnership on AI (2018)). At the same time, both the governments and the developers are aware that the necessity to consider a colossal number of factors while solving this problem will take rather long time. This, in turn, cannot satisfy the business community that, although clearly understanding the importance of AI solutions, places utmost importance on dynamic development. One of the solutions here can be the activation of the dialogue between business and specialists in cross-cultural communication, semiotics, and culture-oriented linguistics, which will contribute much to speeding up the launch of the AI-based products made with careful consideration to the sociocultural peculiarities of subsequent target audiences.

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Forming of Reasonable Information Consumption Patterns: Evidences from Russia

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Abstract:
Using the concepts of sustainable consumer behavior, information consumption and information overload this paper investigates the process of information consumption with a focus on strategies of coping with information consumption. This exploratory study examines how the different demographic groups of people search and consume information, how they recognize the information overload and what they do to cope with consumption of information. Thus, the purpose of this study can be formulated as to develop the patterns of reasonable consumer behavior regarding to conscious coping with information consumption. During the data processing the basic method of grounded theory was used to reach the "theoretical sensitivity" by technics of coding (Corbin & Strauss, 1990). Using open and axial coding we have identified and grouped key topics which characterized the categories describing the information consumption patterns based on the reasonable content limitation practices. As a result of research three information consumption patterns were identified and described: emerging, established and predominantly entertainment. First two patterns were referred to reasonable information consumption.

Keywords: *Sustainable Consumer Behavior, Reasonable Information Consumption Patterns, Information Overload, Information Overload Coping Strategies, Social Media, Mass Media, Information Assessment*

Introduction

The topic of “sustainable consumer behavior” is becoming increasingly relevant due to the adopted global concept of sustainable development. Previous studies have shown that sustainable consumer behavior can be described not only by its attitude to health, the environment and the material resources used, but also by its information culture (Yuldasheva et al., 2018). This is especially important in the conditions of the formation of the information society and digital transformation. In this regard, we assume that information aspect of consumption is becoming more and more topical and can be the fourth dimension of global sustainable development concept along with the economic, social and ecological aspects of consumption. This exploratory study examines how the different demographic groups of people search and consume information, how they recognize the information overload and what they do to cope with consumption of information.

Theoretical background and Literature overview

The topic of reasonable (sustainable) information consumption is based on two not crossed in the academic research directions: sustainable consumption and information consumption. We had to refer to a large number of interdisciplinary literary sources. We started with the general theory of communication, namely "surface consumption of information". Analysis of the general theory of information allowed to identify the concepts of "information glut" (Koski, 2001) and "information inflation" (Henry, 1973) as part of our current research. The basic theory of “information society” and cognitive psychology connect our topic with the concept of “information overload”. Modern marketing theory tells that the topic of "consciousness", "reasonableness" in the consumption of information is associated with the

theory of "value co-creation" and the phenomenon of “prosumers” (Prahalad & Ramaswamy, 2000). Of course, reasonable information consumption is largely influenced by the trend of rapidly developing digitalization of all spheres of society and the related problem of “information security” of personal data. The theory of sustainable consumer behavior as an element of the global concept of sustainable development is integrating all of the above.

Research Methodology

This research aims on identification the key issues regarding formation of new information consumption patterns from the perspective of sustainable behavior. We try to find out the key directions of research of sustainable consumer behavior in terms of conscious limitation of information consumption and to define the main elements of information consumption patterns to describe the differences between old and new patterns in whole as well as between patterns due to demographic features.

We used the qualitative method (in-depth interviews) on the first stage of research to create a concept of reasonable consumption of information and its key points like premises and trends, consumer’s motives, characteristics of the consumption process, strategies to limit information consumption and avoid information overload, and new instruments for management of personalized consumption of information.

Results

The current trends in information consumption in Russia, the key elements of the information consumption patterns, included information overload coping strategies were identified in the qualitative data processing of in-depth interviews.

Emerging information consumption pattern describes the behavior of young participants, 25 and under years old. They are only recognizing and formulating their life goals, being as a rule university students or schoolchildren. Their information handling practices, including the rejection of unhelpful information are only being formed. Within this group there are 2 subgroups which recognize and not recognize information overload. The first subgroup – dominantly part-time employed students - are aware of information overload and use information overload coping strategies. Second subgroup – dominantly unemployed students and schoolchildren - are not yet recognize information overload. This type of consumer is open to any information and any source, he does not have a completed higher education, his life is calm enough, he has plenty of free time. These consumers basically do not plan the information consumption, do not limit themselves by time and sources. They consume a huge volume of entertainment information, “can sit on social media all weekends”, do not use paid content, do not consider it necessary to limit information consumption.

Established information consumption pattern describes the behavior of mature participants (over 26 years old, employed), with established practices and information overload handling strategies. This type of consumer has a higher or incomplete higher education, full time employed, as well as the need to receive regularly relevant information directly related to professional activities or personal interests. The main goals in information search are personal or professional development and growth, aesthetic pleasure (watching movies, listening to music, podcasts or reading books), leisure, traveling. This group consumes paid content: has a subscription to iTunes, music Vkontakte, Ivi, reads books on LitRes, etc. Advanced (conscious) information consumers do not trust mass media and use proven alternative information sources (bloggers with good reputation, relevant internet portals). This group recognizes information overload and uses different types of information overload coping strategies. The key aim of information overload handling is to get free time for rest, household chores, additional training and conscious entertainment.

These two patterns can be attributed to the models of **reasonable information consumption**. It is these patterns that describe a conscious attitude towards information

consumption, which implies the use of strategies to cope with information overload. We believe that these patterns can be considered as part of sustainable consumer behavior.

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Experience Marketing in Banking

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Abstract:
Digitalization influence was significant in banking and a lot of digital banking services appeared. Use of banking cards changed the customer behavior in general and made consumers interaction with banks more close and enhanced it's importance. As the market of banking cards is now saturated, banks are trying to use different opportunities in order to keep the existing customers. Improving the banking service quality can be considered to be an important principle of customer loyalty in banking sphere, based on understanding the customer experience using the instrument of customer journey maps. Experience marketing is becoming a popular and important tool to trace the possible changes and find new service opportunities for the companies, which takes into account both rational reasons of customer behavior and emotional ones. Empirical research of different groups of customers on the market of banking cards, considering their economic behaviour and degree of their involvement in bank transactions, show an ongoing transformation and a need for further improvement of banking services and client's convenience.

Keywords: *Customer Experience, Customer Behavior, Loyalty, Payment (Cash) Cards, Experience Marketing, Qualitative Research*

Introduction

In recent years the efficiency of use of payment cards increases. With a moderate growth of issue of cards, operations with use of payment cards grew by quantity more than by 36% and for 23% on volume (Federal statistics. 2019).

The maximum growth of demand for cash cards was in 2011 - 2013, and in 2014 – 2018 market showed lower growth with annual increase of 4-7%. It is important to mention the influence of the Federal Law about implementation of "MIR" payment system and it's requirement of using Russian national payment system by all the employees of the budgetary sphere that resulted in a higher growth of number of cards owned in 2017 -2018 comparing to the normal growth rate.

All the data above show the market saturation by the existing offer that forces banks to introduce new functionality and also to promote the banking services more actively, offering new ones better adopted to customer needs and even foreseeing them.

Literature review

Traditional customer theory took into account only the rational part of the decision-making process based on the functional attributes of the product/service (Schmitt, 2000). The era when this approach was developed did not imply the development of information technology, branding and communication transformations to date. The idea of development of marketing science and bringing marketing experience to the level of a tool of the future was continued by defining experience marketing as enhancing the essence of a product through a set of tangible, physical, interactive experiences.

Companies must incorporate customer experience into their business models. Today, industry leaders often follow a strategy of customer experience in pursuit of competitive advantage and value creation (Carbon, 2004, p. 39).

For companies it is relevant to use thematic signals to activate the customer experience and enhance personal engagement with customers (Pine and Gilmore, 1998). Strengthening of interaction will consist of stimulation of concentration, interest and pleasure of the consumer. In

addition, motivation is a key learning tool - tips guide experience and responses provide a common reaction to tips. These reactions are further enhanced by the repetition of responses (Poulsson and Kale, 2004). With this approach, companies should have all the necessary means to attract their target group, raising the level of standards and consistently creating value (Valencia and Westberg, 2005).

Research methodology

To study the main stages of customer behaviour on the payment cards market qualitative research of customers, involved in bank transaction as the final users was held (age of 18 – 75). Three main categories of users were interviewed depending on the degree of their involvement in economic turnover and sources of their income: economically active population (aged from 23 up to 60 years) with both employees and self employed people; students who get the income from the state in the form of grants as well as support from their parents; pensioners, who get the pension from the state.

Focus group as a method of a research of student's audience and economically active population was chosen. Four focus groups with the number of participants of 7-9 people were carried out.

6 in-depth interviews with representatives of the self-employed people were conducted. Similar need was defined by high employment and lack of free time of this category of respondents.

As a method of a research of pensioners in-depth interview on previously prepared scenario was chosen. And six in-depth interviews were held. It is predetermined by essential differences in behavior of consumers of this category.

Results of empirical study

Consumers marked out the following most important characteristics of cash cards: a possibility of interest-free removal of money in wide network of ATMs and input of money to the account, convenient online banking and a possibility of carrying out operations online without visit to office, contactless payments, the minimum cost of service, accumulation of percent for the amount accumulated on the card.

Consumers from the group of students were very likely to use the following opportunities, provided by a number of banks: payment of transport journey, receiving discounts at cinema, free design of additional cards.

Economically active population were mostly using the banking cards highly recommended by the employer and some additional credit cards and were interested in those that can be used abroad while travelling.

Use of banking cards by pensioners is limited to some simple operations but is increasing due to change of generations.

The research showed banking cards provide satisfaction by all the researched groups of customers, who are still open for new offers and would be glad to find the one, that fits to their present and further needs in best way.

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Open Collaborative Innovations as an Antecedent for Adoption of Smart City Solutions

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Abstract:
The paper investigates the issue of involving consumers to smart city solutions through open collaborative innovation. Participation in such initiatives requires growth organizational mindset or changing a fixed one due to the fact that companies will need to consider the option of changing their organizational culture for making open innovation happen. The research unveils the correlation between organizational mindset, capabilities to participate in open collaborative innovation initiatives and organizational culture as endogenous and exogenous factors for collaborative innovation initiatives. The paper uses an incorporated theory applicable to the topic open collaborative innovations in smart cities.

Keywords: *Collaborative Innovations, Organizational Mindset, Cultural Distance,Smart City, Smart City Solutions, Consumer Adoption*

1. Introduction

The chapter introduces the notion of smart city solutions and the ways to overcome consumers reluctance through collaborative innovations. Innovations offered by smart cities are mostly radical, which cause consumer reluctance to adopt them. This phenomenon is triggered by many reasons, including high degree to which consumers desire control (Faraji-Rad et al., 2017) It may be addressed by collaborative innovations (Greer & Lei, 2012). The topic of collaborative innovation has attracted close attention of researchers, who discuss the trend, peculiarities, principles, pros and cons (Payne, 2008; Ojanen, Hallikas, 2009; Baldwin, von Hippel, 2011; Greer, Lei, 2012; Levine et al., 2014; Chua et al., 2015; Nagle, 2018; Lee et al., 2018). The phenomenon of open collaborative innovation (Levine et al., 2014, p. 1416) is paving the way towards dominance in the collaborative innovation field, however, understudied.

1.1 Conventional collaborative innovation

The sub-chapter introduces the issue of misalignment of companies/ consumers who co-create which hinders their successful collaboration (Chua et al., 2015, p. 204). However, in the context of smart city digitization such cultural distance is fading away.

1.2 Open collaborative innovation

The sub-chapter discusses open collaborative innovation, its peculiarities and changes they imply, such as eliminating organisation hierarchy per se.

Based on the given evidence the following questions will be addressed:

What is the correlation between organisational mindset, organizational culture and participation in open collaborative innovations?

2. Mindset and culture

The chapter outlines the notion of mindset and culture and brings out the features of the both in details.

2.1 Mindset

The subchapter articulates a necessity for a growth mindset or its modification in such for open collaborative innovation and highlights the institutional factors influencing the process of change. It identifies that the issue of organizational culture changes followed by the transformation of organizational mindset is a critical one.

2.2 Culture

The subchapter discusses the influence of culture of organizations on the radical product innovation development process. Organizational characteristics including mindset and culture

are correlated with senior leadership (Slater et al., 2014). To investigate the issue of organizational culture, the research explores the issue of senior leadership as well. The change of the mindset and culture can be regarded as the radical innovation which will require active participation of senior leaders.

The chapter reveals the complexity of the open collaborative innovation topic which cannot be explained within one theory, so integrated theory will be offered (Greer and Lei, 2012).

3. Data and sampling

Interviews with twenty five participants, survey of two hundred participants.

4. Empirical results and conclusions

The findings will reflect the results based on the qualitative and quantitative analyses and highlight the importance of growth mindset and through cultural modification in companies for collaborative innovation for staying competitive in the framework of smart cities and giving the freeway to their consumers to participate and seamlessly adopt the collaborative innovation results.

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Do the Same Customer Orientation Principles Apply to B2B Firms?

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Abstract:
This paper explores the specifics of B2B firms' CO on the example of Russia's emerging market. The empirical survey of 272 and interviews with 63 B2B firms represents the platform for applying well-established CO measurement tools as an integrated complex measure. The results of data analysis indicate a critically important aspect of CO, which helps to differentiate the customer oriented firms from those with "declared" CO. The results of the qualitative part of the study provide an in-depth perspective into the link between the "location" of CO-related business processes or their stages and the perception of the CO concept.

Keywords: *Customer Orientation, Russia, Emerging Markets, Quantitative Study, Exploratory Study, Cluster Analysis*

While the economic effect of customer orientation (CO) implementation has been studied by researchers since the 1990s [Narver and Slater, 1990; Ruekert, 1992; Deshpande, Farley, and Webster, 1993; Jacob, 2006; Ellis, 2006], the nature of CO is still a source of ongoing discussion. B2B literature on CO predominantly focuses on comparisons between developed and emerging markets [Singh, Koshy, 2011; Adhikari, Gill, 2011], manufacturing and services firms [Agarwal et al., 2003; Kirca et al., 2005; Sin et al., 2005; Wang, Zhao, Voss, 2016] rather than on the differences on CO between B2C and B2B markets. However, an in-depth analysis of the directions of CO articles, conducted as a part of this study, shows that there are some specifics of studying CO and MO in the B2B market [Cooley, Mentzer, Cooper, 2010; Kaynak , Kara (2004); Farley, Deshpandé (2006); Chung et al. (2011); Smirnova et al. (2011); Sarkar, Mishra (2016)]. First, a separate line in the B2B CO research is identifying and studying CO of an individual sales person even before the CO concept has been widely tested at the firm-level [Saxe, Weitz, 1982; Singh, Koshy, 2011; Herhausen, De Luca, Weibel, 2017]. Secondly, B2B studies prioritize value creation [Viardot, 2017] and consider CO as a platform for customer value creation [O'Cass, Ngo, 2012]. Thirdly, CO is considered within the relationship management framework [Bommaraju et. al., 2019] as a tool for developing relationships with customers [Guo, Wang, 2015].

Methodology

In investigating the conceptual and operational nature of CO using the example of Russia, several measurement tools are usually used: MKTOR [Narver, Slater, 1990], 9-item scale by Deshpande, Farley, and Webster [1993], proactive and reactive MO [Narver, Slater, MacLachlan, 2004]. The adoption procedure included potentially diverse items from existing scales, which might provide insights into the dimensionality and the content of the construct in the B2B context. The resulting scale includes items from MKTOR [Narver, Slater, 1990]; proactive and reactive market orientation and 9-item Deshpande, Farley, and Webster [1993, resulting in overall 24 indicators within a combined scale. The empirical data for the study was collected in 2015 in the form of online survey. The sample consisted of 46,3% - B2B firms and 53,7% firms operating on both B2B and B2C markets. 25,4% of sample firms are product-oriented firms, 45,6% represent services firms; 29% produce both goods and services. Most of respondents represented firms with Russian capital (74,3%), foreign capital (11%) and joint capital (14,7%).

Findings

The first step of data analysis was aimed to identify the factor structure and underlyding CO dimensions. Based on the revealed factorial structure of CO construct an additional cluster analysis was conducted, leading to the identification of five clusters with different focuses on CO elements.

Cluster I ("Truly customer oriented firms", 31%) is characterized by the highest levels of all the CO scale indicators (4-5 from 5). Cluster II ("Declarers", 21% of sample firms) includes firms with a so called "declared" CO. Cluster III ("Low customer oriented", 11%) consists of firms, where CO is very low. These firms are oriented towards existing products and services, aiming to protect their market niche. Cluster IV ("Strivers", 26%) consists of firms developing a customer oriented approach, trying to achieve a competitive angle through it. Finally, cluster V ("CO newcomers", 11%) mostly includes firms with high customer commitment, but currently lacking a CO. They evaluate their level of CO as low on the core indicators, but provide high-level scores on indicators of value for the customer (e.g. "he customer's interest should always come first, ahead of the owners").

The identified CO subdimensions can understand the way the B2B sample firms reflect the CO concept, by prioritizing its angles – e.g. focus on measuring customer satisfaction or being inconsistently applying CO, thus "declaring" CO, not implementing it in an integrated way.

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Is there a Way for a Win-win Approach? The Case of Knowledge-oriented Consumer Digital Performance Research

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Abstract:
Active development of the digital economy influences all market agents, including consumers. Moreover, consumers become a driving force behind adoption of technology in their economic activities. They learn through this adoption process, developing both objective and subjective knowledge components. As an outcome, consumers' satisfaction, trust, value and overall perception of a win-win nature of economic interaction are affected, influencing consumer performance, e.g. causing innate dissatisfaction or stimulating inferences of manipulative intent. Current conceptual paper addresses and critically revises existing research on measuring consumer digital activities, decomposing existing indices and screening them for consumer knowledge components. Most of the indices are biased towards objective consumer knowledge, while the large body of consumer research on the relevance of subjective components, associated, for example, with the overall marketplace perception, persuasion knowledge and skepticism are omitted and thus represent potential contribution to strengthening our understanding of the knowledge perspective of consumer digital performance.

Keywords: *Consumer Knowledge, Digital Marketplace, Consumer Performance, Digital Competences, Emerging Markets, Russia, Win-Win*

The development of the digital economy requires all market agents, including those on the demand side and the supply side, to change their behavior. However, it is consumers who make an ultimate decision whether to adopt and integrate technologies into their economic activities or leave them unattended. The willingness of consumers to accept and actively use digital technologies is associated with the development of consumer resources. These resources are based upon prior consumer experiences, accumulated knowledge and abilities, as well as prevailing motivation and behavioral patterns. These internal motivational, cognitive and competence-based resources are considered the three-composite set of drivers which help consumers exhibit more confident and engaged economic behavior.

The issues of consumer engagement into the digital marketplace are being raised by researchers in various areas – information and communication technology studies, consumer research, and finally cognitive psychology. The various studies reflect on the consequences of the digital overload and technological sophistication for consumer wellbeing. The fundamental pillar of consumer wellbeing under the circumstances of digital transformation is a possibility to adjust to undergoing changes and realize consumption-related tasks in the new digital environment efficiently and effectively. This gives a rise to the notion of consumer performance, which is the quality to fulfil the consumer tasks.

Consumer performance can be defined as an integrated outcome of consumer activities in a marketplace, including satisfaction, trust, value, win-win approach in market interactions while being subject of consumption-related activities. The positive performance is associated with positive outcomes, while in case of market inefficiencies negative outcomes might include low satisfaction (e.g. innate dissatisfaction (Bearden et al., 2001)), distrust, resulting in skepticism and inferences of manipulative intent, perception of loss instead of gaining value, doubts in obtained results of market interaction. Analogous to overall consumer performance **consumer digital performance** assumes regular consumer involvement in interaction in a digital marketplace.

Current conceptual study aims to integrate existing models in the area of consumer performance research and consumer digital competences research in order to suggest a framework with attention to various types of consumer knowledge (e.g. digital literacy, marketing literacy, persuasion knowledge, etc.). The given framework is thought to provide a platform for integration of the streams of research which are currently to large extent isolated and thus provide a biased perspective on consumer behavior in the digital marketplace and its performance – assessed both through the lenses of a market/economy and consumer's own interests and motivation. An absence of such framework can lead to the situation whereas consumers are being increasingly motivated to be involved in the consumption and interaction in the digital marketplace, however do not obtain the required knowledge and skills, as well as do not perceive themselves as being able to cope with potential risks, leading to potential consumer knowledge discrimination (Pillai, Brusco, Goldsmith, & Hofacker, 2015). This approach is meant to represent a holistic perspective on the consumer experience and implications for the market actors' strategies, reflecting on the outcomes for all the involved sides and higher consumer engagement in digital marketplace (Dessart, Veloutsou and Morgan-Thomas, 2016).

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Public Procurement and Public-Private Partnership in Developed and Developing Countries

On A New Approach to Collusion Identification in Public Procurement

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Abstract:
In softening price competition at the tendering stage, collusive suppliers may jeopardize the effectiveness and efficiency of a public procurement procedure. The institutional environment of the Russian Federation is characterized by a relatively high corruption level, a medium level of democracy, permitting mass-media to reflect corruption cases, and a low level of regulatory impact assessment. This puts significant pressure on the authorities and encourages them to apply exceptionally rigid anti-corruption methods. From the academic perspective, this rises several problems concerning identification and analysis of stability of collusion schemes both on the *ex ante* and the *ex post* basis. The current research addressed these issues.

Keywords: *Public Procurement; Oligopoly Market; Collusions; Corruption: Auctions: Mala Fide Behavior; Logistic Regression*

5. Introduction

In softening price competition at the tendering stage, collusive suppliers may jeopardize the effectiveness and efficiency of a public procurement procedure. The public procurement market is a special case of the market, in which the public authorities and other public bodies act as buyers.

Considering an arbitrary market, researchers, as a rule, accept the hypothesis that the combined profits of the entire set of firms in an industry are is maximized when they act together as a monopolist. Since the costs of coordination under the conditions of perfect and monopolistic competition are obviously prohibitively high, and the monopoly excludes the possibility of collusion, the study of the latter is connected with modeling of producers' behavior in the oligopolistic markets.

Collusions of oligopolists and participants of public procurement auctions, have a number of common properties, which makes it possible to expect of the applicability the results of modeling of the processes occurring in the oligopolistic markets in the study of public procurement ones, as well as significant differences that impede this. Moreover, as it will be shown below, the above-mentioned differences, generally speaking, have certain country specifics.

6. Theoretical framework, research questions, and literature review

6.1. The problem of collusion type identification

The institutional environment of the Russian Federation is characterized by a relatively high corruption level, a medium level of democracy, permitting mass-media to reflect corruption cases, and a low level of regulatory impact assessment. It is the mass-media reflection of corruption cases that creates constant pressure on the authorities and encourages them to apply exceptionally rigid anti-corruption methods, which under the conditions of easy suppliers' access

to the public procurement market and a weak regulatory impact assessment create some risks for contracting authorities, so the honest part of them restricts competition in tenders to avoid the above-mentioned risks whilst the other part does it for bribes. In turn, the *mala fide* suppliers try to avoid competition by the means of collusive behavior. Thus, the following research question arises.

RQ1: how to separate different corruption cases from collusion ones to identify the reasons of price competition softening?

6.2. The problem of *ex ante* identification of collusion organization and stability

Among the above-mentioned rigid anti-corruption methods the main is overuse of the price auctions in a great extent, sometimes, instead other procurement methods that gives a lot of opportunities to decrease price discounts by means collusive as well corrupt behavior. Thus, the problem of collusion is of great challenge for the corresponding government structures.

Measures of regulators to combat collusion among sellers can be divided into *ex ante* and *ex post* counteraction. The *ex ante* counteraction is aimed at creating incentives for the *bona fide* behavior of the sellers and developing the design of procurement procedures that impede the implementation of the collusion. Thus, for academic research, the following questions arises here:

RQ2: how to a priori identify organization and stability of collusions in price auctions with minimal restrictions on the quality of the product/service?

Considerable attention in the academic literature is devoted to studying of this question in different types of auction procedures. For example, different schemes of collusion and their stability are studied in ([Pacini, 2006]; [Albano, 2006]; [Ballesteros-Pérez et al., 2015]). A significant contribution to the question was made in ([McAfee, McMillan, 1992]; [Resendorfer, 2000]; [Sonin, Lambert-Mogiliansky, 2006]).

6.3. The problem of *ex post* identification of collusion organization and stability

The *ex post* counteraction applies information about the suppliers' behavior in the procurement process and its results to identify the *bona fides* of the participants and their possible punishment. To this end, information from databases of official bodies (i.e., the Russian Federal Antimonopoly Service, FAS) can be efficiently used. In the context of our research, this poses the following question:

RQ3: can and how the information on a procurement procedure be used to empirically estimate the probability of collusion in the procurement procedure?

Empirical models of collusion identification, in particular, were developed in ([Porter, Zona, 1993]; [Resendorfer, 2000]) which used statistical inference to identify the difference in behavior of members and non-members of a collusion scheme. A Bayesian approach to this problem was applied in [Bajari, Ye, 2003]. Baldwin et. al. (1997) applied econometric models to identify collusions.

7. Experiment design

In the paper, we:

- build an analytic model that identifies variables (price discount, number of selected bidders and so on) which values is signaling of suppliers' collusive behavior;

- select some cases in that the FAS has identified the collusion and for each of them fix the values of above-mentioned variables;
- select some cases in that according the constructed model there were no collusion;
- use the selected data to connect the probability of collusive behavior with independent variables by means logistic regression;
- apply the constructed logit-model to identify suspicion procurement cases.

8. Conclusions

The constructed analytic model is based on a modified "Princpal-Agent" model and the corresponding typology of corruption models to separate cases of vertical collusion from horizontal one. The revelation of opportunities for collusive behavior stems from legal provisions and gives us some findings which can be used in the framework of *ex ante* approach to combat collusion among suppliers.

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The Use of Unified Procurement System zakupki.gov.ru for the Pricing of Air Ambulance Monopoly Services – Drawbacks and Risks

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Abstract:
This paper investigates the implementation of a government decree, which establishes a legal background for the monopolistic pricing of a state-owned company services on the emerging market of air ambulance services in Russia. Being based on firsthand empirical data the research unveils the pitfalls and shortcomings of the Russian unified procurement system zakupki.gov.ru (UPS) both in terms of its design and use. Even though the UPS is one of the most advanced systems in terms of the scope of the data it provides and the declared transparency, being a part of larger contractual system of public procurements, the UPS creates space for distortion and manipulation of data that characterizes the transactions between customers and providers. The latter concerns incomplete and untimely upload of primary documents, vague description of the procurement object, etc. In the construction when the UPS used as a primary source for pricing monopoly services, this may create risks of fraud and consequently - excessive spending of public funds. The empirical sample consists of 3257 entries in the database, which concern air ambulance services throughout Russia. The sample has been collected in the UPS within 2 months of 2019.

Keywords: *Unified Procurement System Zakupki.Gov.Ru, Monopoly, State-Owned Enterprise, Air Ambulance Aviation Services, Russian Federation*

Background

Russia pursues reform of the economic model of the market of air ambulance services. Until now, this market has operated through spontaneous self-organization with the participation of a large number of independent suppliers: squadrons, aviation clubs, private companies and individuals (the typology may be clarified according to our database). The government of the Russian Federation introduced a new procedure – the implementation of air ambulance aviation services is transferred to a single supplier.

For the purpose of an orderly justification of the pricing base of this supplier, the Resolution introduces a special calculation method, which, according to its original plan, involves setting the prices of air ambulance aviation services on the basis of determining the weighted average price of actually implemented market contracts. The unified information system of public procurement serves as an information platform for the calculations. UPS is an information online resource designed for integrated information and analytical support of economic entities of the market, interested producers (suppliers, contractors, performers) of products and services and wide in the procurement of goods, works and services in accordance with the Federal law № 44-FZ. It can be noted in this regard that the economic market construct formed in this way is the most advanced in the world. Only in Russia, in fact, it is possible to obtain complete information about all contract transactions carried out on the market in real time.

Frame of reference

The introduction of the UPS mechanism in the field of public procurement of the Russian Federation in 2016 is, of course, a progressive step. All the basic fundamental microeconomic provisions of the market model proceed from the fact that the behavior of its agents is based on the principle of their possession of all the information necessary for decision-making. This theoretical aspect of economic science has recently received high attention (see for example, the Nobel Prize for 1999, 2001). This factor provides an opportunity to achieve efficiency according to Pareto principle, which in our case is expressed primarily in ensuring the efficiency of budget spending in the implementation of procurement procedures.

Findings

The experience of using this system in practice while solving specific analytical problems has revealed a number of features and shortcomings that significantly reduce the effect it produces. This conclusion can be illustrated by the results and the progress of the analytical project of the price situation in the public procurement of air ambulance aviation services, performed by the authors in early 2019.

The complete information about the concluded and executed contracts in terms of air ambulance aviation services for the period from 02.2018 to 03.2019 was collected. The working database of the project for this period included 3257 records. The volume of "ore" - the initial contracts that had to be processed to obtain such a sample was 2-3 times greater. This number characterizes the volume of requests which the project has loaded the UPS. To the credit of the system, it should be noted that it coped with such a flow of transactions quite satisfactorily (the information was collected in large portions at a time).

Conclusions

We generalize all the identified problematic aspects of the organization of the information space of the UPS:

- Insufficient standardization and unification of ways to fill in the details of the database of UPS
- Incomplete and incorrect filling of prescribed (required)\ set details a database of UPS
- Embryonic stage of formation of the catalog ... KTRU as one of the key selective mechanisms of formation of the target sample data.
- The absence of unambiguous rules for the codification of procurement objects, in particular, and the low level of discipline and correctness of the use of other classifiers in general.
- There is a complete lack of standards in the presentation and placement of copies of primary contract documents.
- Lack of system mechanisms and structures of the UPS database that would unify the presentation of individual stages of contract performance during its working life cycle.
- Permanent retrospective modification of data. This leads to the fact that you can count on a stable database only for the information of the past periods of a year ago.

Some of the drawbacks noted are due to the actions of the users of the system, but their very possibility, it should be assumed, is due to the lack of necessary solutions in the UPS "protection

from the fool." Some details of the architecture are simply not implemented in the system, so there is simply no possibility to support the corresponding function. And the last point should be considered as the main defect of the present device of UPS.

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How to Best Procure Innovation: the Case of the EU

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Abstract:
The paper investigates the use and impact of the tools provided by EU legislation in the procurement of innovation. The issue is of current interest, due to the fact that recent data are available in the Innovation Procurement Policy Framework Benchmarking (2018) and the re-examination of the regulatory frame of innovation public contracts is part of the "Public Procurement Package" which has been adopted by the European Commission on 3.10.2017, as a basis for further discussion and interventions. Innovation has been placed at the heart of the European strategic policy EUROPE 2020 for smart, sustainable and inclusive growth, since it may address efficiently important challenges, in various important sectors, such as the health sector, climate change, energy, transportation, environmental protection, water management, waste management etc, by providing solutions. The paper outlines the reasons why the traditional public procurement procedures (open or restricted procedures) are not suitable for procuring innovation. The paper further outlines the tools for Public Procurement of Innovation provided in the EU legislation, namely (a) the Pre-Commercial Procurement (PCP), (b) the Public Procurement of Innovative solutions (PPI) and (c) Innovation Partnership. The paper provides a comparative assessment of their advantages and disadvantages, in order to suggest the best procedure to be used according to the specific features of each case. The paper presents feedback from Greek Contracting Authorities which participated in recent EU Projects, critically assesses the existing tools of public procurement of Innovation and provides suggestions for their improvement.

Keywords: *Innovation, Public Procurement, Pre-Commercial Procurement, Innovation Partnership*

1. Introduction

In case where Public Buyers intend to satisfy a certain need but are unable to define the specific solution, or may define the specific solution, which is not provided in the market, or may define the specific solution, which is provided in the market, though in very small quantities, or the solution currently applied is not satisfactory / is expensive, have to procure Innovation, i.e. any procurement that has one or both of the following aspects: (a) buying the process of innovation (Research and Development services) with (partial) outcome and / or (b) buying the outcomes of innovation. Procurement of innovation is driven by the demand of public customers and targets the development of concrete solutions to meet these needs. It is multiply beneficial: it improves the efficiency and quality of public services contributes to the achievement of best value for public spending and offers additional financial, environmental and social benefits in terms of creativity, translation of new ideas into innovative products and services; therefore it promotes sustainable economic growth. Procurement of innovation has not found yet a large scale acceptance across Europe, due to lack of incentives, problems of awareness, knowledge, experience and capabilities related to new product and market solutions, which are often difficult to trust due to the element of "novelty" or "unknown"; Contracting Authorities have an inherent risk aversion attitude when spending public funding and usually focus on short-term satisfaction of their needs rather than the pursuit of long-term benefits. Additionally, the market is not always keen in developing innovation, due to the high cost of research, the amount of time usually needed for the development of an innovative solution, the uncertain outcome and the uncertainty as per the buyers' needs. Therefore, businesses, especially SMEs, are unable or deterred to invest often large sums with an uncertain outcome in terms of profit.

For addressing these issues and further promoting innovation, the EU offers various motives, such as funding, tax exemptions, simplification of procedures. Due to the many benefits of innovation and its wide–range potential application, it has been decided for public authorities to make the best strategic use of public procurement to encourage innovation[5]. The creation of a sizeable market for innovation has been considered to be the most effective means for achieving large-scale innovation. Since 2007[6], the EU provides the procurement models of PCP and PPI.

2. Public Procurement of Innovation and the traditional public procurement procedures

Classic public procurement procedures, (open and restricted procedure), are based on a short-term assessment of procurement needs, have rigid deadlines for the conclusion of the contract and the acquisition of products and services and a focus on low cost. Public procurement of innovation usually requires an initial investment which pays-off in the long-term, resulting in the improvement of the quality of public services. Specific tolls for Public Procurement of Innovation have been created (Pre-Commercial Procurement, Public Procurement of Innovative Solutions and Innovation Partnership). The paper presents each one, describes the respective procedures and presents their benefits.

3. Comparison of the new tools for Public Procurement of Innovation

The table below describes schematically the best procedure to be launched depending on the circumstances:

<table>
<tr><td colspan="4">SUFFICIENT KNOWLEDGE OF THE MARKET TO DEFINE REQUIREMENTS OF END-SOLUTIONS?</td></tr>
<tr><td colspan="2">YES</td><td colspan="2">NO</td></tr>
<tr><td colspan="2"></td><td colspan="2">Preliminary market consultation</td></tr>
<tr><td colspan="4">NEED OF R&D SERVICES PRIOR TO PROCUREMENT?</td></tr>
<tr><td colspan="2">YES</td><td colspan="2">NO</td></tr>
<tr><td colspan="2">Do you wish to acquire innovative products or services on a commercial scale as part of the same procedure?</td><td colspan="2">Can a specification of the end products/services to-be-procured be developed?</td></tr>
<tr><td>YES</td><td>NO</td><td>YES</td><td>NO</td></tr>
<tr><td>Innovation Partnership</td><td>Pre-commercial procurement</td><td>Competitive procedure with negotiation</td><td>Competitive dialogue</td></tr>
<tr><td colspan="4">LEVEL OF COMPETITION OR TIME/RESOURCES INADEQUATE FOR ABOVE PROCEDURES?

Consider Joint procurement or, in exceptional cases only, derogation from the Directives</td></tr>
</table>

3.1 Comparison and assessment of the PCP and PPI procedures

The two procedures develop a complementary function: PCP procedures concern the R&D phase, before the commercialization of the products / services developed in large quantities, while PPI procedures are related to the commercialization of the products / services which are

[5] recital 47 of the 2014/24/EU Directive

[6] EU Commission Communication of 14 December 2007 on “Pre-commercial Procurement: Driving innovation to ensure sustainable high quality public services in Europe”

the outcome of the PCP procedures. The two procedures are clearly distinct. PPI procedures are best suitable for cases where the innovative solution is already provided in the market, though in non-commercial quantities; by the use of such procedures Contracting Authorities advertise their intention to buy the required innovative products / services in large quantities and encourage economic operators to invest financial and other resources in order to render final products / services suitable for commercialization, as well as to satisfy the needs of the Contracting Authorities; ultimately, PPI procedures achieve a balance of the cost / benefit ratio.

4. Recent case study in Greece

In Innovation procurement Policy Framework Benchmarking (2018) Greece is a modest performer, ranked 15/30, achieving a score of 26,9% out of the European average of 27,4 %[7]. The Projects presented and respective feedback refer to the participation of the Municipality of Lamia in the FABULOS Project[8] (ongoing) and the participation of the Center for Security Studies (KEMEA)[9] in the Projects EWISA (recently concluded) and SAYSO (Standardization of situational Awareness sYstems to Strengthen Operations in civil protection).

4.1 Assessment and suggestions for future improvements derived from their feedback:

The feedback is overall positive: the Projected resulted in an improved and effective cooperation among the Buyers and in an active interaction with the Industry. By using the PCP procedure, Buyers acquired thorough knowledge and expertise in the performance of the procurement of R&D services, which have been procured and developed in a competitive environment and evaluated under operational standards. However, the PCP procedures conducted highlighted the need for active support of the Buyers at national level and the encouragement of the cooperation between Buyers at national and EU level. Last, further interaction with the Industry is required.

5. Conclusions

The paper concludes that existing tools are suitable for Innovation Procurement, is applied properly. The action to be taken has to focus on a change in the mentality and attitude of management of a public contract, by reversing the course: from award to design. The experience of Greek CAs from the recent Projects presented shows that suitable procedures already exist. Focus has to turn on the development of a comprehensive strategy of Innovation Public Procurement. Innovation as part of a policy, requires the development, mainly, of the following, most importantly at national level: Building capacity, by founding competence centres; training people; organizing workshops; promoting cooperative procurement; securing additional funding; setting up a central website; drafting of good practices, case examples, easily accessible guidance and handbooks, template tender documents; organizing networking activities; coordinating procurements at national level. Attracting Innovators, by reducing administrative burden (e-procurement solutions; adjusting selection criteria; improving standards, open data, open interfaces, open source; using lots; introducing SME-friendly payment schemes. Mobilizing Innovation Brokers, who connect supply and demand, advise, find solutions and organize events; in sum, they create links for the facilitation of public procurement of innovation. Attracting Innovation, by taking existing innovation from the market, adjusting Innovation and triggering Innovation via R&D.

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Digital Infrastructure as a Tool for Spatial Development: the Potential of Public-Private Partnership (on Materials of Russian Localities)

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Abstract:
The article examines the conditions and possibilities for leveling digital imbalances in the spatial development of Russian localities with the help of public-private partnership (PPP).

In developing the economic model of spatial diffusion of the digital social infrastructure of the region through PPP, statistical, logical-structural, functional methods, as well as comparative analysis were used. In determining the territorial factors of heterogeneity of access to digital infrastructure and the development of a model of matching the type of access to localization - cluster, statistical and network analysis methods. When developing a strategy for coordinated planning of the development of the digital subsystem of a region in a PPP format, the scenario method.

We used empirical analysis data obtained from a survey of a sample of localities included in the PJSC Rostelecom digital inequality elimination program (2014-2018), as well as data from panel studies to determine the effectiveness of integration forms of interaction between subjects of the digital subsystem in the PPP format, infrastructure security and density conducted by the authors in the settlements of the Yamalo-Nenets Autonomous District in 2014-2018.

A hierarchical model of the digital subsystem of the social infrastructure of the region and the economic model of the territorial diffusion of digital infrastructure were developed based on the allocation of state-subsidized and market segments and their mutual integration through the PPP mechanism. An organizational mechanism for the creation, distribution and development of digital infrastructure has been proposed, a feature of which is the coordination of the interests of federal and regional stakeholders, the technological neutrality of access infrastructure development and the typology of access. A joint planning strategy has been developed for the development and use of the digital infrastructure market segment.

Keywords: *Digital infrastructure, public-private partnership, spatial development, investment resources, social infrastructure*

Introduction

in the projections of localities
Figures tables

3. Data and sample:
- author's studies to assess the distribution of the number of localities by population in the territory of the Russian Federation (2014-2018);
- Author's studies on the assessment of global information inequality based on global databases on localities and locations of IP addresses (2016-2018);
- evaluation of the reform of the universal telecommunications service of the Ministry of Communications and Mass Media of the Russian Federation and the project to eliminate the digital inequality of PJSC Rostelecom (2014-2018);
- the results of surveys to determine the effectiveness of integration forms of interaction between subjects of the information and communication subsystem, infrastructure provision and density, conducted by the authors in localities of the Yamalo-Nenets Autonomous District (2014-2018).

4. Empirical results and conclusions
Results can be used
- when planning the development of digital infrastructure in the territory of the constituent entities of the Russian Federation, developing PPP programs aimed at reducing territorial information and communication inequalities;
- when developing and adjusting state and regional programs for the development of the infrared subsystem of the social infrastructure of the region, while reforming universal communication services.

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Strategic Finance and Corporate Governance

Behavioral Discounting: Empirical Results and Potential Pitfalls

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Abstract:
We document that results of empirical/experimental studies of discounting are sensitive to the list of questions. We compare results of our survey conducted in 2018 to the results of a similar smaller survey (Scholten and Read (2006)). Based on the overlapping questions, our results are remarkably similar to these earlier results. At the same time, the overall conclusions from our survey are markedly different. The earlier declared conclusions do not survive a more complete set of alternative choices offered to the respondents. A much greater share of respondents deviate from choice consistency between the alternatives. Deviations seem to increase in the considered time horizons and time intervals. This may be driven either by the direct effect of time on discounting or by inclusion of choices with higher nominal amounts. Sensitivity of discounting to amounts being discounted warrants further investigation.

Keywords: *Behavioral Finance, Discounting, Intertemporal Choice, Subadditivity, Superadditivity, Transitivity, Survey*

Introduction

It is hardly controversial that \$100 tomorrow are not as valuable as \$100 today. The standard financial theory has well-accepted models for discounting certain future cash flows (CF_t):

$$PV_0 = CF_t e^{-r_t * t} = CF_t/(1+\tilde{r}_t)^t,$$

where t is the number of periods from now (e.g., years), r_t is the continuously compounded interest per period for the horizon of t periods ($\tilde{r}_t$ is its discretely compounded counterpart). If CF_t is set to 1, the above formula turns into the definition of discount factor, which we will denote as $D_{0,t}$.

No-arbitrage conditions that $D_{0,t}$ should obey are quite lax. For any $t > 0$, $D_{0,t} \in (0,1)$. $D_{0,t} \geq D_{0,t'}$, for any $t' > t$. Beyond that, the shape of $D_{0,t}$ as a function of t is influenced by the shape of the term structure (the shape of r_t as a function of t) and the chosen discounting model.

It turns out that when it comes to the models of discounting, the standard models fail in empirical studies of investor time preferences (at least for flat term structures) and there is still much debate to what constitutes the best-fitting discount model. We present a selection of discounting models in Table 3.

There are a few common deviations from the standard discounting in empirical data. We will focus our attention on their three manifestations in investor choices: intransitivity, subadditivity, and superadditivity. Intransitivity of choices is defined as a choice of the type $A \leftarrow B \leftarrow C \rightarrow A$, where arrows point in the direction of preference. The forward discount factor (today's discount factor between two future points in time) is defined as $D_{0,t,t'} = D_{0,t'}/D_{0,t}$ (and, more generally, $D_{0,t,t'} = D_{0,t_0,t'}/D_{0,t_0,t}$, for any $t_0 < t < t'$). However, empirically, this equation is often violated. $D_{0,t_0,t} \cdot D_{0,t,t'} < (>)\ D_{0,t_0,t'}$ is described as subadditivity (superadditivity).

Survey

In 2018, we conducted a survey with 104 respondents, residents of St. Petersburg. Table 1 shows age and professional/educational split of the sample. Nearly 80% are young adults, under 26 years of age. 61.5% have either math or business/finance educational and/or professional background. The survey was conducted online, without any direct contact between the survey organizers and the respondents or among the respondents. There was no financial remuneration for survey participation.

The survey consists of 21 questions. In each question, the respondent is expected to pick a better alternative of the two. One alternative offers a smaller amount sooner (we denote the choice as SS), the other−a larger amount later (we denote it as LL). 21 questions represent an exhaustive set of choices between the total of 7 alternatives presented in Table 2.

Results

We analyze survey results for each respondent as a directed graph. The nodes are choices from Table 2. As we consider all choice pairs in 21 questions, the graphs are complete (all choices have a link/a connecting edge). The edges are directed towards the preferred alternative. Examples of graphs are in Figure 1.

If a respondent's graph has a loop, as in Figure 1b, the respondent exhibits intransitivity. We place such respondents into the ITR group. Respondents that do not have loops do not violate transitivity of preferences and are placed into the TR group. More than 80% of the members of the TR group either always prefer to get money later (LL) or sooner (SS). Only 11 out of 58 of the TR group switch between the two choices (SL). For more details, see Figure 2 and 3.

There are different potential reasons for respondents to violate transitivity. Two potential explanations are discounting functions that exhibit sub- or superadditivity. Subadditivity is twice as common as superadditivity. Finally, we have an 'anomalous' group of respondents that exhibit intransitivity of choices, but cannot be described by either sub- or superadditivity. They amount to nearly 27% of all respondents (Figure 3).

Discussion

Our survey results diverge from the main results of a similar survey conducted at the London School of Economics (Scholten and Read (2006), SR (2006)). We have significantly extended the original survey. This has allowed us to conclude that a much greater share of respondents in our survey deviate from transitivity of preferences between the alternatives, 20% versus our 44%. Additionally, our respondents are much more likely to belong to the 'anomalous' group, 16% versus our 27%.

It turns out that the deviations are driven by the extra questions added to our survey. The extra questions cover longer horizons (over one month), see Table 2. This means that more respondents exhibit both sub- and superadditivity when a longer horizon is considered. Extension of horizon also means that the extra questions involve greater nominal amounts. Previous empirical studies have shown that discounting may be sensitive to the amount being discounted, with more patience (higher discount factors) applied to greater amounts. This potential sensitivity is not taken into account in this study or SR (2006).

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Table 1. **Respondents: Descriptive Statistics**

Age	Education/Professional Background				Total
	Math/Management Background			Others	
	Math Students	Mgmt Students	Other		
18–25	32.7% (34)	9.6% (10)	11.5% (12)	26% (27)	79.8% (83)
26–40	—	1% (1)	1.9% (2)	8.7% (9)	11.6% (12)
40+	1.9% (2)	—	2.9% (3)	3.8% (4)	8.6% (9)
Total	34.6% (36)	10.6% (11)	16.3% (17)	38.5% (40)	

Table 2. **Questionnaire: Set of Choices**

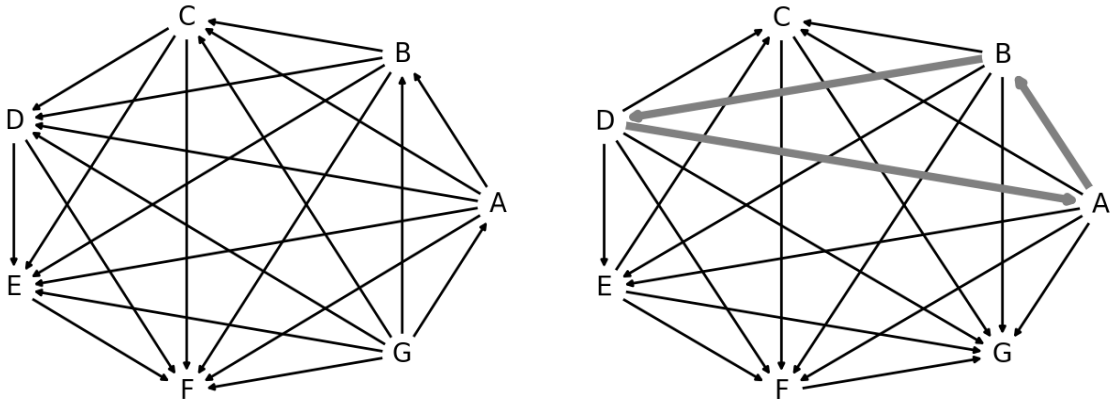
Notation	Sum (RUB)	Time Horizon	Time Horizon in SR (2006)
A	10000	1 week	Yes
B	10500	2 weeks	Yes
C	11000	3 weeks	Yes
D	11500	4 weeks	Yes
E	15500	3 months	No
F	21500	6 months	No
G	33500	12 months	No

Table 3. **Different Models of Discounting**

Model	Forward Discount Factor	Domain	Delay Effect	Period Effect
E Exponential	$F_{T_{SL}} = \frac{1}{(1+r)^{t_L - t_S}}$		–	–
ES Samuelson (1937)	$F_{T_{SL}} = \left[\frac{1}{e^{t_L - t_S}}\right]^{\beta}$	β>0	–	–
QH Phelps, Pollak (1968)	$F_{T_{SL}} = \frac{1}{(1+r)^{t_L - t_S}}$	*r*>0	–	–
H1 Ainslie (1975)	$F_{T_{SL}} = \frac{t_S}{t_L}$		√	–
H2 Mazur (1984)	$F_{T_{SL}} = \frac{1+\alpha t_S}{1+\alpha t_L}$	α>0	√	–
H3 Mazur (1987)	$F_{T_{SL}} = \frac{1+\alpha {t_S}^{y}}{1+\alpha {t_L}^{y}}$	α>0	√	–

H4 Harvey (1986)	$F_{T_{SL}} = \left[\frac{t_S}{t_L}\right]^p$	p>0	√	–
H5 Loewenstein, Prelec (1992)	$F_{T_{SL}} = \left[\frac{1+\alpha t_S}{1+\alpha t_L}\right]^{\beta/\alpha}$	α>0, β>0	√	–
W Read (2001)	$F_{T_{SL}} = \left[\frac{1}{e^{(t_L-t_S)^\nu}}\right]^\beta$	β>0, 0<ν<1	–	Subadd.
DBI Scholten, Read (2006)	$F_{T_{SL}} = \left[\frac{1}{1+\alpha(t_L^\tau - t_S^\tau)^\nu}\right]^{\beta/\alpha}$	α>0, β>0, 0<τ<1 0<ν<1 ν>1	√	Subadd. Superadd.
FC Benhabib, Bisin, Schotter (2010)	$F_{T_{SL}} = \frac{\beta[1-(1-\theta)rt_S]^{1/(1-\theta)} - b/F}{\beta[1-(1-\theta)rt_L]^{1/(1-\theta)} - b/F}$	$b > 0$	√	–

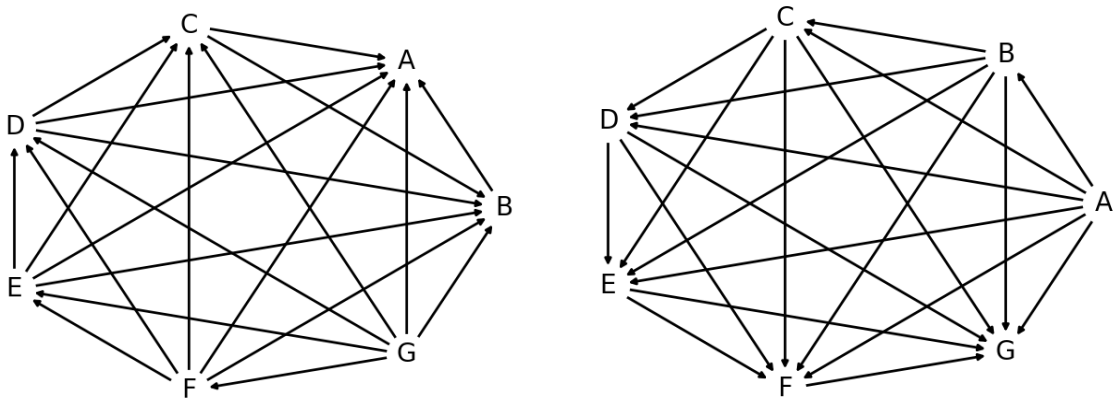
Figure 1. **Responses as Graphs**



a: Respondent 37 (TR)

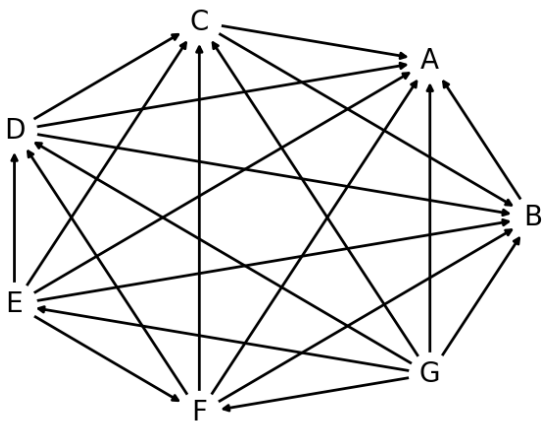
b: Respondent 44 (ITR)

Figure 2. **Types Responses with Transitivity**



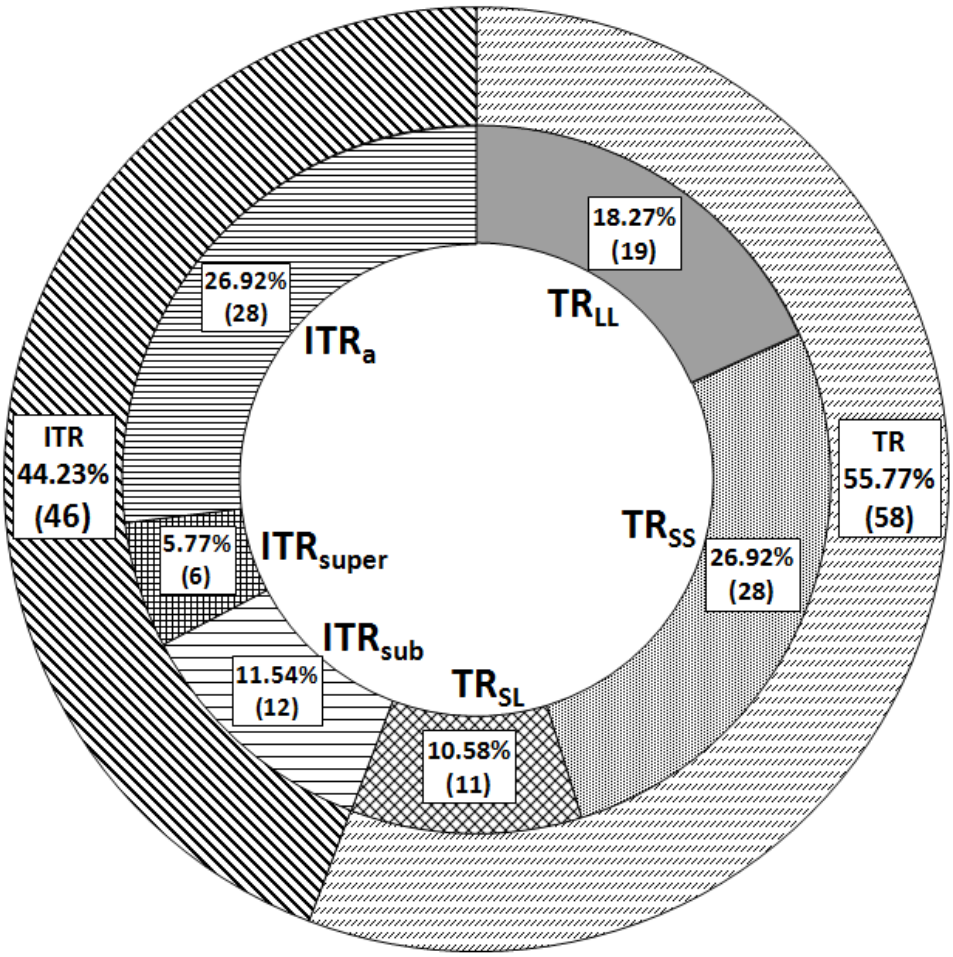
a: Respondent 3: LL

b: Respondent 4: SS



c: Respondent 10: SL

Figure 3. **Distribution of Respondents by Discounting Type**



Conceptual Framework of Capital Structure Optimization: Southern Copper Corp Case

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Abstract:
The study aims to provide a conceptual framework for company's capital structure optimization. As the maximization of equity holders' wealth remains the main goal of the company's financial managers, research in this area is also topical for corporate finance practitioners. To reach this goal, the paper provides a brief theoretical background of the topic, describes key steps in a practice-oriented approach to finding the optimal capital structure, and discusses limitations of the framework in respect to companies in emerging markets. The framework is illustrated with a case study of Southern Copper Corp, a US-based metals & mining company due to limitations discussed in part three of the paper.

Keywords: *Capital Structure, Financial Leverage, Leverage, Cost of Debt, Cost of Equity, Cost of Capital, WACC*

1. Optimal capital structure

Capital structure, the extent to which a company finances it assets with either debt or equity, has been a popular subject for academic research since first studied by Modigliani and Miller (1958). According to their second theorem with taxes, financial leverage reduces weighted average cost of capital (WACC) by substituting equity financing with cheaper debt as the latter provides tax shield (reduces tax base). In reality, however, such effect would only be observable to a certain extent, beyond which risks undertaken with extensive use of financial leverage would ultimately increase WACC.

According to Myers (1984), optimal capital structure is obtained when debt tax shield is equal to financial distress costs. While being unobservable directly, the distress costs are reflected in risk premia of both debt and equity financing. Thus, the capital structure optimization challenge is to estimate the changes in risk premia for varying capital structures, which is discussed in the following sections of the paper.

2. Capital structure optimization framework

First of all, the framework requires basic WACC and CAPM inputs for a selected company: current debt-to-equity (D/E) ratio using market values for equity instead of book values, effective tax rate, cost of debt, company's beta, risk-free rate (RFR), and equity risk premium (ERP). For the purposes of the study, the data was sourced from Thomson Reuters Eikon database with unlevered beta estimated based on 3-year weekly levered beta, median tax rate for the past 5 years and current D/E ratio.

The second step would be the estimation of both cost of debt and levered beta for a range of D/E ratios. While re-levering the beta is quite straightforward, calculating cost of debt is barely as simple. For a set of comparable companies of the same size, industry and region, one might find a linear relation between share of debt financing in current capital structure and cost of debt. This is the case for US-based metals & mining companies with market capitalization beyond $2 bn: the correlation coefficient between the two variables is 0.82. Cost of debt values are then obtained for each D/E level with the standard Excel forecast function using the data of the comparable companies. Such estimates are simple to calculate which comes at a cost of their precision. However, more complex and precise approaches are discussed in the following section.

Lastly, using nominal cost of debt at each D/E level, cost of debt is then adjusted for tax shield effects using corporate effective tax rate. Tax rates, unlevered betas, RFR and ERP are

held constant for all D/E values. Cost of equity is then estimated for each levered beta (depends on D/E level) using the standard CAPM model. These estimates are then used for WACC calculation:

D/E	Cost of debt	Tax rate	Tax-adjusted cost of debt	Unlevered beta	Levered beta	RFR	ERP	Cost of equity	WACC
0.0	1.1%	39%	0.7%	0.94	0.94	2.3%	6.1%	8.0%	8.04%
0.1	2.1%	39%	1.3%	0.94	0.99	2.3%	6.1%	8.4%	7.74%
0.2	3.0%	39%	1.8%	0.94	1.05	2.3%	6.1%	8.7%	7.58%
0.3	3.7%	39%	2.3%	0.94	1.11	2.3%	6.1%	9.1%	7.51%
0.4	4.3%	39%	2.6%	0.94	1.16	2.3%	6.1%	9.4%	7.49%
0.5	4.9%	39%	3.0%	0.94	1.22	2.3%	6.1%	9.8%	7.51%
0.6	5.3%	39%	3.2%	0.94	1.28	2.3%	6.1%	10.1%	7.55%
0.7	5.7%	39%	3.5%	0.94	1.33	2.3%	6.1%	10.5%	7.60%
0.8	6.1%	39%	3.7%	0.94	1.39	2.3%	6.1%	10.8%	7.67%
0.9	6.4%	39%	3.9%	0.94	1.45	2.3%	6.1%	11.2%	7.74%
1.0	6.7%	39%	4.1%	0.94	1.50	2.3%	6.1%	11.5%	7.81%
1.1	7.0%	39%	4.3%	0.94	1.56	2.3%	6.1%	11.9%	7.89%
1.2	7.2%	39%	4.4%	0.94	1.62	2.3%	6.1%	12.2%	7.96%
1.3	7.5%	39%	4.5%	0.94	1.68	2.3%	6.1%	12.6%	8.04%

Table 1. WACC estimation spreadsheet

The obtained WACC values are then compared to current WACC in order to estimate capital structure optimization potential, which is only -0.09 p.p. with D/E ratio more than doubled in case of Southern Copper Corp:

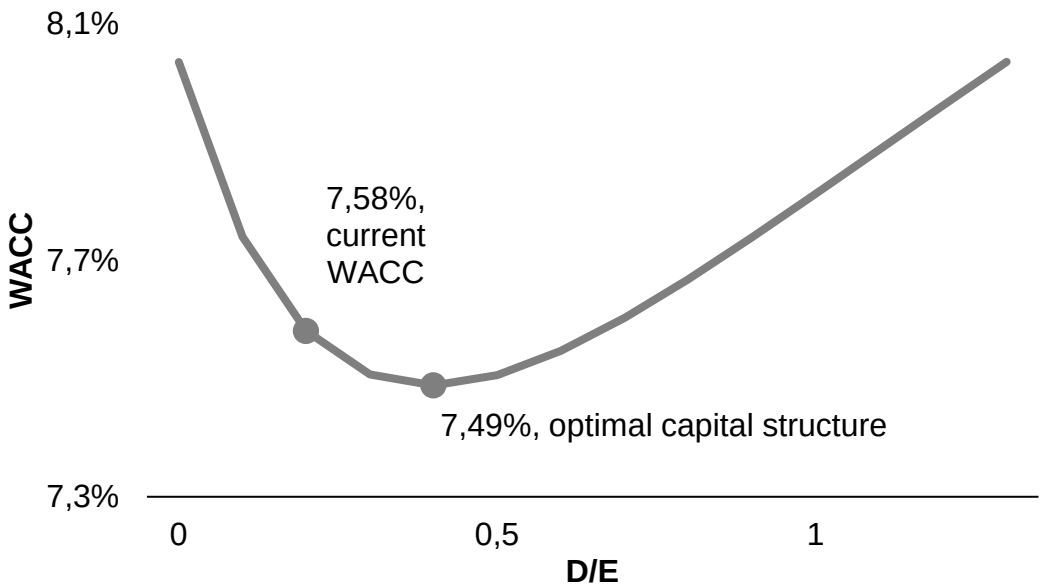

Chart 1. Optimal capital structure

3. The framework limitations in respect to emerging markets

Due to higher WACC values for the emerging markets, the potential of capital structure optimization is also higher. However, the case of Southern Copper Corp simplifies the application of the framework as compared for a study of an emerging market company in the following manner:

- A US-based company issues only USD-denominated debt. Many emerging market companies issue debt denominated in a range of currencies, which sophisticates cost of debt estimation for each D/E level and requires separate D/E optimization for each currency.
- As a consequence, cost of debt curve would no longer be possible to predict using comparable companies as none would be comparable in terms of currency structure of their debt. Instead, it is possible to project credit ratings for each D/E level and calculate cost of debt as a sum of risk-free-rate and default spreads obtained, for instance, from credit default swap (CDS) prices for the given credit rating.
- Currency fluctuations cause the debt structure to be unstable and require exchange rate forecasts to be considered while estimating the optimal capital structure.

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Merger and Acquisitions and Technological Efficiency: the Empirical View

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Abstract:
The aim of this research is to investigate the efficiency of technological M&A deals and find factors of the efficiency for both acquirers and targets. As it was said before, we consider by TM&A deals where at least one party has either R&D expenses or patents. In this work we tested several research questions that are in scope of our interest. Firstly, the information of patent and R&D of a target is necessary to evaluate efficiency of an acquirer. However, the majority of M&A studies investigated companies focusing on either patents or R&D. Since patents indicate the technological diversity of companies, while R&D expenses are a sign of technological depth, thus, we would like to address this issue and try to estimate the impact of both characteristics all together. To calculate the efficiency we employed data envelopment analysis (DEA) In accordance with the aim of the study we proposed that the substitution effect prevails over a complementarity effect of technology of acquirers with respect to technology of a targets. In the literature review it was discussed that there is no consensus regarding what effect of the two dominates. However, in practice, it may depend on what firm

Keywords: *Mergers and Acquisitions, Strategic Motives, Data Envelopment Analysis, Research and Development, Patents, M&A Efficiency*

1. Research questions

The aim of this research is to investigate the efficiency of technological M&A deals and find factors of the efficiency for both acquirers and targets. As it was said before, we consider by TM&A deals where at least one party has either R&D expenses or patents.

In this work we tested several research questions that are in scope of our interest. Firstly, the information of patent and R&D of a target is necessary to evaluate efficiency of an acquirer. However, the majority of M&A studies investigated companies focusing on either patents or R&D. Since patents indicate the technological diversity of companies, while R&D expenses are a sign of technological depth, thus, we would like to address this issue and try to estimate the impact of both characteristics all together. To calculate the efficiency we employed data envelopment analysis (DEA)

In accordance with the aim of the study we proposed that the substitution effect prevails over a complementarity effect of technology of acquirers with respect to technology of a targets. In the literature review it was discussed that there is no consensus regarding what effect of the two dominates. However, in practice, it may depend on what firm citing another firm's patents or technology. Since in this work there is no patent citing information, any of the two economic effects seem equally possible. Thus, the authors chose the substitution effect as the null hypothesis. The result will be seen in the beta-regression analysis, in which DEA efficiency scores are regressed upon the parameters of acquirer's.

Additionally, in the case of technological substitution effect of technology of acquirers with respect to technology of a targets, it may be the case that the more technologically developed an acquirer relative to target, the easier it is to integrate a smaller target into a large technology. In the case of complementarity effect, there will not be such a relation.

2. Data, Empirical results and Conclusion

The dataset contains 1637 deals from 1985 to 2017 where an acquirer or a target have R&D expenses on the income statement in each year for the last 10 years (i.e. from 2008 to 2017). These data has been subsampled in order to understand which combinations of R&D expenses and patents provide relative efficiency to the deals. Therefore, 4 subsamples has been investigated with following characteristics: 173 deals where acquirers and targets have both patents and R&D expenses (each strictly above zero); 434 deal where either acquirers or targets have patents or R&D expenses or both. 776 deals when R&D expenses held by either acquirers or targets without consideration of patents; and 531 deals where acquirers or targets have patents without consideration of R&D expenses.

The DEA efficiency score distributions is skewed to the inefficient left side when we omit the information regarding patents or R&D expenses. On the other hand, in the case of 434 deals the DEA scores are less skewed to the left, which imply that deals are relatively effective when patents and R&D expenses are considered simultaneously. Consequently, the distribution of efficiency score is different for subsample of 173 deals when both patents and R&D expenses are strictly above zero for both acquirers and targets in each deal. These evidences demonstrate that the disregard of patent and R&D expenses leads to at least incomplete picture of efficiency in technological M&As.

The negative signs of the coefficients indicate a substitution effect of R&D expenses of an acquirer with R&D expenses of a target in subsample of 776 deals. This implies for an acquirer that the higher R&D expenses and Capital intensity, the lower related values can be obtained from a target. In case of 531 deals, the higher capital intensity within an acquirer, the lower efficiency results of a deal for the acquirer, regardless of parameters of targets. This happened due to the fact that technology is a rapidly amortized asset. Machinery and equipment are morally (becoming not cost-effective) amortized even faster than physically (not able to produce a good). Moreover, the higher capital intensity, the higher needs for physical equipment renovation, which is a sign of technological dependency of a company. The subsample of 434 deals show a substitution effect in all variables which implies that the more technologically developed an acquirer, the less efficiency it receives from its target in a deal.

Therefore, in this work the we examined 1637 deals and found that the omitting either patent or R&D expenses information gives an incomplete picture of efficiency of a technological M&A, economic substitution effect is a dominant over a complementary effect (acquirer to target) in technological M&As. Also, individual characteristics of acquirer matter differently. There is a need to distinguish between deals, in which at least component of technology is involved or all of them simultaneously.

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Can Non-Financial Indicators Shed Light on the Bankruptcy Risk in Russian Agricultural Enterprises?

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Abstract:
This paper investigates the factors which influence the risk of bankruptcy in Russian agricultural enterprises. Currently the number of bankruptcies in agricultural sector remains one of the highest and stakeholders need the instruments for bankrupt identification. Despite the features of this industry, the majority of existing bankruptcy prediction models developed for agricultural firms includes only financial indicators. Although the researchers claim that the performance of these companies strongly depends on external environment and the corporate management, these factors remain underrepresented in the models. Thus their influence should be investigated carefully.
In our paper we include in our model such parameters as number of companies affiliated with the CEO (relational data), combination of the ownership and management function by CEO, core activity and the state of agriculture in the region. To check the hypotheses we employ logit model. On the sample of more than 100 Russian agricultural companies it was proven that not only the financial ratios but also non-financial indicators matter. In particular, it was found that the number of companies affiliated with the CEO has the positive impact on the probability of going bankrupt. Thus, this relational data may serve as important non-financial indicator of the bankruptcy risk.

Keywords: *Bankruptcy Prediction Model, Agricultural Enterprises, Logit Model, Bankruptcy Factors, Russian Companies*

In 2017 the number of bankruptcies in Russia has increased by 7.7% in comparison with the previous year. Besides, in 2017 agricultural sector was ranked 4th among sectors leading in the number of bankruptcies. So, it is vital to find indicators which help stakeholders to identify potential bankrupts.

1.Literature review

Bankruptcy prediction is a popular topic to study among both Russian and foreign researchers. Such investigators as E. Fedorova, T. Bogdanova, A. Ilina, use traditional approach and create their models with the help of financial ratios. The model developed by O. Bolshakova include additional parameter: the size of the firm, because if the enterprise is big it is luckily to get the support from the government and to pass through recovery procedures.

Besides, there are also models with additional factors: macroeconomic, corporate management, relation data. Thus, E. Fedorova and G. Hajdarshina include macroeconomic factors such as an increase of amount of loans and refinancing rate. Corporate management influence on bankruptcy was shown by Daily and Dalton, who proved the impact of combining the ownership and management function by the director on the risk of bankruptcy. The factor of associated companies based on the managers or boards members also was used in paper prepared by E. Tobback, The research by Vorobev showed that the number of companies affiliated with the director also has an impact on bankruptcy risk.

2. Hypotheses

Basing on existing literature, in this paper the following hypotheses are tested:

H_1: The growth of the number of companies related to the CEO increases the probability to go bankrupt.
H_2: Combining the ownership and management function by the director of an agricultural enterprise increases the risk of bankruptcy.
H_3: The choice of an agricultural enterprise to produce crop increases its probability to go bankrupt.
H_4: The condition of agricultural sector in the region where an agricultural enterprise is located influences the risk of bankruptcy.

We control the fact that the company produce crop, because type of core activity may also affect the financial stability due to the seasonal work that is mentioned in the paper by Dedova.

3. Data and methods

The dataset contained the data of more than 100 Russian agricultural enterprises. The dataset was a balanced one and included the equal number of bankrupts and non-bankrupts. The bankrupt-enterprises were found on FEDRESURS database and were filtered according to the following limitations: the bankruptcy process has been started in the company during the period of 2012 – 2018, the company is supposed to be announced as a bankrupt by a court decision. All of the firms in the dataset were non-public joint stock companies or LLC. The data for financial indicators was collected with the help of SPARK database and FIRA. The information about management was taken from SPARK and RUSPROFILE. The statistic connected with agricultural conditions in the Russian regions was found on FIRA.

As for the modeling method, according to the analysis of previous papers the logistic regression is the most preferable model for bankruptcy prediction. So, this method was used to build model as well. We also include control variables in the model: logarithm of sales for the size of the firm and financial indicators such as ROA, current ratio, equity to assets ratio.

4. Results

As a result of modeling, it was found that ROA is significant on 5%, whereas the number of affiliated companies variable is significant on 1% . As for the state of agriculture in the region, the choice of enterprise to produce crop and combination of the ownership and management function by CEO, they have no significant impact.

Thus, it was found that the company is more likely to go bankrupt if CEO of the company is an owner or manager of other firms. These findings correlate with the results obtained by E. Tobback on the sample of Belgian and UK companies, because they also identify the importance of relational indicators. The results do not contradict the conclusion of S. Vorobev that such ties with the firms give Russian agricultural companies a chance to withdraw assets so the existence of affiliated company cause the increase in bankruptcy risk.

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The Impact of Top-Management Characteristics on the Performance of M&A Deals Initiated by Russian Public Companies

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Abstract:

The performance of M&A deals is the actual research topic for many years, both in academic literature and practical field. According to prior research, despite firms hire directors with acquisition experience regardless the effective-ness of the deal, only prior positive experience is creating additional positive re-turns. Those studies examine the firms operating in developed countries, mainly USA traded companies. In this article the effect of management's experience is analyzed in emerging countries, where the management plays a greater role in decision making and value creation, on the example of Russia over 2007 – 2018. Based on the sample of 205 acquisitions exceeding 1 mln dollars, performed by public acquirers, we find that in Russia several management's experience related characteristics, such as industry and political expertise, prior acquisitions experience, with respect to performance quality, significantly and positively affect deal outcomes in acquisitions for bidder company.

Keywords: Mergers and Acquisitions; Corporate Governance; CEO Characteristics; Event Studies.

1. Introduction

This paper analyzes the data on acquisitions in Russia starting from 2007 up to 2018 to estimate whether the prior experience directly in M&A deals among other managers' skills positively influences the effectiveness of the deal in conditions of the transition economy. According to the academic research, many different CEO's characteristics might influence the deals outcome. The results indicate that prior experience of the CEO is highly valuable, creating an additional value on acquisition returns. Many papers search for correlation between multiple firm's acquisition and serial acquirers returns. Also, many of the authors focus on CEOs' characteristics. But nearly none of the findings are conducted on the emerging markets, and none of them measure the CEO power on the Russian deals.

2. Data and summary statistics

The sample includes all acquisitions both foreign and domestic, made by Russian public companies, the data is retrieved from Thomson Reuters Eikon Database, following the criteria:

- Type of the deal – acquisition;
- The deal status – completed;
- The Acquirer - a Russian public company trading on one of Stock Exchanges (MOEX, RTS);
- The announcement date was made between January 1, 2007 and December 31, 2018;
- The deal value was disclosed and reached, at least $1 million;
- The target was a public company, a subsidiary or a private company.

The final data sample consists of detailed observations of 205 deals of 62 firms performed by 75 CEOs.

3. Measuring acquisition effectiveness by event studies

This research examines cumulative abnormal returns on event windows of different length as prior findings argue about which window shows the more appropriate result. Thus, the specified event windows are the shortest 3-days [-1:+1] one, the medium one, observing 5 days prior and after the announcement date, [-5:+5], and the largest one, 21-days window [-10:+10].

CAR is computed by estimating coefficients for expected return on market model (McKinlay, 1997) by running OLS on return data based on 150 days estimation period prior the deal announcement date stock data. As market index is used the MOEX industry index of the corresponding industry to the acquirer firm. Statistical significance is checked via Patell t-test (Patell, 1976) and Corrado Rank-test (Corrado, Zivney, 1992).

The data sample is divided by two criteria. First, it is CEO's prior acquisition experience (135 out of 205 deals in our sample were performed by the managers, who had taken part at least in one acquisition before, 70 are performed by those, who never took part in acquisition as a bidder manager before). The next division is done by relative deal size. From the whole sample we left the deals, where the acquirer got more than 50% of target shares (the full control over it) after the transaction, and where the deal value was at least equal to 0,5% of acquirer's total asset[10] (for the deal to be large enough to have an influence over the stock returns). The sample that fits these limitations contains 63 deals, 33 of which were performed by CEO's with prior acquisition experience.

For all three event windows, both CAARs and Patell t-statistics are higher for the deals, performed by experienced CEOs, also the difference between the CAARs of experienced and inexperienced CEOs is larger for the size criteria adjusted sample. The most significant results are shown by 11-days window, with 4 significant CAARs, both on overall and deal size adjusted samples. Thus, it would be the main event window for further analysis.

4. Empirical results and Discussion

Based on the results on CAARs and Patell statistics, CEO's previous experience in performing acquisitions is expected to have a positive relationship with acquirers' cumulative abnormal returns. To measure that impact, multivariate regressions, where the dependent variable is the acquirer's CAR, computed over the 3-day window [−1:+1], over 11 day window [-5:+5] and over 21-day window [-10:+10] surrounding the announcement date.

Despite the theoretical approach of prior studies, many of the describing control variables do not have any significant effect over CAR. Moreover, the success of the prior acquisition itself is not influencing the current deal outcome, as well as just the existence of such experience. Out of all regressors sample the significant effect from deal describing variables has the deal attitude, so the hypothesis about negative impact of hostile acquisitions is accepted. Next, the amount of target shares significantly influences the deal outcome, otherwise, the influence is negative. The hypothesis about negative effect of serial acquisitions for the firms is also proved. Industry relation is important for the firm, thus, the hypothesis about the ability of the firm to learn through inside information and operation processes is proved. All corporate governance characteristics resulted in insignificant values. The suggestion about expertise experience of CEOs results to be true, as both, industry expertise and government experience result in significant positive values. The hugest impact of 0.81 has the prior CEO's CAR, it is positive and significant, indicating that CEO's acquisition experience quality is associated with direct influence on current outcomes. Also, the total number of CEO's acquisition has a significant positive value of 0.077. Thus, the experience in acquisitions enriches the quality of strategic decisions and deal effectiveness. The results show, that the effect of CEO's acquisition experience on deal efficiency measured by acquirer abnormal returns is both economically and statistically significant.

[10] Similar to prior studies (e.g., Field, Mkrtychan, 2013)

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The Relationship of Earnings Management and Dividend Payouts: Empirical Analysis of Russian Companies

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Abstract:
Current study investigates the relationship between the level of earnings management and dividend policy of Russian companies. Dividend policy represents itself one of corporate governance mechanisms that are generally presumed to restrain earnings management. Prior research considered this relationship in different countries and delivered mixed results. What is more, it primarily considered developed markets. Hence, there is a necessity to analyze this relationship on emerging markets, like Russia. We use dividends payouts as a proxy for dividend policy. The sample includes 144 Russian traded companies for a period of 2006-2017. Using the classical Jones model we assess the level of earnings management, and then regress it on the number of characteristics of sample companies. We revealed that the average level of earnings management of dividend payers is lower than that of non-payers. The results also show that the payout ratio along with proportion of closely held ownership in a company have inverse relationship with the earnings management in Russian companies.

Keywords: *Earnings Management, Abnormal Accruals, Jones Model, Dividend Policy, Corporate Governance, Russia*

1. Theoretical underpinnings of research

Earnings management represents an array of accounting and non-accounting instruments that company's management can use to influence its financial reporting in order to create and extract particular private benefits. Earnings management in its core is based on activities permitted by accounting standards. However, in reality this process may become illegal. This type of earnings management can cause potential damage for the company and its shareholders (e.g., different costs, including reputational ones, penalties through legal action, etc.). That is why the task of establishing tools to limit earnings management remains very important.

Corporate governance mechanisms are expected to protect shareholders from opportunistic behavior of management and/or expropriation from controlling shareholders. There is a number of studies on the relationship of corporate governance mechanisms and earnings management. For example, in [Leuz, Nanda, Wysocki, 2003] on the data of 8500 firms from 31 country the significant differences in earnings management between countries were identified. The overall level of earnings management was lower in countries with relatively higher level of investment protection. Also, in [Shen, Chih, 2007] the authors revealed the inverse relationship between the level of corporate governance and scope of earnings management for nine countries from Asia. However, in a number of papers devoted to developed markets scholars did not find any significant relationship between earnings management and standard features of corporate governance system, namely the level of board independence and audit committee independence (see, e.g., results on Canada in [Park, Shin, 2004] and France in [Piot, Janin, 2007]).

At the same time, there is still shortage of studies on the relationship between corporate governance features and earnings management for emerging markets, including Russia. Given

the specific institutional environment in Russia (for example, the well-known role of majority shareholders in ownership structures and decision-making), analysis of the considered relationship could shed additional light on the peculiarities of earnings management in emerging markets. In this research we concentrate on the analysis of dividend policy, because it is viewed as one of important characteristics of corporate governance in a company since seminal papers by Eastbrook (1984) and Jensen (1986).

2. Data and methodology

The analysis was conducted on a sample of all Russian traded companies (excluding banks and financial companies) with available data. IFRS reporting was used. Our final sample included 144 companies for 2006 to 2017.

At the first stage of analysis, the level of earnings management in sample companies was assessed. We used discretionary accruals obtained via Jones model as a proxy for earnings management. Jones model assesses the "normal" level of total accruals:

$$\text{Total Accruals}_t / TA_{t-1} = \beta_1(1/TA_{t-1}) + \beta 2\ (\Delta Rev_t / TA_{t-1}) + \beta 3\ (PPE_t / TA_{t-1}) + \varepsilon_t \qquad (1)$$

where Total Accruals_t — total accruals in a period t; TA_{t-1} — total assets at the beginning of a period; ΔRev_t — change of revenue in a period t comparing with the previous time period; PPE_t — property, plant and equipment of the company at the end of a period t; t — time period of observation; $\beta 1 - \beta 3$ — parameters of the model; ε — error term.

The actual level of total accruals (Total Accruals) was calculated by the formula (2)

$$\text{Total Accruals}_t = \Delta CA_t - \Delta CL_t - \Delta Cash_t \qquad (2)$$

where ΔCA_t — change in current assets in a period t; ΔCL_t — change in current liabilities in a period t; $\Delta Cash_t$ — change in cash of a company in a period t.

After estimating the normal level of accruals with the Jones model and calculating the actual level of accruals, we identified discretionary accruals (i.e. the difference between actual level of accruals and their predicted level). Then, at the second stage, the multivariate regression model was assessed, where discretionary accruals were regressed on a number of variables including dividend payouts, some characteristics of ownership structure (i.e. share of controlling shareholder and the government presence in a company) along with the number of company's characteristics (like leverage, size, ROA, revenue growth, etc).

3. Empirical results and conclusions

The empirical analysis revealed that higher dividend payouts correspond to lower level of earnings management in a company. This result generally complies with the outcome model of dividends. According to this approach, higher dividend payout ratio could stem from higher quality of corporate governance. Our analysis also showed that in companies with larger share of major shareholder the level of earnings management is lower. This relationship could reflect that in companies with relatively high level of ownership control the major shareholder seeks to limit the level of earnings management. Additionally, we identified the inverse relationship between (1) discretionary accruals and corporate profitability and (2) discretionary accruals and leverage of a company.

To sum up, the results of our analysis are consistent with the outcome of studies on a number of developed and emerging markets. Dividend policy, in line with classical suggestions

by Eastbrook (1984) and Jensen (1986), could be viewed as a corporate governance tool reducing the scope for agency conflict in general and, more specifically, earnings management.

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Software Platform's Value Correction by Idiosyncratic Risk and its Application in the SaaS Business Model

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Abstract:
One of the main digitalization risks is the information overwhelming that either consumers either companies face with. The digital economy rearranges the risks, so rare events in the past nobody considered as worth to be afraid of seriously become real. A huge volume of information needs to be structured to become at least partially manageable. But as this is still the problem for institutional organizations, this is far more true for the individual users. So, one of the main risks for a company arising specifically with the digital economy is customer disloyalty. In the study, one of the risks that denote those "disloyalty issue" is called idiosyncratic risk, as far as it is manageable from the company's perspective but it is covered by the market risk. The main aim of this study is to assess whether the idiosyncratic risk influences a company's value or not and if it does, whether that could be utilized in the decision-making mechanism.
The Software-as-a-service business model is under consideration. The reasons for the model choice include the rapid growth of SaaS businesses in recent decades (Choudhary, 2007; McKenzie, n.d.). One doesn't need to visit a store to make one's choice. In this sense all software developers are in the comparatively equal conditions, and a company's physical location doesn't matter, at least in the same language region. All consumers who buy the same given software license use totally identical service, and the software bugs or weird features are the same, so the negative reviews on the software will draw much more public attention that they would in case of FMCG market. Software development is considered to be innovative industry (OECD, 2011). Innovation spillover can damage companies' performance (Hamel & Prahalad, 1994; Майссиер, 2012), so the companies could see innovation spillovers as a risk.

Keywords: *Idiosyncratic Risk, Software-as-a-Service Business Model, Software Platform, Emerging Markets, Real Option Approach*

1. Introduction

The diversity of possible situations makes the traditional "certain" industries highly volatile even if there are not connected with systematic factors too much. So, from the traditional point of view (CAPM model (Lintner, 1965; Mossin, 1966; Sharpe, 1964) it isn't possible to assess those risks. As the risks under consideration were considered company-specific in previous research, it was impossible to make any conclusions concerning those risks nature and provide any recommendations, except for case-type analysis. Here an attempt is made to extract a next part from the company-specific risk, that is partially connected with the business environment on the one hand, and partially can be managed on the other hand.

2. Research aim

Under the idiosyncratic risk in the study the risk of a company's value damage due to the company's closest outside environment is understood and is modelled through the systemic

processes. Digital economy forces companies' especial exposure to the idiosyncratic risk. The purpose of the study is the idiosyncratic risk analysis possibility to improve a business' value assessment in emerging markets conditions in comparison with the traditional view. To achieve the aim the idiosyncratic risk concept is considered. Companies' earnings, current cost changes and operating margin are forecasted, and the model of the software platform valuation in the SaaS business is developed using econometric analysis and real options modelling. At the last stage the model is tested using the data on the emerging markets and calibrated using M&A deals data.

3. Method

Under idiosyncratic risk in the study the joint part of the systematic and the specific risk is understood, which is the result of complex market and company interconnection in the digital economy. The diffusion between the systematic and the specific risk was described in (Cochrane & Culp, 2003). The systemic part of the idiosyncratic risk is modelled in the study using approach on the base of the financial contagion effect. The financial contagion indicators are traditionally used as the systemic risk measures (Glasserman & Young, 2015; Щепелева, 2017). The idiosyncratic risk in the given concept expresses the influence of the system on the company. In the study under the system is understood the industry due to the similar operation conditions, market rules and product type for all companies involved.

The classical model of the business valuation with the use of the growth options (e.g., (Liu, Li, & Zeng, 2018) is considered. The cash flow for value assessment aims is modelled through the difference between the earnings' changes and the current costs' changes. The value of a software platform in the SaaS business model is assessed using the growth option model (1).

$$V_{platform} = E\left[\sum_{t=1}^{t=n} \max[E_t - C_t, 0] \cdot e^{-r_t \cdot t}\right], \quad (1)$$

where $V_{platform}$ – the value of the growth option of a software platform development in the SaaS business,

E_t – a company's delta earnings at time *t*,

C_t – the company's delta current costs at time *t*,

r_t – the company's interest rate of discounting at time *t*.

The companies' earnings changes, current costs changes, and interest rates of discounting were modelled through the current assets difference modelling using the Poisson (jump) process and geometric Brownian motion with drift. The difference with the traditional approach in the delta earnings modelling lies in the earnings modelling with the conditional distribution (2) based on the copula function for the companies (Aas, Czado, Frigessi, & Bakken, 2009).

$$F(E_i|E_j) = \frac{\partial Cop_{E_iE_j}\{F(E_i), G(E_j)\}}{\partial G(E_j)}, \quad (2)$$

where $F(E_i|E_j)$ – an i's company's earnings changes conditional distribution given the j's company earnings changes distribution,

E_i – the i's company's earnings changes, $F(\cdot)$ – the distribution function,

E_j – the j's company's earnings changes; $G(\cdot)$ – the distribution function,

$Cop_{E_iE_j}$ – copula function describing the joint distribution of the j's and i's companies earnings.

The interest rates were modelled through the return on sales modelling using the geometric Brownian motion without drift model.

The quarterly data of Russian, Indian, and Chinese software development markets during 2007-2017 from *SPARK*[11] and *Thomson Reuters Eikon*[12] were used. Emerging markets provide unique opportunity for research of digital economy development as the costs of software platform development are concentrated around the stuff salaries, team building, corporate culture sustaining, personal development, corporate education systems' costs, while the costs of the equipment in the software development industry are minimal, as far as most of the data processing could be done via the cloud services using secure blockchain technologies and data protection. Due to the high quality educational systems in Russia, China, and India, the markets under consideration are the real competitors to the developed markets from the point of view of the digital technologies development.

4. Results

The comparison of the traditional business value approach with the approach to a business assessment taking into account a company's idiosyncratic risk. The both approaches' results were compared to the real data of M&A deals. The model was tested on the Russian, Chinese, and Indian market companies. Conclusions concern the methods for the software companies hedging from the idiosyncratic risk, e.g. *Agile* (Beck et al., 2001) and *SCRUM* (Schwaber & Sutherland, 2017; Takeuchi & Nonaka, 1986) protocols.

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The full list of references is available on request from the authors.

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[12] *Thomson Reuters Eikon* database. URL: https://eikon.thomsonreuters.com/index.html

Supply Chain Management and Operations in Digital Age

Cooperative Game for Working Capital Management in Distributive Supply Network

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Abstract:
Globalization, technological breakthroughs and steadily growing competition between supply chains shape working capital management as important means of liquidity and profitability improvement. More importantly, for companies still focusing on their individual SC issues and taking their own interests into account rather than understanding the whole SC and cooperating with their partners this has become critical. Authors address the problem of joint WCM by developing cooperative game working capital cost game aimed at minimizing total financial costs associated with each SC stage. The focal network is a distributive supply network consisting of N suppliers, one distributor and M retailers connected through material, information and financial flows. The members of the network can form various coalitions with the distributor. Each member's working capital position is constrained by liquidity and profitability requirements. For this cooperative game we investigate Shapley value. As a result, we provide empirical evidence of fair SC cost redistribution through a case study focusing on a large Russian ICT supply chain and develop cost redistribution policy.

Keywords: *Supply Chain Finance, Supply Chain Collaboration, Working Capital Management, Cooperative Game, Cost Imputation*

Introduction and purpose of the research

Modern supply chains are constantly striving to eliminate process inefficiencies while at the same time to provide the final customer with additional services, to increase the overall value of the entire chain. With this in mind, focal companies in supply chain tend to acquire control outside of the boundaries of their own company. The idea is the following: organizations as self-serving entities maximise their profit, however this might result in a sub-optimal overall performance. At the same time, a focal company may orchestrate the actions of other players in the supply chain in order to achieve optimal profit. SCC literature tends to oversee in-depth analysis of financial practices and solutions in this context.

Consequently, the demand for capital from within the SC, e.g. from companies directly involved in supply chain finance (SCF) schemes or acting as financial service providers (FSPs) has increased (Gelsomino et al., 2016; Hofmann, Kotzab, 2010; Kouvelis and Zhao, 2016; Protopappa-Sieke and Seifert, 2017; Talonpoika et al., 2016). For this reason, the importance of effective WCM has raised dramatically, especially for SCs from emerging markets, which faced difficulties with access to capital, limited financial infrastructure and legal, regulatory and accounting uncertainties in the first place.

We address these gaps and aim to develop a methodology for SC participants to cooperate with each other and unite into coalitions, what would lead to cost optimization of joint working capital and fair redistribution of optimized costs among the participants. This is only achieved by

means of collaborative actions of capital reallocation along the SC under constraints of profitability-liquidity tradeoff. As a result, we construct a methodology of SC cooperation in optimal coalitions minimizing the costs on joint working capital and develop cost redistribution policy.

In light of the literature gap presented, this paper aims at developing a model that analyses the aligning potential of joint working capital management for a 3-stage supply chain. More specifically, we identify two research questions (RQs) as following:

RQ1. What are the cooperative solutions to cooperative working capital cost game?
RQ2. How are different stakeholders impacted by such solutions?

Methodology

We develop a model that analyses working capital management process for 3-stage supply network. The focal network is a distributive supply network consists of *N* suppliers, one distributor and *M* retailers connected through material, information and financial flows.

However, as we know, individual WCM is highly limited, therefore the optimization should be done along several consequent parts of the chain. Therefore, collaborative approach should be considered. The members of the network can form various coalitions with the distributor. Each member's working capital position is constrained by liquidity and profitability requirements.

We construct characteristic function of each coalition as a minimum value of the sum of financial costs associated with working capital allocation. For this cooperative game with coalitional structure we investigate Shapley value imputation.

The case study focuses on the supply chain of a large real-life ICT company, located and operating in Russia. The relevant section of the focal supply chain, i.e. within the scope of this paper, can be identified through its main suppliers and customers. The focal company aims at adopting sophisticated WCM and SCF tools, such as Reverse Factoring and Inventory Financing.

Results and implications

The paper aims at measuring the potential of redistributing working capital costs on the grounds of fair cooperation in coalitions. The described case shows that Shapley value lies in the C-core and is strictly non-dominant. It implies that all supply chain participants have no motives to oppose cooperation and behave opportunistically.

Nonetheless this case reveals several constrains which are still to be discovered further. The first one is the base for the assumption that each participant of the chain is able to obtain its cash conversion cycle on the boundary values. The second assumption is that possessing an optimal negative cost function of the joint working capital a supply chain participant might face not willingness to be financed by outer participants of the chain, for instance the final customer might oppose to paying in advance and decide to switch to another retailer or the earlier step supplier might require earlier payments.

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Antecedents and Outcomes of Sustainable Supply Chain Integration in Emerging Economies: The Study of Large Russian Companies

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Abstract:
The adoption of sustainability practice in the large business agenda is growing trend and it goes along with the increasing number of claims that sustainability business leaders generate more value and with a growing public and state attention to the transition of world economy to the green model of wellbeing, specifically in the field of supply chain management due to its high external effect. In order to push the agenda forwards there is a high demand of researchers for learning about antecedents and drivers of the sustainability adoption in the supply chain management, especially in the context of emerging economies where sustainability trend is still on the early rise. The paper explores the antecedents and outcomes of sustainability adoption in supply chain management in the Russian context using a multiple case-study approach. The data of research includes cases from oil & gas companies Gazprom, Rosneft, SIBUR, Lukoil and is used as an empirical evidence and background for articulation of antecedents and outcomes of sustainable supply chain. Through the analysis of the cases several drivers of sustainable supply chain integration in large Russian oil & gas companies were indicated including strategic, governance, and cultural drivers of sustainability.

Keywords: *Circular Economy, Closed Loop, Supply Chain, Sustainability, Sustainable Supply Chain Management*

1. Introduction.

With the growth of sustainability agenda importance globally, more firms are looking at opportunities to adopt sustainability into their value chain. This trend is supported with a growing number of sustainability research, including those which indicate a possible connection between firm's performance and sustainability leadership (Ioannou, Serafeim, 2019). Special attention is paid to the issue of integrating (or adopting) sustainability in supply chain management projects, since such projects have a serious potential to influence performance of business (Bose, Pal, 2012). In terms of academic relevance this remains a hot topic for research, since there is a high need of more empirically driven research dedicated to sustainable supply chain, especially in developing and emerging markets like Russia.

Prior research by Jin & Zailani (2010) has shown that risk management, corporate social responsibility and socio environmental considerations of the firms serve as three antecedents of green value chain, following with adoption of green business activities, resource and capability management, that in its turn follows by achievement of additional triple bottom line performance of business. A more integrated approach is seen today in comprehensive theoretical models such as Sustainable Supply Chain Management Integration models (SSCMI models, e.g. Wolf, 2011 or Carter, Rogers, 2008). The aforementioned approach includes such drivers of adoption and SSCM performance as stakeholder integration capability, sustainability strategy and appropriate sustainable performance measures, internal activities including training and integration, risk and supplier management.

Along with other sustainability predictors we know also that the governance mechanisms play an important role in adoption of sustainability at the corporate supply chain levels, with different

sustainability profiles (sustainability leaders, practitioners, traditionalists), collaboration, centralization and formalisation approaches (Formentini, Taticchi, 2016; Vurro et al., 2009).
Another important factor that we pay attention to is the influence of organizational climate, entrepreneurial orientation of company and individual values of managers on organizational commitment to adoption of sustainability in supply chain management projects as proper cultural attributes have the possibility to adjust behavior to both organization and even the whole community surrounding supply chain (Vincenza Ciasullo, Troisi, 2013; Gattiker et al., 2014; Marshall et al., 2015; Mariadoss et al. 2016;).
Following the theoretical framework of SSCMI we also pay attention to the issue of collaboration with suppliers, and specifically at influence of sustainable supplier cooperation, with focus on green practice suppliers (Hollos, Blome, Foerstl, 2012).

2. Research aim

In markets where wide sustainability adoption is still on the early rise, investigation of antecedents and drivers of sustainability becomes a top priority research question (e.g. research of green value chain initiatives in Malaysia, by Jin & Zailani, 2010). The objective of this research is to find antecedents and drivers of adoption of sustainable supply chain management in emerging countries like Russia using the sample of large corporations.
The choice of large corporations as an object of research is justified since the process of sustainable supply chain integration may require serious resource constraints (Wolf, 2011) that only large market leaders are capable to conform to, and get benefit from (Bose, Pal, 2012). Another reason for studying large companies stands for their existing adoption of supply chain management, since some studies even indicate, that a lack of proper activities within the field of Supply Chain Management (SCM) and lack of Supply Chain Orientation (SCO) can be a predictor of failure for sustainable development projects in emerging countries, even if investments are at hand (Diniz, Fabbe-Costes, 2007). For these purposes large Russian oil & gas companies were chosen, as they have both the experience in SCM and proper resource base suitable for adoption of sustainable supply chain management.

3. Methodology

The theoretical framework of the paper uses Sustainable Supply Chain Management Integration models. The paper uses a multiple case study approach to bring new insights on the antecedents and outcomes of sustainable supply chain introduction in the emerging market context. Value chain analysis (VCA) is used in every studied case since with its modifications it allows maintaining focus on obtaining possible competitive advantages offered from managing and social and environmental welfare (Fearne et al, 2012).

4. Data

We use the data from Gazprom, Rosneft, SIBUR, Lukoil companies. In the research we combine primary and secondary sources of data and applied triangulation procedure to obtain reliable results that address the questions formulated above. The primary data were collected through face-to-face interview with company representatives. The secondary data were obtained from open sources (i.e. mass media, data bases, company's official website, etc.).

5. Results and Discussion

The case analysis allowed us getting a number of drivers of sustainable supply chain integration including strategic, governance, and cultural drivers of sustainability. Even though there were identified a number of differences between the cases studied, a number of similarities were also found that go along the theoretical framework of the SSCMI model and a number of previous findings.

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Joint Working Capital Management in Supply Chains

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Abstract:
The research is devoted to joint working capital (WC) management in supply chains (SC) aiming to improve joint WC management methods through minimization of financial SC costs on WC using SC finance (SCF) solutions. Although in recent years the topic of SC finance has gained academic attention aiming at its applicability to financial SC management to relieve access to capital sources, there are uninvestigated areas such as managerial perspective of SCF solutions use. Thus, the research suggests the managerial algorithm that contains four developed models: the model of Collaborative cash conversion cycle (CCCC), two model of SCF solutions and the model of joint WC optimization. The models imply using such SCF solutions as Factoring, Reverse Factoring and Inventory Financing to improve joint WC in terms of costs on WC and liquidity of both SC members and entire SC and to provide the optimal conditions of SCF solutions use to achieve the results. Quantitative optimization with SCF solutions use demonstrates on the cases of SCs the improvement of financial position and liquidity of all SC members. The research has strong potential to de applied in businesses since the algorithm represents a comprehensive managerial tool for joint WC management in a SC. It may be used to achieve optimal cash conversion cycle values for minimal SC costs on WC constrained by liquidity and profitability target levels.
Keywords: *Working Capital Management, Collaborative Cash Conversion Cycle, Supply Chain Finance, Supply Chain Finance Solutions, Reverse Factoring, Inventory Financing*

1. Introduction

Nowadays companies come across such difficulties as access to capital, increasing competitions of the market, etc., which lead to difficulties with liquidity, solvency and finding sources for financing their operational activity. Therefore, companies have been focusing on managing financial flows of supply chain (SC) rather than ones of individual company (Gupta and Dutta (2011), WC management has become important in FSC management.

The research goal of the paper is to improve the joint WC management methods through minimization of FSC costs using SCF solutions.

2. Literarure Review

Many studies show that sharing of WC is financially beneficial for all members (Hoffman & Kotzab (2010); Talonpoika et al. (2016); Protopappa-Sieke & Ralf (2017), however, there is lack of methodology to identify proper way of WC management in SC (Caniato et al., 2016). SCF demonstrates a gap of adequate application of SCF solutions for improvement WC management. Managerial perspective of SCF solution adoption remains yet uninvestigated (Zulqurnain et al., 2018).

The paper considers WC of direct 2-stage SC which are upstream and downstream parts. The reason to that is the contractual agreements that define bilateral relations, so both members are motivated to increase joint profit being under specific coordinated types of contract.

As a measure for joint WC of 2-stage SC CCCC is used. Hofmann & Kotzab (2010) define it as a sum of the cash conversion cycles of all members of SC. It shows number of days when capital is tied-up within business activities of a SC (Wang, 2019).

3. Methodology

4 models were developed and combined into an algorithm to demonstrate how they can be applied for joint WC optimization in SC: the model of CCCC, two model of SCF solutions (Factoring/Reverse Factoring and Inventory Financing), and the model of joint WC optimization.

The model of CCCC aims to minimize total financial costs on WC by changing CCCC components under the specific constraints: liquidity-profitability tradeoff constraint and member's costs on WC. The results are optimal values of CCCC components to achieve minimal total costs on WC. The model may provide, however, solution which implies fulfillment of unrealistic conditions and cannot satisfy financial interests of SC members. SCF solutions allow to avoid it.

The models of SCF solution imply Factoring/Reverse Factoring or Inventory financing use. The former is to facilitate longer payment terms for buyer and shorter period of cash receipt for supplier through involvement of financial intermediary. Inventory financing is beneficial in the following way: supplier sells its inventory to LSP and gets money for it as fast as possible while manufacturer buys it from LSP as close to demand occurrence as possible. In between LSP takes legal ownership of inventory. It allows SC members to reduce its amount. Objective function of both models includes additional costs associated with SCF solution adoption. As a result, the models provide optimal conditions of Factoring/Reverse Factoring or Inventory Financing to achieve minimal total SC financial costs on WC.

The model of joint WC optimization implies simultaneous adoption of Factoring or Reverse Factoring and Inventory and provides optimal usage conditions of both solutions to achieve minimal total SC costs on WC.

Consistent application of the models represents the algorithm to manage joint WC in 2-stage SCs.

4. Empirical results and conclusions

Since the used method is optimization modelling of non-linear programming problems, it is impossible to obtain results in closed form. Thus, the cases to check the robustness of joint WC management methods represent 6 two-stage SCs from three different industries: FMCG sector, ICT, and Automotive one. The results of cases analysis show that the model of CCCC allows to find optimal solution for all cases regardless initial financial and liquidity position of SC members; however, the model provides unrealistic results for those SCs where CCC of at least one SC member lies outside stability interval, which resolves liquidity – profitability tradeoff. SCF solutions models and joint WC optimization model help to avoid unrealistic results. But separate adoption of SCF solutions cannot fully optimize liquidity and costs of joint WC in SCs. In contrast, the model of joint WC optimization is able to provide optimal solutions for all the cases.

Developed models of joint WC optimization allow to reduce total SC costs on WC and achieve greater liquidity both individual and one of SC. The algorithm which includes these models represents the managerial tool and may be used by businesses from different industries, consulting companies, different intermediaries as banks or logistics service providers.

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4PL Flexibility in Business Models

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Abstract:
Current development of delivery types in various business models makes logistics schemes numerous and more complex. Supply chain and its efficiency or agility (or together) become one of the key factors to win in market competition. The flexibility of logistics used in business models vary depending on chosen way to compete. The role of 4PL has incredibly changed the forces in supply chains. 4PL became creators of business models and main innovators in the market. Technological development also contributes to this transformation. Based on internet planforms services 4PL are not needed to be a big company, it could be the smallest (in terms of assets) company, managing all other participants, but it should be the most flexible among them. The paper is devoted to the description of theoretical background for 4PL innovativeness.

Keywords: *Supply Chain, Business Model, Innovation, Fourth Party Logistics*

The role of 4PL in competitive business models

The classification of logistics providers identifies 4 types of sets of functions for which they are responsible. Accordingly, the first level providers are manufacturing companies that are responsible for delivery by their own transport. So here we can imagine transportation task as just deliverance from point A to point B without any optimization schemes. The second level includes companies that have vehicles and are external logistics service providers. Typically such companies are called transportation companies and their main task is to optimize utilization of vehicles. At the third level of classification, consulting is added to the logistics functions, that is, logistics companies already partially assume management functions, including responsibility for the results of the logistics component of the company. The fourth-tier providers include operators that do not have any transport or other capacities, but are centers of competence. At the same time, such companies should not only have knowledge in the field of logistics operations, but should also be competent in market trends. As they create the supply chain based on their knowledge about the market they define supply chain strategy and innovativeness level.

Even within one discrete firm the management could use two or more business models to compete in various market areas and business segments. For example, in B2B service environment several delivery models are in use, from direct delivery source-to-customer to classic make-to-stock. Direct source-to-customer model relies on cost efficient delivery, according to customer's request, logistics care from source to destination. Make-to-stock model uses such standards as high availability, rapid delivery, logistics care from warehouse to destination.

Source-to-customer models are in use when project delivery, direct delivery and engineered-to-order delivery are needed. On the contrary, delivery from stock (or consignment) and consolidated delivery are in place when we talk about make-to-stock model.

When 4PL needs to be used in a business models described above, we need to give the 4PL provider a clear task to fulfil our and customer expectations. This concept referred to as Clean Order that describes requirements for the order as following:

- Right Product in the…
- Right Quantity from the…
- Right Source to the…
- Right Destination in the…
- Right Condition at the…
- Right Time with the…

- Right Documentation for the…
- Right Cost.

Operationalization of such model is imbedded in Just In Sequence (JIS) concept where the supplier deliver an order just in time for production and concrete resource that is needed for the next production step. This approach is popular for car manufacturers and also several companies in Russia are implementing it already.

Technologies as prerequisites for transformation

In Industry 4.0 there are several new tools and tasks for supply chain management (Hebnev, Sverchkov). Among them are 1) Predictive event management in supply chains using Internet of Things, 2) Lowering of transactional workload with robots; 3) Increasing transparency and flexibility using big data; 4) Creating new value for customer in supply chains with new automatized interaction tools between vendors, customers. For example, 4PL provider could interact with the customers directly by punch-out catalogues to satisfy demand (examples may include NLMK group with class B MRO requests from internal customers and Wildberries integration of vendors catalogues in the firm's sales platform).

Recently, 4PL are also called "virtual" logistics companies due to the fact that they organize the network business using the global information space and operate in the global market. The literature describes as examples of online stores such as eBay, Aliexpress, Amazon. Nevertheless, it is worth noting that these companies do not position themselves as logistics operators. Other examples of companies that provide integrated supply chain services based on modern information technology capabilities include Küehne + Nagel International AG and DHL, which have so-called Control Towers, that is, information centers that act as platforms for aggregating data on logistics flows and external factors affecting the supply chain system.

Such organizations use the "Control Towers" approach, aggregating huge amounts of information across all streams. Such control centers are used to be information hubs, they can serve the purposes of one client-company, then they are created on its basis, and can serve many different customers, in this case, most often this hub is a "superstructure" of the logistics operator.

This information flow provides maximum transparency of the supply chain, the ability to track cargo, control costs, and also allows to increase the speed of reaction to external factors. These factors could include both demand fluctuations and natural or market changes that affect the supply chain.

4PL as flexible owners of supply chain

Applying the strategy of a logistics operator of the fourth level, the company leaves the category of service providers, and becomes the "owner" of the supply chain, creating it to meet the needs of the final customers. The classic model of supply chain suggests the 4PL as outsourcer for any client, basically manufacturer, but in reality we can see the situation where all functions are outsourced including production. As an example of such companies could be, organizations that place orders for production in countries where it is most profitable, still most often in China, then hiring a third-level logistics operator to arrange transportation to markets. Such companies retain solely the management function, which is characterizes them as "owners" of the supply chain. So we can assume these logistics providers as "Solution builder" with a high level of innovation activity and "Fast Follower" with low innovation activity according to the BCG's classification of innovation types (BCG, 2017). The degree of their dependence on any capacity is practically minimal, as they don't have any assets, allowing them to be as agile as possible, and the market knowledge requirements are extremely high. From the knowledge economy point of view, these innovation models are most closely associated with the competence of logistics providers of the fourth level, which, based on the idea to create full-fledged supply chains to meet customer needs, while maintaining maximum flexibility.

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The Problem of Supply Chain Profit Maximization Using Sales Rebate Contract

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Abstract:
The paper considers the problem of supply chain profit maximization using the sales rebate contract. The problem solving is proposed for the two-echelon supply chain model with risk-neutral partners (supplier and retailer) and the assumption of triangular distributed demand. It was shown that the sales rebate contract is not coordinating in general, as it does not fulfill the condition of individual rationality for the supplier. The authors considered conditional coordination of the supply chain with sales rebate contract, when the expected profits of the supply chain and the retailer reach their maximum, and the supplier's expected profit is greater than for the case of the wholesale price contract. It can be argued that the sales rebate contract implementation under certain conditions is beneficial for both partners involved in the supply chain and provides the maximum of the supply chain expected profit. The algorithm for constructing a coordinating sales rebate is proposed. To verify the algorithm for constructing a coordinating contract, the case of the pharmaceutical supply chain was investigated.

Keywords: *Supply Chain, Profit, Supply Chain Coordination, Coordinating Contract, Sales Rebate Contract*

1. Introduction

The total financial result, such as profit, of a supply chain depends on the decisions made by supply chain partners. At the same time, each company involved in supply chain seeks to maximize its own profit, that often has a negative impact on the total result of supply chain. However, it is possible to motivate supply chain partners to make decisions, maximizing supply chain profit and achieving an acceptable profit level for each partner through coordinating mechanisms, one of them are contracts.

The research is aimed at solving the problem of supply chain expected profit using coordinating sales rebate contract. The study explores a two-echelon supply chain consisting of a supplier and a retailer. An algorithm for constructing coordinating sales rebate contract is proposed and carried out on the data of the pharmaceutical company.

2. Theoretical background

Among different supply chain coordination mechanisms, coordinating contracts have been increased attention by researchers and practitioners. Coordinating contract is a contract, which provides the maximum of the expected profit of the supply chain. The contracting process can be represented as a game of two players: a supplier and retailer. Constructing a coordinating contract comes down to solving such a game. The coordinating contract must ensure the fulfillment of two properties: individual and collective rationality (Cachon, 2003). Individual rationality means that the solution is a Nash equilibrium and ensures the maximum expected profit for each supply chain partner. Collective rationality implies that the solution is Pareto-optimal and ensures the maximum of supply chain expected profit.

The paper investigates the sales rebate contract, according to which the supplier pays the retailer a rebate per unit sold by the threshold of sales volume set by the supplier (Taylor, 2002, Cachon, 2003).

3. Supply chain coordination with sales rebate contract under the assumption that demand has a triangular distribution

The problem of coordination is considered for two risk-neutral players: a supplier and a retailer, which interact under the sales rebate contract, and the supplier has exceptional market power. As the first step the supplier offers the retailer the wholesale price per unit (ω) and the amount of rebate (r) paid per unit sold above the established threshold (t). In response to the supplier's offer, the retailer chooses the volume of products (q) which maximizes her profit. The retail price per unit (p) is not discussed.

The construction of a coordinating contract consists of the following steps:

1. Determination of the optimal purchase volume for the retailer (q_R^*);
2. Determination of the wholesale price value ω^*, at which the optimal solution for the retailer coincides with the optimal solution for the supply chain ($q_{SC}^* = q_R^*$);
3. Determination of the parameters r and t, at which the expected profit of the supplier ($E[\pi_S]$) is maximum for obtained q^* and ω^*.

The solution of the supply chain coordination problem is given in the assumptions that demand has a triangular distribution. As a result of the problem solution, the optimal values of the purchase volume and the wholesale price were defined. However, the condition of individual rationality for the supplier is not fulfilled, because the supplier's expected profit function does not reach its maximum.

In order to show that a sales rebate contract is still profitable for the supplier, a restriction on the parameter t was found, in which the supplier's expected profit is greater with sales rebate contract than with the wholesale price contract.

4. Constructing a coordinating sales rebate contract for pharmaceutical supply chain

Let us now consider the solution of the supply chain coordination problem for the case of pharmaceutical industry. The supply chain considered consists of an international manufacturer - supplier and a company selling specific products to medical institutions - retailer. The product to be analyzed is a reagent for which the following initial data are known: the retail price per unit (p), the manufacturer's costs per unit (c_s), the retailer's costs per unit (c_r) and the salvage value per unit (v).

The solution to the problem of coordination was given in the assumption of a triangular law of distribution of demand. As a result of statistical testing of this hypothesis for this reagent, this assumption was confirmed.

The result of coordination problem solution have shown that the function of the supplier's expected profit does not reach its maximum, as it infinitely increases in r and t. For any value of the parameter t, the supplier's expected profit in the wholesale price contract is lower than in the case of the sales rebate contract. Thus it was demonstrated for the case of pharmaceutical industry that the sales rebate contract coordinates the supply chain under certain conditions.

5. Conclusion

The coordination problem solving for two risk-neutral supply chain partners is proposed under the assumption of triangular distributed demand. It was shown that the sales rebate contract does not coordinate supply chain. However, the sales rebate contract provides the maximum of supply chain and retailer's expected profits and under certain conditions the supplier's expected profit is greater than with the wholesale price contract. In this case, the contract allows to achieve conditional coordination.

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Cluster Approach to Evaluation and Analysis of Regional Transport and Logistics Complexes

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Abstract:
In recent years, the issues of strengthening inter-regional relationships, increasing the efficiency of trade between regions and countries, and improving the management of transport flows are becoming increasingly important. The purpose of this work is to assess the level of development and to conduct a comparative analysis of regional transport and logistics complexes based on the cluster approach. The findings of the research are based on providing of algorithm for assessing regional transport and logistics complexes (RTLC) condition, proposing an effective system of indicators, which allows to combine regions into clusters, taking into account the degree and dynamics of transport logistics complexes development.

Keywords: *Regional Transport and Logistics Complexes, Transport and Logistics Clusters, Cluster Analysis, System of Indicators*

1. Introduction

Aiming to create a flexible, adaptive, cost-effective regional centers, which maintain the international requirements in terms of global competition, logistics management in Russia is going through a crucial period of reorganization. Regional transport and logistics complex largely determines the competitiveness of the territory in comparison with the other regions of the country or other cities that can also be centers of transport and logistics activity. The problem that this study focuses on is not only to consider the logistics complexes themselves of a single territorial unit, but also to develop an algorithm for assessing their condition, proposing an effective system of indicators and indicators, which allows to combine regions into clusters, taking into account the degree and dynamics of transport logistics complexes development, and the development of methods for calculating the regional logistics index. The cluster approach is reflected in many documents and agreements at the international level. For example, the European Cluster Memorandum was presented at the European Presidency Conference on innovation and clusters organized in Stockholm on 22-23 January 2008. Up-to-date regulatory and legal framework and developed measures of state support for the development of regional clusters in many areas of economic activity have created in Russia. Nowadays the transport and logistics clusters are the key forms of strategic alliances in many countries and business domains. In Central and Eastern Europe today there are about 25 major and 60 secondary transport and logistics clusters.

Companies in cluster offer and realize a full range of infrastructure logistics services - from planning and construction of logistics objects and systems to advisory services for managing of the flows of materials/cargo and supply chain management in region. In Frankfurt-am-Main, Germany there is a transport and logistics cluster, which includes Lufthansa, Deutsche Bank Group, and many companies engaged in small and medium-sized businesses.

2. Contribution

The purpose of this work is to assess the level of development and to conduct a comparative analysis of RTLC based on the cluster approach. The results and conclusions of this analysis will help to develop recommendations for effective management of regional logistics in their innovative development.

To achieve this goal, the following tasks should be solved:

1. Analysis of domestic and international practices devoted to the formation and functioning of regional transport and logistics clusters (TLC), as an effective form of developing the innovation infrastructure of a company.
2. Development of methodological regulations for the use of mechanisms for the creation, coordination of activities and cooperation of participants in TLC under specific conditions.
3. TLC concept application for development of regional innovation infrastructure, creation of corporate databases and mechanisms for interaction with universities and research organizations.
4. Conducting cluster analysis and identifying groups of regions according their socio-economic development and the development of regional transport and logistics complexes.

3. Methodology

Research Methodology includes systematic approach and cluster analysis, which is a convenient way to identify homogeneous groups of objects.

The authors propose to consider the cluster as a regional environment that enables organizations to flexibly form strategic alliances from external environment, as a flexible combination of resources and capabilities required for the rapid development and introduction to market innovative, competitive products and services with high consumer qualities.

The advantages of clusters are a qualitatively new level of organizational capabilities and efficiency of operational and innovation processes, which are achieved through:

- synergies from the accumulation and sharing knowledge between partners,
- formation of new networks and forms of cooperation within the merged systems,
- effects of scale and diversity.

There are many different clustering procedures, but the practical difference is the differentiation between hierarchical methods and centroid-based clustering (primarily, the k-means clustering) (Everitt B.S., *et al*., 2011):

- hierarchical clustering;
- k-means clustering.

Each of these procedures has its own approach to grouping the most similar objects into clusters.

Agglomerative procedures are probably the most widely used of the hierarchical methods. They produce a series of partitions of the data: the first consists of n singlemember ‘clusters’; the last consists of a single group containing all n individuals. The basic operation of all such methods is similar, and will be illustrated for two specific examples, single linkage and centroid linkage. At each stage the methods fuse individuals or groups of individuals which are closest (or most similar). Differences between the methods arise because of the different ways of defining distance (or similarity) between an individual and a group containing several individuals, or between two groups of individuals (Everitt B.S., *et al*., 2011).

The k-means method forms exactly k different clusters located at the greatest possible distances from each other. In this study, both approaches are used, depending on the specifics of the indicators and the sample size.

4. Empirical results and conclusions

The solution of the regions clustering problem justifies need to use of different indicators which have the most significant impact on the placement of elements of regional transport and logistics complexes. The authors propose to divide them into the following groups:

- Social and economic environment of RTLC (12 indicators);
- The scope of activities RTLK (10 indicators);
- RTLC resources (9 indicators);

- Technological level of RTLC (8 indicators).

Classification of regions into homogeneous groups will allow in the future to make valid strategic decisions related to the cluster policy and improving the efficiency of regional transport and logistics centers in Russia.

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Efficiency-based Leadership in the Banking Sector

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Abstract:
Nowadays, organizations have faced extremely competitive situations due to uncertain, dynamic, and complex environment in the business market. In the strategic management research, competitive advantage and organizational performance are linked, and organizations prefer to follow the leaders in such an environment but more efficiently. In this research, we will develop a new data envelopment analysis (DEA) model based on the gaps in the literature, theoretically and practically. This research contributes to the leadership literature with the investigation of efficiency-based leadership among a set of rival organizations and in the DEA models with developing a new model according to the initial assumptions. From the practical point of view, we will test the applicability of our developed model in the banking sector to find the leader among 100 Melli bank branches in Isfahan city of Iran. The results will help managers to follow the right organizations as a leader according to the competitive dynamics and neo-institutional theories.

Keywords: *Leadership, Efficiency, Data Envelopment Analysis, Efficiency-Based Leadership, Common Set of Weights*

Organizational performance is a critical subject matter in strategic management research (Combs et al., 2005). Indeed, the focus on performance differentiates strategic management from other fields (Meyer, 1991). Therefore, the strategic management field and operational management must focus on theories and methodologies that help explain and improve organizational performance especially in service industry (Samsona et al., 1999; Storey and Easingwood, 1996) which is linked with competitive advantage and survival in the current competitive, complex, and dynamic situations (Fridgen et al., 2015). In such situations, managers use different tools to stabilize the conditions inside of their organizations to make their organizations and related functions manageable and predictable (Tung, 1979). In other words, the underlying argument concerning competitive advantage and organizational performance is the notion that an organization should select either to follow what other organizations are doing especially the leader, but more efficiently, or to pursue differentiation from other organizations to be successful in the business market (Porter, 1998; Mackelprang et al., 2018). In this regard, some studies (e.g., Wu, 2010; An et al., 2017; Zhu et al., 2017; Zhuo et al., 2018, Li et al., 2018) addressed to organization level and its efficiency as one of the most prominent characteristics of leadership (Hiller et al., 2011) and introduced efficient organization as a leader among other competitors.

As organizations face highly competitive situations for customers, they obviously seek to compare themselves with their competitors and imitate first mover, most visible, and competitive positions as leader in the market (Smith et al., 2001; Lieberman and Montgomery, 1998; Gulati and Gargiulo, 1999) to keep their distance from leaders and competitive positions in the business market. It is a crucial decision for survival and making a profit, especially in an uncertain environment (Lieberman and Asaba, 2006; Giachetti and Torrisi, 2018). However, leaders don't compare themselves with competitors anymore. Instead, they compare their current performance with where they need to be as a leader, and that is what the business expects. In the past, it was familiar to benchmark organizational performance against "industry averages," and being "above average" was considered good. Today, "above average" is no longer good enough; fickle customers demand exceptional experiences and options. Delivering those experiences requires outstanding performance; otherwise, another company will steal your customers. Therefore,

identification of leadership to correctly imitate and keep their competitive positions is a central task for managers in each industry.

Among the service industries, the banking sector is perhaps the largest one that caters to the needs of people belonging to all sections of society (Sureshchandar et al., 2002). The banking system is considered as the backbone of the most economical countries and increasingly plays a vital role in the financial system development and economic development by mobilizing small deposits of the people in the household sector and leading them towards productive uses in industrial areas. Therefore, the performance of banking system not only helps achieve economic growth but also is the necessary condition for it (Zhao and Kang, 2015; Zimková, 2014; Wang et al., 2014). At the moment, banks are under pressure to increase their efficiency more than their competitors. They work with lower costs to achieve high efficiency and do not tend to do operations with moral damages.

Moreover, the analysis of efficiency is one of the stimulation ways of the banks toward the border of best performance methods (Barros and Wanke, 2014; Fioderlisi et al., 2010). Actually, most of the recent studies have been focused on the efficiency, such as Kamarudin et al. (2017), Wanke et al. (2016), Tavana et al. (2015), Barros and Wanke (2014), Kiani Mavi et al. (2013), etc. In this case, based on recent researches, one of the useful methods for efficiency measurement is Data Envelopment Analysis (DEA), a non-parametric approach.

According to the principles of DEA, in its basic models, there is primary hypothesis such as measuring inputs and outputs with enact values or real and definite factors, while the observed values for input and output data in real-world problems often include missed data, judging data, forecasting data or generally inaccurate and unclear data. According to the ambiguity, restriction, and complexity of judging data, expressing the size of variables with crisp values may have incorrect results. In return, variables with periods of fuzzy sets can be replaced with amounts of crisp value for expressing relative values with flexibility and without limitation, which in this regard, DEA models are developed with fuzzy data and then they are used (Saati et al., 2013; Saati et al., 2002).

On the other hand, primary models of DEA can divide decision-making units to two groups of efficient with the efficiency of 1 and inefficient with the efficiency of [0,1), so these models make no difference between efficient units and do not operate the ranking of these efficient units. Several ways have been suggested to solve this problem and to rank the efficient units in DEA that in between, common set of weights (CSW) method have been taken into consideration more (Jahanshahloo et al., 2010a; Kiani Mavi et al., 2013).

Also, in primary models, evaluating units are considered homogeneous and compatible, a principal and fundamental assumption, which means they have similar goals and duties, they consume same inputs and provide same outputs, and they activate in a similar operating environment (Charnes et al., 1978; Cook et al., 2012; Fathi and Izadikhah, 2013; Jahanshahloo et al., 2010a; Kiani Mavi et al., 2013; Palečková, 2017). Because of that, nearly all done researches related to DEA studies have considered DMUs homogeneous. While in real situation cases, the evaluation of unit's efficiency in a homogeneous environment will not happen, and the factors which made different settings should have been considered in assessment processes.

In this regard, Athanassopoulos (1998) points out that while bank branches are similar in terms of operation, they meet different environments in the market and lack of consideration of the factors outside the control of branches managers in performance evaluation will reduce their acceptance and support from this performance evaluation plan. These factors, as well as other environmental factors that are beyond the control of the managers in each DMU frequently called "exogenously fixed" or nondiscretionary, also need to be considered. Some examples of nondiscretionary factors in the DEA literature are the number of competitors in a restaurant chain and snowfall or weather in evaluating the efficiency of maintenance units and so forth (Jahanshahloo et al., 2010; Lotfi et al., 2007; Ruggiero, 1989; Banker and Morey, 1986).

Therefore, in this study, we will develop common weights model based on nondiscretionary inputs and fuzzy data using ideal point approach according to the explained

importance about the efficiency measurement of bank branches to identify leaders and the importance of environmental variables to address mentioned problems related to the primary models of DEA. Then, using related experts, 100 Melli bank branches in Isfahan city of Iran as our case studies have been evaluated to test the applicability of our proposed model and to identify leader branch in our bank industry. The results will contribute theoretically in DEA models to fill the existent gaps and to address the non-discretionary inputs for measuring the efficiency of homogenous DMUs. Also, practically in measuring efficiencies of DMUs and identification of leader in the industry among a set of homogeneous competitors.

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Identification of Factors Affecting the Implementation of the Internet of Things for Evolutionary Stable Strategy in Supply Chain Management

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Abstract:
Research object of this study is the IoT implementation in supply chain management. Research subject is the analysis of factors influencing the implementation of the Internet of Things in supply chain management and their contribution to the evolutionary stable strategy. The context of the research is the Russian telecom industry, which was chosen as the main provider and integrator of IoT solutions. For the purposes of the current research, the partial least squares regression (PLS method) was chosen in order to evaluate factors which affect the implementation of the IoT in SCM. The main result of the paper are: a comprehensive approach for factors evaluation was developed and applied to the Russian telecom industry; benefits and challenges affecting the Internet of Things implementation in supply chain management were evaluated based on the PLS method; based on the empirical part, relevant assumptions for the evolutionary stable strategy were stated and incorporated in the mode.

Keywords: *Logistics, Supply Chain Management, Internet of Things*

1. Introduction

The fourth industrial revolution, Industry 4.0, Internet of Things (IoT), interconnection are one of the most hyped words both in the corporate and academic environment. First publications on the Internet of Things (IoT) have started as early as 1992, and the topic remained of interest in the past several years as well. A considerable amount of research has been done with regard to the application of IoT to such considerably sexy industries as banking and finance, manufacturing, healthcare, consumer electronics, and cars. The topic will remain of interest to business, as it is expected that by 2020 the Global IoT market will grow to USD 457 billion, attaining a Compound Annual Growth Rate (CAGR) of 28.5% (Forbes, 2018).

No matter the industry, supply chain management and operations, and logistics are a crucial component of a company's survival and success in the market. As strange as it may seem, the area of operational management is not considered as of primary importance for IoT application by some researchers and executives. Due to these reasons, a holistic literature review in this narrow topic is still lacking despite the potential benefits that IoT can bring to the operational effectiveness of a company through its integration in supply chain management.

As technology and economics develop, there will be required further research and development efforts to investigate the industrial development and applications of the Internet of Things, which makes the topic relevant for academics in various areas. There are several directions in which further research can go, including such topics at the direction of IoT infrastructure development for a chosen industry, assessment of business models for delivery of products and services, estimation of risks and core risk bearers, analysis of decision models to attain optimal profit, synchronized production and transportation topics as well as the research on impact of service sharing on enterprises. Indeed, the IoT in supply chain management provides a variety of interesting topics to academics and researchers.

Mishra et al. (2016) state that there is a limited number of studies that look into the relationship between the IoT adoption and supply chain performance. Additionally, Whitmore et al. (2015) noted that the topic of the IoT is poorly presented in the management literature and in general the topic of the IoT concentrated of technological research, which lacks managerial conclusion.

Discussing factors that influence the IoT implementation, academic studies lack holistic, industry-specific cases, which could also use game theoretical approach for business purposes. So, industry-wide evaluation with a subsequent game theory model becomes the research problem of the current paper. In this paper solution is found in terms of evolutionary stable strategy (ESS). ESS can be considered as a refinement of the Nash equilibrium where individuals (in our case – companies) use the same rule for communication and interaction with each other. Stability in ESS refers to the fact that the strategy cannot be invaded by an alternative course of action.

Research object of this study is the IoT implementation in supply chain management. The context of the research is the Russian telecom industry, which was chosen as the main provider and integrator of IoT solutions. Research subject is the analysis of factors influencing the implementation of the Internet of Things in supply chain management and their contribution to the evolutionary stable strategy.

2. Methodology

The current research was stated as the development of an approach which will help evaluate both stop and go factors. The framework should serve the following purposes:

1. Give ad industry-wide overview of what perceived benefits promote the IoT implementation and what challenges impede the advance of IoT integration in SCM.
2. Take into account a company's perspective and be flexible to provide a company-specific recommendation with a check-list of what to improve in order to ensure smooth implementation of the IoT in SCM.
3. Take into account the profit generated from the IoT implementation for suppliers and core enterprises as well as the profit distribution (maximum survival in Evolutionary Game Theory terms)

Once the developed method is designed, it is applied to a chosen industry.

The paper at hand uses mixed method research. The mixed method offers a better insight into understanding the incentives behind firms' decisions to adopt IoT than just the use of either the qualitative or quantitative method alone (Tu, 2018). It is assumed that the mixed research method can successfully bridge the qualitative and quantitative research gap, as it helps to generalized the qualitative findings with the help of quantitative methods. It blends the merits of both research methods and, moreover, helps to cross-reference data in order to deepen the understanding of the topic researched. Since the goal of the paper is to provide a more in-depth understating of the IoT adoption in SCM, the mixed research will provide better insights than a single method. Detailed guidelines for mixed research methods in supply chain management can be referenced in Golic and Davis (2012).

The qualitative part of the research includes the choice of factors which might affect the implementation of the IoT in SCM via literature review and its justification based on the review of preliminary findings with an expert in the field. On the other hand, the quantitative part takes the findings of the qualitative phase and further develops the research approach applications: data will be collected via survey for the case industry and data analysis will be performed using the partial least squares (PLS) statistical method in XLSTAT. XLSTAT is a statistical software for data analysis in Excel. Each of the stages is further described in the paper in details and the practical implication of the approach on the specific company is discussed in details in Chapter 3.

As a result of the work done, the author came up with the following visual representation of the developed research approach (Figure 1).

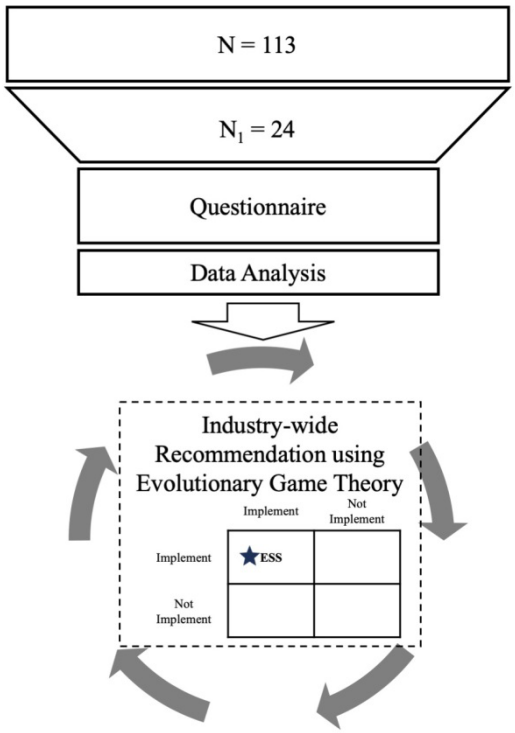

Figure 1 Visualization of the research approach

We can see that the research approach consists of several steps:

1. Gathering of factors.
2. Narrowing down based on the industry specifics and expert interview.
3. Design of a questionnaire which will help gather data for further interpretation.
4. Analysis of data collected and its subsequent inference.
5. Recalculation of the obtained evolutionary stable strategy point through some time period (Deming cycle rationale).

The steps and justification of the rationale behind them are described in consecutive stages later in this chapter.

3. Data and sample

In order to conduct the empirical study, a data sample of 16 responses from employees of the Russian telecom companies was obtained via survey. Tto obtain the 16 responses more than 150 e-mails and messages were distributed via digital communication means. As far as the target group for the survey is concerned, two considerations were introduced. Firstly, the survey targeted Russian telecom companies, as they are the largest vendors and solution providers of IoT-related technologies and RFID tags. The majority of companies (56%) have between 2000 to 5000 employees. For the purposes of the current research, the partial least squares regression (PLS method) was chosen in order to evaluate factors which affect the implementation of the IoT in SCM. Having analyzed the data at hand with the PLS method and having understood the main motivating benefit and stop-factors in form of the main challenges for the industry, we can theorize on the next step approaches for further analysis using the Evolutionary Game Theory approach.

4. Empirical results and conclusions

Based on the results of the research, the following theoretical and managerial implications can be derived.

Theoretical Implications:

There are several factors that indicate that the current work contributes to contemporary academic literature. The research brings together concepts of TOE framework, partial least squares analysis, evolutionary stable strategy and evolutionary game theory. The work has managed to create an extensive list of factors, narrow them down to the most relevant for the purposes of the research and industry and empirically interpret them.

The main theoretical contribution of the current paper is based on the development of a comprehensive, holistic and complex method for benefiting and challenging factors evaluation and further mathematical model for the evolutionary stable strategy. It is also possible to conclude that the proposed method is not specific for supply chain management and logistics field only. On the contrary, the developed approach may be implemented for identification and analysis of factors motivating to implement and impeding the implementation of any new technological breakthrough in any business process of any sector, and the only adjustment necessary is the incoming identification of relevant factors. It may be suggested that the developed method aims to support the decision making on prioritizing bottlenecks for improvement in accordance with their significance.

Managerial Implications

As far as the managerial implication is concerned, the paper ensures several conclusions. Companies do really think that the implementation of the IoT in supply chain management can benefit the business process and improve effectiveness. Such an improvement is tracked to all three levels of the TOE framework and is related both to suppliers and core enterprises.

The prospects of the IoT integration in the supply chain are obvious, while the analysis of challenges is not that straight-forward. Organizational unpreparedness of enterprises and suppliers acts as the main bottleneck for a complex IoT integration. This unpreparedness is reflected in the perceived high costs associated with new technologies and the necessity of business process transformations. Technologically companies are repelled by the seeming immaturity of the IoT and low understanding of how to implement the technology. However, the most surprising challenge is related to the environmental part. Although companies strive for personalization and better product development, they are afraid that once the IoT is implemented and the informational flow from the customers becomes clear and evident, companies will not be able to cope with customers' demands and growing needs.

The evolutionary game theory implies that it is important to monitor the market situation and chose a time when to go for the implementation strategy. In this regard managers should pay attention to the fact, that the implementation of the IoT can maximize profit in accordance with the relevant size of a company (namely, the bigger the company, the bigger chunk of the generated profit it can gain), and the free-ride strategy will impose some monetary punishment on the company.

By the prioritization and elimination of the organizational bottlenecks, namely process modernization and cost concerns, companies will be able to increase their digital savviness and improve supply chain efficiency. Additionally, the elimination of these factors will allow the telecom industry in the name of core enterprises and suppliers to ensure profit maximization. In order to eliminate the challenges listed the following cost of action can be recommended. Technology- and operations-wise it is possible to find those technologies that are both mature and suitable for the current business processes. Such an approach will not disrupt the existing supply chain flows but will help to enhance and develop those elements of the process which produce stable and optimized results. A gradual implementation can be seen as a way of mitigation of major risks associated with IoT integration.

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The Digital Contribution into Effectiveness and Efficiency of the Public Sector

Do Merger Policies Increase Universities' Efficiency? Evidence from a fuzzy Regression Discontinuity Design

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Abstract:
This paper focuses on the effect of merger policies in Russia on universities' efficiency. We consider one particular type of involuntary mergers conducted by Ministry of education based on universities' performance indicators. At the first stage we estimate efficiency scores using bootstrapped DEA non-parametric technique. The efficiency scores were evaluated for universities that were merged and for appropriate control group which was formed by propensity score matching approach before and after implemented policy. Then, fuzzy regression discontinuity design was conducted to reveal the impact of mergers on efficiency level. We find non-linear statistically significant effect of merger policy on universities' efficiency. The results of the analysis suggest that merged universities experienced greater efficiency gains (smaller efficiency declines) after the merger was implemented.

Keywords: *Higher Education, Efficiency, Mergers, Public Policy in Higher Education, Data Envelopment Analysis, Regression Discontinuity Design*

1. Introduction

Massification of higher education, integration of national higher education systems, struggle for high positions in international rankings and pressures to higher efficiency in use of public resources force the universities and policy-makers in the field to look for new strategies of the development. Universities' mergers are often considered as one of the possible policy instruments that aimed at responding to mentioned challenges. There is a lot of evidence in existing literature that mergers may lead to desired positive outcomes. Firstly, economic theory predicts that establishment of the organization of relatively larger size allows consolidating resources and improving efficiency level when universities' production process can be represented by production function with increasing returns to scale (Papadimitriou & Jill Johnes, 2018). Secondly, mergers may cause positive outcomes for strategic development of universities because enlargement of organization may improve its global competitiveness and positioning in international rankings, enhance its reputation (Valimaa et al., 2014; Harman and Harman, 2003). These considerations about possible effects of universities' mergers have their consequences for public policy in higher education. Despite universities are often considered as an organizations that are resistant to change (Rantz, 2002; Clark, 1998) mergers of higher education institutions were implemented in many countries – in Denmark (Aagaard et al., 2016), Romania (Andreescu et al., 2014), Spain (Delgado and Leon, 2015), Norway (Kyvik and Stensaker, 2013), China (Mok, 2005) to name a few.

2. Research design and methodology

In order to explore how mergers influence the efficiency level of universities involved in the merger process we employ methodology that consist of three steps. Firstly we form appropriate sample using propensity score matching algorithm. Secondly, we estimate the efficiency of universities before and after merger using bootstrapped data envelopment analysis (DEA) methodology. Finally, we consider the efficiency change before and after merger and use it as an outcome variable in fuzzy regression discontinuity design. We utilize the fact that the assignment to the treatment is based on the Monitoring of Performance' results, meaning that all universities assigned to the treatment has "inefficient" status given by the Ministry of Science and Higher Education.

3. Results

The results of the analysis suggest that merged universities experienced greater efficiency gains (smaller efficiency declines) after the merger was implemented. This effect is observed despite the fact that efficiency was not declared as an aim of the studied policy. The aim of considered mergers was to eliminate universities with low level of performance and increase the performance in the whole sector by imposing sanctions for poor performance. However, identified treatment effect is observed only in comparison of treated universities with very similar ones that were not treated.

The identification of significant impact of mergers on efficiency level presented in the paper is a first step towards understanding of how mergers in higher education may influence efficiency level. The research design of this study does not allow to reveal particular channels through which merger process may influence efficiency. We have highlighted several potential ways – economies of scale effect, economies of scope effect, changes in managerial practices after the merger. The treatment effect identified using regression discontinuity design can be interpreted as a total influence of all possible factors. The deeper analysis of the effect and its decomposition can be considered as a possible direction of further research. Another important limitation of this study that can be studied further is a comparison of efficiency's dynamics between treated and non-treated universities. Some empirical papers discussed in literature review section show that the positive effect of merger on efficiency level can be observed only just after the merger and disappear in subsequent years, therefore it is necessary to check the hypothesis about effect of merger on efficiency in the long-run.

This study can also be considered as an example of how regression discontinuity design can be used for reform evaluation in public sector. Most papers that employ this kind of methodology use individual level data. We implement regression discontinuity design on institutional level. However, in order to use regression discontinuity methodology for these purposes we should have the reform with clear process of selection of treated units and formalized mechanisms of treatment. The example of Monitoring of Performance is suitable case since the "inefficient" status is assigned based on the observed quantitative criteria, so we can clearly define forcing variable and cutoff point.

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Corporate Governance and Financial Performance in the EU Agencies

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Abstract:
Object of this paper is answering the research question: "Is state-of-art financial management of help in fulfilling the institutional goals of EU Agencies"? Corporate performance depends on sound administrative support. In the case of the European Union Agencies, a reform agreed by the Council, the Commission and the European Parliament provided a unified schema for the funding acts. In a previous work evidence has been provided that uniformity of funding acts and standard auditing methods indeed have improved financial performance, but at the same time have reduced overall corporate performance: the ability to take into account some of the objectives of the Agencies' stakeholders represented in the Board of Directors. In this paper pros and cons of applying public sector audit practices to Agencies that should provide services in an unstable and evolving environment are challenged. Standard financial performance reports of the EU Court of Auditor that attribute poor values to the budget without context-related considerations, can have potential negative effects on the ability to react to changes in the environment.

Keywords: *Agencification, Corporate Governance, Funding Act, Financial Performance, Principle of Annuality, Carryover*

1. Introduction

The term "historical town" was entered into professional and academician vocabulary in the middle of the 20 century almost simultaneously in Russia and abroad as reaction to huge losses of the heritage sites during the World War II. Particularly in 1955 – 1956 The International Commission for the History of Towns launched initiative on developing historic towns' atlases (Mikhaleva 2013). In the Soviet Union first list of the historical towns was adopted by decree of the Committee for Architecture of the Ministers' Council of USSR "On Preservation of the Historical Towns and Setting Theirs Key Plans" in 1946 and include 10 cities. Further throughout 20th century this list was revised several times and by now it includes 41 towns. So now it is a specific group of settlements which has a preservation statute as complex object of cultural heritage in accordance with legislation.

This study aimed to unveil the factors which undermine the tourism potential of the small historical towns and explain the gap between tourism potential and attractiveness of the particular historical settlements for the tourists and further suggest receipts for policymakers addressing the preservation and valorization of cultural heritage and providing the state support to tourism development in small historical towns.

2. Policy Agenda

Issues related to the preservation and development of the historic towns are raised at policy documents of federal level, particularly, in Strategy of Spatial Development of the Russian Federation up to 2025 adopted in 2019 and several draft documents: The Concept of the Federal Targeted Program "Socio-economic Development of the Small Towns", "Concept of the Development of the Historical Settlements… up to 2030". Mentioned above documents are setting agenda for the development of the historical towns. Amongst declared goals and principles there are integrated approach to development and preservation of the heritage, competitive basis for provision of the federal grants, support and promotion of the cultural and touristic opportunities.

However, yet none of these documents suggest mechanisms for implementation and so it raises a number of practical questions and, in particular, questions addressing assessment of the tourist potential, mechanisms for competitive selection of grant recipients etc. Meanwhile as some researchers point out (see, for example, Khodachek and Shamahov, 2017) there is a contradiction between the touristic potential, significance of the unique cultural resources and the touristic attractiveness of the settlements in Russia. The presence of these resources in historical towns per se often does not enough for the successful attraction of visitors. Thus cultural endowments of the historical may be used effectively in case the touristic potential is accompanied by high rate of attractiveness and vice versa.

3. Data and methodology

Over the past years the issues addressing the tourist potential were in focus of many studies (see for example, Hudenkih 2006, Tulskaya and Shabalina 2012, Gudkovskih 2017) and various methods and criterions for its assessment were suggested. The authors of these studies analyzed the tourist potential at different levels of hierarchy starting from single heritage objects and sites, municipalities in specified regions and federal districts and finally with comparison of the tourist potential of the whole regions within the country. However historical towns were not a subject in any of these studies whilst they have significant specifics which cannot be accurately assessed in total cross-municipal or even regional surveys.

First of all high concentration of the cultural heritage stands out historical towns from other municipalities and direct comparison to them would be misleading. Secondly historical towns are strewn across the whole country so that the transport accessibility is a significant factor which could be disregarded when the study focuses on the municipalities located in the same region. Important role is also played by availability of tourist infrastructure elements including accommodation, dining, leisure and recreation facilities which are crucial for the tourism industry. These aspects are specifically important for the smaller size towns beyond metropolitan areas to take the advantages of their historical and cultural variety. Finally none of the mentioned above studies were aimed to analyze the gap between the rate of the tourist potential and attractiveness, i.e. number of tourists visiting the destination.

Thus suggested approach to assessment of the tourist potential and the analysis of the gaps between potential and attractiveness presupposes 3 groups of criteria:

- Aggregated historic and architectural values of the cultural heritage sites located in the historic settlement (assessment based on official data on protection status of the cultural heritage objects);
- Geographic location and accessibility of the historic settlements (assessment of accessibility from metropolitan and regional centers, total population, living in within certain distance, distance from airports, cross-border gates, railway stations, other tourist attraction sites an routes etc);
- Availability of tourist infrastructure including accommodation, dining, leisure and recreation facilities.

Further study adopts ranking scales for each set of criteria and aggregated assessment of the potential used for comparison with number of visitors on per annum basis. This assessment allows to estimate the degree to which the tourist potential converts to the tourist visits and identify historical towns where conversion rate might be higher, i.e. potential is underused.

Findings and Conclusion

The difference in number of the tourist visits amongst small historical towns is significant. It varies from 1,7 mln people per annum in most popular amongst tourist Suzdal to 60 thousands visitors in Gorokhovets which located in same region in central Russia and to less than 10 thousands in Kargopol located in the north part of the country.

Combination of high rank of tourist potential and low level of attractiveness may be described as a case of lost income for the historical town and requires further analysis. The gaps

may derive from quality of the tourist product, tourist and transport infrastructure and the detailed analysis may answer the question which type of actions should be undertaken. Particularly if the gap is explained by quality of the tourist product the policy measures may include action aimed to improve preservation and museumfication of the cultural heritage object located in the historical settlement, redesign and promotion of the tourist products.

In case of the gaps derived from quality of the tourist and transport infrastructure the agenda for such historical town will be focused actions related to the support of SME and attraction of investors to HoReCa sector, negotiation of PPP with potential investors in transport infrastructure etc.

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Evaluating the Gap between Tourist Potential and Attractiveness of Small Historical Towns in Russia

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Abstract:
In recent years federal authorities in Russia undertook a number of initiatives to shape public policy on spatial development of the country and address the issues of regional and urban development. These initiatives raised the discussion amongst both experts and officials about fate of the smaller towns and settlements. Small historical cities constitute a special group of settlements, which on the one hand are characterized by typical problems of social and economic development attributing to small towns in Russia including amongst the most acute depopulation, crisis of labor market and the deterioration of urban infrastructure. On the other hand, the cultural heritage of which these cities are the possessors and custodians is a resource capable to provide, under certain conditions, a significant driver of the economic growth through tourism development.
This study carries an attempt to understand the factors which undermine the tourist potential of the small historical towns and explain the gap between potential and attractiveness of the particular historical settlements for the tourists and further suggest receipts for policymakers addressing the preservation and valorization of cultural heritage and providing the state support to tourism development in small historical towns.

Keywords: *Small Historical Towns; Cultural Heritage; Tourism Potential, Tourist Attractiveness; Public Policy; Evaluation*

1. Introduction

The term "historical town" was entered into professional and academician vocabulary in the middle of the 20 century almost simultaneously in Russia and abroad as reaction to huge losses of the heritage sites during the World War II. Particularly in 1955 – 1956 The International Commission for the History of Towns launched initiative on developing historic towns' atlases (Mikhaleva 2013). In the Soviet Union first list of the historical towns was adopted by decree of the Committee for Architecture of the Ministers' Council of USSR "On Preservation of the Historical Towns and Setting Theirs Key Plans" in 1946 and include 10 cities. Further throughout 20th century this list was revised several times and by now it includes 41 towns. So now it is a specific group of settlements which has a preservation statute as complex object of cultural heritage in accordance with legislation.

This study aimed to unveil the factors which undermine the tourism potential of the small historical towns and explain the gap between tourism potential and attractiveness of the particular historical settlements for the tourists and further suggest receipts for policymakers addressing the preservation and valorization of cultural heritage and providing the state support to tourism development in small historical towns.

2. Policy Agenda

Issues related to the preservation and development of the historic towns are raised at policy documents of federal level, particularly, in Strategy of Spatial Development of the Russian Federation up to 2025 adopted in 2019 and several draft documents: The Concept of the Federal Targeted Program "Socio-economic Development of the Small Towns", "Concept of the Development of the Historical Settlements… up to 2030". Mentioned above documents are setting agenda for the development of the historical towns. Amongst declared goals and principles there are integrated approach to development and preservation of the heritage,

competitive basis for provision of the federal grants, support and promotion of the cultural and touristic opportunities.

However, yet none of these documents suggest mechanisms for implementation and so it raises a number of practical questions and, in particular, questions addressing assessment of the tourist potential, mechanisms for competitive selection of grant recipients etc. Meanwhile as some researchers point out (see, for example, Khodachek and Shamahov, 2017) there is a contradiction between the touristic potential, significance of the unique cultural resources and the touristic attractiveness of the settlements in Russia. The presence of these resources in historical towns per se often does not enough for the successful attraction of visitors. Thus cultural endowments of the historical may be used effectively in case the touristic potential is accompanied by high rate of attractiveness and vice versa.

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Over the past years the issues addressing the tourist potential were in focus of many studies (see for example, Hudenkih 2006, Tulskaya and Shabalina 2012, Gudkovskih 2017) and various methods and criterions for its assessment were suggested. The authors of these studies analyzed the tourist potential at different levels of hierarchy starting from single heritage objects and sites, municipalities in specified regions and federal districts and finally with comparison of the tourist potential of the whole regions within the country. However historical towns were not a subject in any of these studies whilst they have significant specifics which cannot be accurately assessed in total cross-municipal or even regional surveys.

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The New Role of Talent and Human Resource Management in International Business

Inclusiveness of Employees with Childcare Commitments in Different Work Systems: Russian Case

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Abstract:
The paper presents the first phase of the research aiming to reveal legitimate solution for raising inclusion of employees with childcare commitments. The research focuses on questions: how firms understand inclusion of this marginal group and why they engage in it; acknowledged barriers for inclusion and factors shaping legitimacy of possible interruptions. The empirical part of the research grounds on the Q-methodology, thus, the goal of the first phase is to analyze the councourse - a 'flow of communicability' for this social topic, in order to prepare the Q-set – a sample of the most relevant initiatives from the concourse. For this goal, the comprehensive literature review intersects perspectives of two research domains: gender inclusion for revealing the content of initiatives and strategic Human Resource Management for defining the context of them. It results in nine options for each of the three analysed Work Systems, forming a concourse of 27 statements; and the final Q-set consisting of nine final initiatives, pre-sorted for the Q-sort in the Russian context. The research decouples findings from the feminism agenda or gender studies and treats parenting as part of a personal identity work. There are several applications of findings: to acknowledge the list of possible initiatives sorted according to their legitimacy for different business context; to understand the reasons behind each item in the set; to learn from contradictions of their previous approbation.

Keywords: *Childcare, Fatherhood, Gender Inclusion, High-Commitment Work System, High-Involvement Work System, High-Performance Work System, Motherhood, Parenting*

1. Introduction

The issue of employees with childcare commitments inclusion derives from the feminist research. However, recent raise of men's engagement into the child-rearing shifted research agenda from exploring gender specificity to an analysis of the identity work, associating inclusion with a voluntary enhancement of work environments through offering support for a diverse workforce by fostering a sense of uniqueness and belonging for all employees (Shore et al. 2018). The research perceives parenting as part of gender identity. Thus, the comprehensive literature review focuses mainly on the highly ranked journals interested in gender research that suggests many feasible inclusion-related initiatives. However, postcolonial feminist positions offer to re-examine Western feminist theories, their epistemological assumptions and general beliefs; as such theories have been produced based on positions of power and privilege in the West, while the "Rest" could face significantly different socio-cultural, political and economic processes and thus, may produce novel concepts and practices related to understanding identity and management activities (Ozkazanc-Pan, 2012).

Russian context, being part of the "Rest", provides a very insightful illustration of searching balance among contradicting requirements of work-related and parenthood-related identities. In Russia feminization of work conditions started much earlier than in the West, in 1918th and, contrary to the western liberal feminism, was pioneered by government, resulting in

early equalization of women with men in rights regarding civil and educational concerns, and in obligation to work. Soviet government guaranteed women equality in salaries and provided intense support in fulfilling their childcare commitments, e.g. by providing free access to pre-school institutions, extending maternity leave and providing additional allowance (Zavyalova and Kosheleva, 2010). A hundred years later, in 2018 the state Duma rejected the second draft of the law № 284965-3 that intended to define what is gender equality, introduce a gender quota in parties, guaranty equal rights in recruitment, remuneration system, and at defining such concepts as harassment, sexism, etc. A lack of consensus in society was mentioned among the reasons for the rejection.

2. Research questions

The main concern of the inclusion-oriented initiatives is their legitimacy for the chosen context (Harrison et al., 2018). High legitimacy is associated with five types of fit: institutional, organizational, individual, strategic and internal (Farndale and Paauwe, 2018). Balancing among these sources of expectations is usually a big challenge. However, referring to Work Systems as aspirational referent systems (Kosheleva and Bordunos, 2018) significantly eases the task of filtering the employees'-related initiatives. Such systems help to answer RQ1: What are the contextual limits of the initiatives' generalizability, affecting their legitimacy?

The research focuses mainly on the identity salience, inspiring RQ2: What are needing efforts for employees with childcare commitments to readjust their self-understanding and reach higher self-esteem despite perceived identity threats; and how might companies help in it - what is their motivation? Such internal process of self-construction in the given context is known as identity work: intersection of work-related and parenting-related commitments.

Traditional patriarchal contract is in the process of constant revision by the society and the organization members, incorporating changing requirements. Such "doing gender" motivates RQ3: What are barriers for inclusion and what is the attitude towards them by employees and employers?

3. Findings and conclusion

The main outcome of the research is a list of 9 inclusion-related initiatives. We referred to the deductive approach for the Q-sample construction: a 3 × 3 factorial design bracketed by three Work Systems times three aspects of AMO framework, produced 9 possible cells to categorize opinion statements: upraise line-managers' responsibility; introduce sponsorship and provide a training on stress-resistance; role review; exit-interviews; empowerment of entrepreneurial profile; adding visible signs of a family-friendliness; introduce support for working fathers; encourage affinity groups.

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Diversity-driven Talent Management and its Relationship with firm Performance

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Abstract:
Diversity creates for business both: new challenges and new opportunities. The positive relationship between diverse workforce and firm performance is proven by number of studies. This is the reason why diversity management becomes a strategic task for the companies. The easiest way of diversity management realization at firm-level is HRM practices with diverse focus.
This study explores gender-diverse talent management practices in the context of emergent market. Being a part of HRM, talent management is system of practices, addressing to the most effective employees of the firm. Our goal is to investigate specificity of gender-diverse talent management practices, examine the determinants, driving these practices at firm-level and assess their impact on firm performance. Focusing on female talent we analyze data from 300 MNC operating on the Russia market. We find positive relationship between gender-diverse talent management practices and firm performance, identify groups of determinants, influencing gender-diverse practices significantly, and specify the role of the emergent market context.
Our results have several theoretical, context-specific and practical implications in diversity management and talent management fields.

Keywords: *Talent Management; Gender Diversity; Female Talent; Russia*

1 Purpose of the research

The research problem is linked to several significant issues have to be highlighted: importance of diversity and gender diversity in particular (Miller, 2007; Eagly & Carly, 2015), its link to firm performance (Carter & Wagner, 2011), and positive relationship between talent management practices and firm performance (Latukha, 2015), whereas females as special talent group attracts attention from researchers (Bohmer & Schinnenburg, 2016). We claim that further understanding of how management of diverse talent groups may influence firm performance is needed (Tarique & Schuler, 2010). For this purpose, following research questions were formulated.

RQ1. What specifics of talent management practices for female talent exist?

RQ2. What factors influence talent management practices of diverse talent groups, female in particular?

RQ3. Is there any relationship between gender diverse talent management practices and firm performance?

2 Research methods

2.1 Questionnaire

The questionnaire contains 92 questions is created with a purpose of survey. Following blocks of questions are included: general information regarding the respondent's profile, factors influencing gender-diverse talent management at firm-level and country-level, questions about talent management practices oriented on gender diverse talent groups and firm-performance questions.

2.2 Respondent selection

The sample of MNCs headquartered in Russia or the subsidiaries of foreign companies operating in Russia are created. The target group of respondents is middle or senior HR managers working in Russia in the Russian and foreign companies which practice talent management of diverse talent groups. For collecting 300 - 400 HR managers' data, Alumni database of Graduate School of Management (GSOM) of Saint-Petersburg State University and HR conferences will be used. Questionnaire will be distributed via internet by e-mail and in way of hard-copy.

2.3 Data analysis

Following methods of data analysis were used: content analysis, descriptive analysis, exploratory factor analysis, ANOVA modelling.

3 Preliminary results

The preliminary analysis is performed at the point of 100 respondents collected.

3.1 Country-level factors

We identify that the lowest influence on gender-specific TM practices have government regulations and laws related to women, however, among the highest are gender stereotypes related to the social roles of men and women and work-life balance issues. The exploratory factor analysis confirmed the assumption that all country-level items explaining one concept: country-level factor, which explains 57,6% of variance.

3.2 Firm-level factors

Firm-level items were analysed by exploratory factor analysis. As a result, 4 items were deleted, other items were divided in 4 factors, which cumulatively explain 63,1% of variance: the first factor "stakeholders expectations and company reputation" accounts for 33,5% of the variance, the second "*talent and management diversity*" - 12,4%, the third "organizational environment."- 9,2%, and the fourth "innovation and creativity" - 7,8%

3.3 Firm-Performance

The relationship between gender-diverse talent management and firm performance was assessed in two ways: in general, and by groups of practices (attraction, development and retention). As a result, 37,3% of the variation in the firm performance can be justified by the variation in the gender diverse talent management practices.

"Attraction" variable has the largest influence on firm performance(b=0,330) has "Attraction" variable, next goes "Development" (b=0,293) coefficient and the smallest and insignificant is "Retention" (0,129).

4 Contribution

4.1 Theoretical contribution

We expect that the research contributes to diversity management studies (Endendijk et al., 2015) proving that management of diverse talent groups may influence firm performance (Collings & Mellahi, 2009; Collings et al., 2018)., thus we see the evidence for importance of diversity in an organizational context.

4.2 Practical contribution

We see that managerial relevance is linked to the empirical evidence of the role of diverse managerial practices, talent management in particular. As much said about importance of diversity in different organizational contexts, whereas the talk has mostly theoretical focus, we prove that diverse practices may influence firm performance. Specifically, we expect to have results about each talent management practice, namely talent attraction, development and retention, thus help companies to have precise focus in diverse talent management agenda.

High-performance Work Systems in Russian and Indian IT Companies

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Abstract:
The empirical verification of the relationship between High Performance Work Practices (further – 'HPWPs') and firm performance is one of the key topics in strategic human resource management (strategic HRM) literature for the past 25 years. This study aims to examine the HPW systems (further – 'HPWSs') in IT sector of two emerging markets, Russia and India. Our research design is based on the assumption that IT companies both in Russia and India use HPWPs which in turn contribute to organizational performance. Meanwhile the combination of these practices for each country is different and caused by institutional context. Thus, we stick with contingency (best fit) approach. By the use of well-known European quality standard "Investors in People" (IiP) applied in developed countries as a framework for the assessment of HRM system in organizations, we compare IiP with Russian and IT companies' HPWPs. Additionally, we identify those HPWPs that impact the performance of Russian and Indian IT companies. The findings, based on the survey in 132 companies, indicate that there are differences in HRM practices between Russian and Indian IT companies which construct particular HPWSs. Further, these systems impact differently on firm performance.

Keywords: *High-Performance Work Systems, High-Performance Work Practices; Performance, IT Companies, Russia, India*

Introduction

Knowledge-intensive companies are the organizations with their primary value-added activities consisting of the accumulation, creation or dissemination of knowledge for the purpose of developing a customized service (Bettencourt et al. 2002). They usually show superior innovation competences and develop new routines to improve products and processes, are able to create innovations in products and processes, hence obtaining higher levels of firm performance (Palacios-Marqués, Peris-Ortiz, and Merigó 2013). Being knowledge intensive, contemporary global IT industry deals with high technology and relies on some considerable investments in research and development, as well as in innovation.

The number of studies shows that the IT industry worldwide is quite sensitive to the changes in social and economic environment. One of the key external factors affecting the outcomes of IT companies is the labor market, and particularly the deficiency of IT professionals. In these conditions the strategic goal of IT companies is to establish such HPWS that will provide an efficient recruitment, utilization and retention of employees.

Our research design is based on the assumption that IT companies both in Russia and India use HPWPs which in turn contribute to organizational performance. Meanwhile the combination of these practices for each country is different and caused by institutional context. Thus, we stick with contingency (best fit) approach. By the use of well-known European quality standard "Investors in People" (IiP) applied in developed countries as a framework for the assessment of HRM system in organizations, we compare IiP with Russian and IT companies' HRM systems. Additionally, we identify those HPWPs that impact the performance of Russian and Indian IT companies.

Thus, the research questions can be expressed as follows:

Research question 1: What types of HPWSs are used by Russian and Indian IT companies?

Research question 2: What in the relationship between HPWSs and performance of Russian and Indian IT companies?

Theoretical Background

The idea of HPWSs is based on a bundle perspective where a set of interrelated, internally consistent and mutually supportive HRM practices could contribute to superior outcomes. These outcomes could cover the improvement in works attitudes (employee satisfaction, commitment, trust, motivation), behavior (employee turnover, absence), productivity and quality of services and products (Paauwe and Boselie, 2005).

Different synergistic HRM practices construct specific HPWSs. There are three types of HPWSs (control, high-commitment and high-involvement) with the following attributes:

- *control HRM system:* high labour specialization, fixed task assignments, direct control, formal organizational structure, low level of employee participation in decision-making process and giving specific training to employees
- high-*commitment HRM system:* flexible work design, comparatively high involvement of employees in decision making process, indirect supervision, informal organizational structure, job rotation, regular quality circles and giving general training to employees
- high-*involvement HRM system:* schemes to promote employee discretion and autonomy such as formally designated teamworking, quality circles or problem-solving groups; systems of communication that allow for upward communication of employee suggestions as well as downward communication from management; and serious attention to developing employee skills.

Data and Sample

We used the cross-sectional survey design. The questionnaire for the survey was prepared on the basis of the well-known European quality standard "Investors in People" (IiP). All the items were the closed format questions. The section included the factual items (e.g., 'What HRM

practices are used in your Company?') and attitudinal items (e.g., 'How satisfied are you by the current HRM practices in your Company?').

The following performance indicators were included: net profit and sales volume.

The methods of data analysis were the descriptive statistics (Research Question 1) and regression analysis (Research Question 2).

Participants were selected on the basis of non-probability sampling. The initial convenience sample consisted of 58 Russian and 74 Indian IT-companies. All these companies are software developers; hence their competitiveness is completely dependent on the intellectual capital of the employees.

Empirical results and Conclusions

The results can be summarized as follows.

Firstly, we identified that there are differences in HRM practices used in Russian and Indian IT companies. Russian IT companies actively use decentralized participative decisions which are frequently considered as an important HPWP (Posthuma, Campion, Masinova, Campion, 2013). Employees are delegated with authority and are provided with necessary information for the decision-making. Internal recruiting is often used as a tool to fill the vacancy and also as instrument for career management. Multiple selection tools (screening, testing, interviews) are implemented to choose the most suitable professional. The particular measures (e.g., quality of goods and services) are used to evaluate the training outcomes. The most popular forms of training are mentoring, funded training opportunities and in-house training of employees. The regular feedback about the performance is given to employees through appraisal interviews. The current findings also correspond with the previous research (Zavyalova, Kucherov, Tsybova, 2018) that in IT industry, companies with high quality and high productivity orientation need people with innovative thinking and creative mind. To develop these competencies, the extensive and continuous training initiatives are implemented. Training extensiveness and decentralized participative decisions show that sampling Russian IT companies have the high-involvement HRM system.

Indian IT companies, in contrast, do not use the internal recruiting. Instead, companies are ready to recruit the applicants from the external labor market. To evaluate their competencies psychological tests and interviews are used. Respect for employees is the core corporate value. There is no mismatch in communication flows to employees from managers. The individual contribution is highly appreciated and rewarded and the feedback is given from supervisors to subordinates. These attributes show that sampling Indian IT companies have the high-commitment HRM system.

Secondly, we found that both Russian and Indian HPWSs related to performance. At the same, there are differences in the set of HPWPs which related to performance between two institutional contexts.

Thirdly, we compared the well-known European quality standard "Investors in People" (IiP) applied in developed economies with the existing HPWSs from two developing economies, Russia and India.

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Double Work of Women in Russia

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Abstract:
The work is devoted to the problem of gender discrimination of women in the labor market in Russia. The authors identify two main reasons for the current income situation. They analyze the statistics of executive positions that women and men held and the distribution of home duties in the family. The authors conclude that the stereotypes that rule today in the family are the basis of the double work of women in Russia. The dominance of the patriarchal type of interaction holds this model both for women and men. Authors discover a discrepancy between the norms that dominate under women and their real place. In authors' opinion, this also increases discrimination against women in the labor market

Keywords: *Gender Inequality, Labor Market, Executive Positions, Domestic Responsibilities, Stereotypes, Patriarchal Type*

Introduction

The most significant problem of gender inequality in Russia is the gap in labor remuneration - on average, female salary was 71.7% of the male salary in 2017 [8]. There are two main reasons for this situation. First, women less often than men occupy executive positions; secondly, there is an unequal distribution of home duties. This affects the involvement of women in the production process.

Executive positions

Let's look at the results of the research of Grant Thornton International. It says that Russia continues leading in the number of women in leadership positions (47% of managerial positions). However, if we look at the level of posts and activity areas, we will see that they mostly talking about the middle management but not the highest management level.

About 23% of female managers head HR departments, 19% are in the position of financial director and 12% - in the position of executive director. But fewer women are at the top of the career ladder: as IT manager they make up 4%; company president 3%; managing vice president 3%; company director 3%. According to the international research of the World Economic Forum, there are only 25% of firms in Russia with a woman as a top manager. And we still are not talking about political leadership with 16% women in the parliament, and 10% in ministerial posts.

We see disproportion among women and men in managerial positions for the Russian economy is an actual reality, a better situation is only among middle managers.

Home duties

There is a very unequal distribution of home duties in the domestic sphere. We see the distortion in the distribution of the women's daily fund of time and it is not in favor of employment.

In Russia women devote less time to formal work and pay more attention to unpaid domestic work - this is evident from the statistical information about the distribution of the daily fund of time of people working in urban areas at the age of 15 years and more for 2015.

The work takes 34% of the total fund of time for men, while for women it is 29.8%. The male population more uses work-related non-working time (5.3% vs. 4.0% for women); free time (11.9% vs. 9.0% for women); time to meet physiological needs (43.1% vs. 42.8% for women). Women overtake men only in terms of housekeeping: for women, 11.2%, for men, 3.7%.

Housekeeping is divided into 7 categories, in six of which (shopping, cooking, washing dishes; washing, ironing, sewing; cleaning the rooms; taking care of children; other types of work) costs of time for women is bigger than costs of time for men. The only exception is the item "receiving

household services”, where there are 2 min. for men and 1 min. for women. The largest differences are noted in the items “child care” (27 min.), “purchase of goods” (16 min.), and “care for the room” (12 min.).

It follows from the above that men in Russia pay very little attention to their children and that they almost do not help women in housekeeping.

At the same time there is the opposite situation in the category of "free time". It includes 9 items, and in eight of them men win (visiting the cinema; watching television; reading; hobbies; playing sports; moving to a place of rest; other kinds of recreation; social activities). Only the sub-item “walks” takes 5 minutes for men, and 7 minutes for women.

It turns out that Russian women are forced to devote a lot of time to housework, while their husbands have a lot of free time.

Stereotypes in the modern family as the basis for the double work of women in Russia

In the article O.N. Kalachikova and M.A. Gruzdeva compares the views of women and men on the interaction of marrieds in the family. The authors believe that one of the main problems in the family today is the unclear status of women who takes over double work, performing not only women's functions, but also the male function of increasing material well-being.

In the opinion of researchers, Russian society looks at women through the prism of motherhood and ignores her motives and interests outside the family. The patriarchal type of interaction holds this model and causes discrimination against women in the Russian labor market.

Today, the roles of breadwinner and chapters no longer belong only to men. 19% of men surveyed believe that the wife should fulfill the role of head of the family, and 54% of men who are married say that she is already the head. And only 20% of men believe that the wife should perform the function of a breadwinner, 58% of respondents say that she already performs it. From the general picture of the responses it is clear that the roles of the mother and the housewife dominate for the woman in mind of our society.

The majority of women respondents say that the husband in the family is the father, protector, owner, leader, earner (from 83% to 73% of respondents). But the proportion of women who answered which of these roles the husband should fulfill is much less (from 65% to 43% of the respondents). This shows the instability of male roles in the family and their rethinking.

Conclusion

Summarizing the two reasons we have pointed out for the differences in the wage levels of women and men (difference in positions and in housekeeping), we understand that a Russian woman simply does not have time and energy (she wastes it for home duties) to provide themselves with the same level income as a man.

Involving in the role of a breadwinner, the wife feels the injustice of her position as husband does not assume some of the women's responsibilities (although we argue that some of the duties traditionally attributed to women’s are not like taking care of children). This state causes a woman to doubt in her own womanhood, in the manliness of a man, and leads to undermining the value of the husband for the family. This is the area of greatest risk of a new family lifestyle in our country and the risk of increasing discrimination against women in the national labor market.

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Recruitment Goes Digital. Challenges and Opportunities for the Russian Companies

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Abstract:
This paper investigates the origins of E-recruitment and address some challenges that Russian HRs meet. The results of the study "International trends in human capital for 2019" showed that the issue of digitalization of HR functions is in the top 5 priorities for Russian companies (SAP, Deloitte, 2019). Recruitment refers to one of such HR activities covered by technology (Thite, 2019). The data were collected from semi-structured in-depth interviews with the HR-representatives from construction, manufacturing, retail companies (4 cases) who are responsible for recruitment process and have already implemented any e-recruitment practice in their everyday life.
The results demonstrated that E-recruitment is introduced in order to improve efficiency, but there are some crucial challenges such as devaluation the expertise and professional experience of HRs.

Keywords: *Human Resource Management, Digital Human Resource Management, e-HRM, Traditional Recruitment, E-Recruitment*

1. Introduction

The goal of this article is to discuss the origins of e-recruitment and address some challenges of this practice in Russian companies. In 2017, Russia developed and approved a program for the country's transition to a digital economy that can be defined as "providing digital space for all spheres of life of the country".
According to experts, at present we are witnessing a “digital revolution” in the field of HRM, which is manifested both in the introduction of computer technologies in the processes of HRM and in a change in the structure and the corresponding competencies of HRs (Ulrich 2015; Huselid, 2018). The results of the study "International trends in human capital for 2019" showed that the issue of digitalization of HR functions is in the top 5 priorities for Russian companies (SAP, Deloitte, 2019). Recruitment refers to one of such HR activities covered by technology (Thite, 2019).

2. Background: E-recruitment. Methods of E-recruitment.

Since the middle of 1990-s, companies started to introduce electronic Human Resource Management (e-HRM, digital HRM and webbased HRM) (Bondarouk, T., & Ruël, 2005). The most cited definition of e-HRM is the following: e-HRM - the planning, implementation and application of information technology for both networking and supporting at least two individual or collective actors in their shared performing of HRM activities (Strohmeier, 2007).
Marler & Parry defined e-HRM more precisely: ‘configurations of computer hardware, software and electronic networking resources that enable intended or actual HRM activities (e.g. policies, practices and services) through coordinating and controlling individual and group-level data capture and information creation and communication within and across organizational boundaries’.
In general e-HRM is associated with cost reduction, service improvements, and reorientation of HR professionals (Ruël, Bondarouk, & Van der Velde, 2007), helps to improve efficiency, service delivery, standardization and organisational image (Parry, Tyson 2011).
According to (Ahamed and Adams, 2010), E-recruitment is “the practice whereby the online technology is used particularly websites as a means of attracting, assessing, interviewing, and

hiring personnel". E-recruitment could be defined as any recruiting process that an organization conducts using Web-based tools (Kim and O'Connor, 2009)

According to Deloitte (2018) there are 4 main tools that may be used in recruitment (so called HR Digital):

1. robots (e.g chatbots -virtual intelligent agent that can make intelligent conversations and negotiation with one or more human or virtual agents, in a specific domain) and AI (artificial intelligence);
2. automation of business processes: video and audio interviews, test programs, personnel assessment systems;
3. aggregation and uberization. Companies may use resume aggregators that collect CV of applicants who have posted resumes on job search sites, on social networks or professional communities. Also there are services for the interaction of employers and recruitment specialists, similar to the Uber model, when employers publish vacancies and recruiters send their offers.
4. BigData and analytics.

E-recruitment has several advantages such as its low cost (Galanaki, 2002), lower cost-per-hire (Pollitt, 2005), worldwide accessibility (Galanaki, 2002), vast pool of applicants (Kaur, 2015).

Drawbacks of e-recruitment are the following: disclosure of information, website malfunctions: it requires being computer savvy, and has legal consequences (Kaur, 2015).

3. Data and sample

Qualitative research is chosen since it will become possible to obtain a deeper knowledge of the issue: the data were collected from semi-structured in-depth interviews with the HR-representatives from construction, manufacturing, retail companies who are responsible for recruitment process and have already implemented any e-recruitment practice in their everyday life. Interviews were conducted in Russian language both in person and via Skype/telephone. The first task was to identify what E-Recruitment instruments are being used and the second task was to identify which advantages and disadvantages are being experienced by organizations using instruments

Key questions were the following:

1) What tools, information technologies do you use when selecting personnel?
2) What are the main advantages of digital instruments?
4) What are the main advantages of digital instruments?

4. Empirical results and conclusions

Main findings are listed in the following table:

Company	Tools (methods) of E-recruitment	Advantages of E-recruitment	Disadvantages of E-recruitment
Company A: manufacture	VCV , chat bot (HeadHunter)	1. *saves the time of HR managers that they will spend on mass recruitment;* 2. *it is possible to watch the video (VCV) for several times in order to check the candidate*	1. *time-consuming (it is important to list all possible requirements);* 2. *technical bugs.* 3. *expensive to maintain*
Company B: construction	customized chat bot for recruitment of linear workers, VCV	1. *fast, easy application process for an applicant;* 2. *do not need any supervision;* 3. *wide pool of*	1. *tools for mid-level and executive search are absolutely ineffective* 2. *costs*

		applicants	
Company C: retail	chat bot (HeadHunter), chat bots in Telegram, Viber, WhatsApp, Telegram-channel	1. *fasten the recruitment process* 2. *news about the vacancies reach the candidates many times faster, which increases the likelihood of the desired candidate responding specifically to our vacancy, and not to the announcement of our competitors*	1. *video interview at the initial stage of selection is necessary* 2. *there are no tools for hiring 'talents'(traditional recruitment process will be more effective)*
Company D: retail	Telegram, Viber, Facebook Messenger	1. *candidate is offered a comfortable form of "question-answer" interaction.* 2. *chat bot can be integrated into any channel (Telegram, Viber, Facebook Messenger)* 3. *the coverage of candidates is very significant: even those who do not have a home Internet are very likely to use one of the instant messengers on their mobile device*	1. *candidates do not take chat bots or other techniques seriously: someone does not answer essentially, someone "trolls" the bot as best he can, someone simply ignores it* 2. *high costs*

Respondents agreed that e-recruitment have certain advantages, such as less time-consuming process that can be extremely useful for so-called "mass recruitment"; it increases the probability of the desired candidate's response, helps to recruit personnel from different regions of the country. E-recruitment helps to analyze the degree of person-organization fit and clarify some ambiguities that recruiters have. E-recruitment helps to hire "millennials" and is widely used in graduate hiring programs.

Also the respondents highlighted some crucial disadvantages and challenges, such as costs of e-recruitment are high, limitations (there are no tools for mid-level and executive search, for hiring 'talents' and experts with some unique qualifications). All respondents admit that E-recruitment tries to make recruitment process a completely standardized product where efficiency and result are independent of human being and it devalues the expertise and professional experience of HRs. There are certain risks that the traditional recruitment process might be completely replaced by E-recruiting.

Despite the fact that the results of the study correspond to the latest findings in the field of e-HRM, this study has several limitations. The empirical part of this study is limited to Russian Federation (especially Saint-Petersburg and Moscow), and its economic and social domains.

Also our respondents were HR-professionals who are responsible for recruitment process. Further research should reflect the employees' perspective.

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Exploring the Essential Impact of Talent Management on Innovation Performance: An Ambidexterity Perspective

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Abstract:
Depending on the form, magnitude, referent and type of desired organizational innovation, a firm can be overwhelmingly oriented at maintaining a close relative balance between its potential and realized capabilities for 'absorbing' talent, whereas in other cases it can be focused on increasing their combined magnitude. Building on the organizational ambidexterity and absorptive capacity literatures, I argue that the balance and combined dimensions of a firm's capability to acquire, assimilate, transform and exploit talent resources rely on different causal mechanisms, thus making them conceptually distinct. I offer a conceptual framework that explores this relationship in relation to innovation performance and discuss the possible synergistic benefits that concurrent high levels of balance and combined dimensions may yield. It is expected that in resource-constrained and highly competitive contexts firms may benefit from a focus on managing trade-offs between potential and realized talent absorption capacity, but for firms that have access to sufficient resources, including international human capital (i.e. human capital, which is not firm- or location-specific), the simultaneous pursuit of potential and realized talent absorption capacity development is both possible and desirable.

Keywords: *Organizational Ambidexterity Perspective; Innovation Performance; Process-Driven Talent Management; Talent Acquisition; Talent Assimilation; Talent Transformation; Talent Exploitation*

1. Introduction

Considering talent investments may not yield immediate, visible results, it is rather difficult to make certain causal inferences. Even now, after nearly two decades of TM research, the "direction" and strength of the TM – firm performance relationship remain unclear. For example, in highly volatile, uncertain, complex and ambiguous contexts TM may not be seen as a priority for resource-constrained firms with limited organizational capabilities. As the implementation of TM practices may not actually lead to positive tangible outcomes in the first few years after integrating them into the HR system, there is a high chance of such firms allocating most of their resources to realize 'more immediate, important' organizational objectives, that would help them gain short-term profits and stay afloat, instead of engaging in rather costly TM. Additionally, when exploring the relationship between TM practices and firm performance (often proxied with financial indicators, such as revenue, profit margin, and sales growth), the "effect" of the former often gets overestimated due to omitted variable bias. The multiple organizational factors that can potentially explain the variance in firm performance are usually not accounted for in empirical TM studies, which is why some scholars advocate investigating the role of TM in more HR-related outcome-terms, e.g. knowledge transfer efficiency and absorptive capacity levels (e.g. Minbaeva et al., 2003; Latukha, Veselova, forthcoming).

In this paper, I investigate TM from the dimension of key absorptive capacity processes (I adopt an objective approach to defining talent) and explore its essential impact on innovation performance.

2. Theoretical foundations

Pertinent literature often emphasizes talent and TM practices as key sources of competitive advantage based on the straightforward assumption that both – individual talents with valuable, rare, hard to find, and difficult to replace knowledge as well as the dedicated set of HR practices

– disproportionally contribute to various aspects of organizational performance (e.g., Schuler, 2015). This conventional reasoning leaves much ambiguity in the understanding of the actual role of TM for global organizations. In particular, the underlying mechanisms of the effect of TM on organizational innovation are not properly investigated (cf. Chen, Huang, 2009). Specifically, it remains unclear how the peculiarities of different contexts (e.g., highly dynamic knowledge-intensive industries or emerging markets that experience profound institutional transformations and brisk economic growth) shape a firm's HR architecture with respect to innovation capabilities. Considering talented workers are of different backgrounds, TM practices dealing with them are not, and should not be, the same either (Al Ariss, Sidani, 2016). This results in divergent context-specific TM systems that prove to be effective only under very specific conditions and circumstances. Consequently, comparing firms in their TM endeavors as well as drawing the right conclusions on the basis of these comparisons are, to say the least, problematic. A possible solution is to move-up the ladder of abstraction and consider TM from the dimension of formal processes: e.g., the acquisition, assimilation, transformation and exploitation of internal and external talent resources (adopted from Zahra, George, 2002). The former two (potential talent absorption capacity, PTAC) reflect the variety of context-specific management practices, aimed at talent identification, attraction, recruitment and positioning, whereas the latter two (realized TAC) represent a firm's ability to 'grow' talents internally and fully realize their potential. Firms focusing primarily on the development of PTAC capabilities are able to continuously renew their knowledge stocks by attracting high-potential workers and expanding their talent portfolio, but they, however, risk losing short-term profits from not exploiting existing talent resources. At the same time, firms engaged in RTAC development gain benefits from developing their talented employees and exploiting their knowledge, skills, competences and experience to meet set organizational objectives, but risk falling into a competence trap (Volberda et al., 2010). In some cases, maintaining a balance in the relative magnitude of PTAC and RTAC is important as it contributes to firm innovation performance through more structured control of performance risk (balance dimension); meanwhile, considering though PTAC and RTAC take place in complementary domains (i.e., technologies and markets) they may not necessarily compete for the same resources and rather help leverage the effects of the other (combined dimension).

3. Methodology

The paper uses two concepts to organize the literature on process-driven TM: absorptive capacity and organizational ambidexterity. Based on [Cao et al., 2009; Raisch, Birkinshaw, 2008; Zahra, George, 2002; Latukha, Veselova, forthcoming; Kepes, Delery, 2008; Morris et al., 2016], I analyze the key value-generating TM processes, introduce the notions of PTAC and RTAC, and explore how they interact with one another (there could be an additive, positive interactive, or negative synergistic effect) in relation to innovation performance. In addition to TM research, I develop a framework that draws upon a number of non-HR literatures, such as the RBV perspective, dynamic capabilities, and strategic knowledge management, and explore the organizational settings and environmental conditions, under which optimal TM systems can be designed.

4. Results and conclusions

Depending on the type of desired innovation, organizational structure (i.e. talent portfolio configuration), and external environment conditions, a firm can be overwhelmingly oriented at maintaining a close relative balance between its PTAC/RTAC, whereas in other cases it can be focused on increasing their combined magnitude. Building on prior literature, I argue that the balance and combined dimensions of a firm's capability to acquire, assimilate, transform and exploit talent resources rely on different causal mechanisms, thus making them conceptually distinct. I offer a framework (Fig. 1) that explores this relationship, articulate a number research

propositions that the TM field now needs to prove, and suggest how research might now address these.

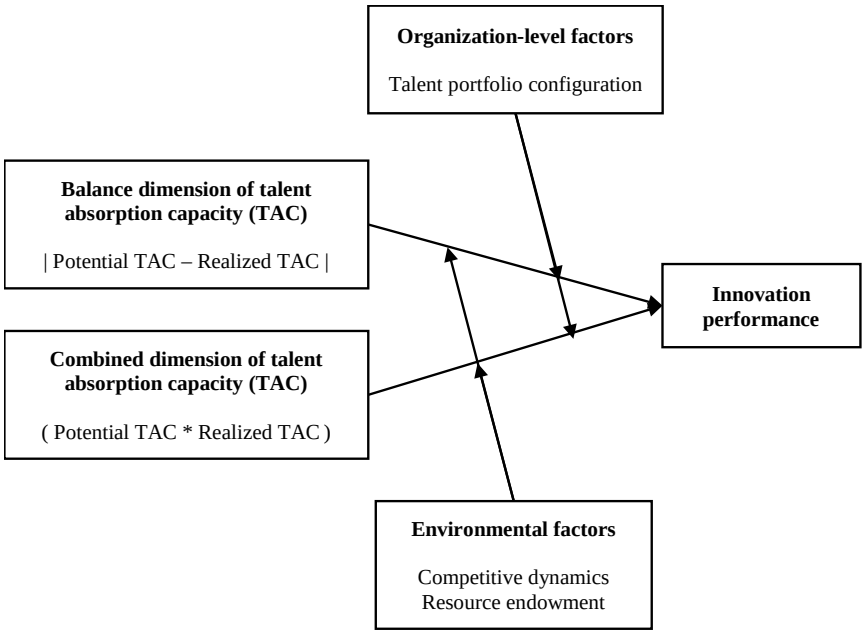

Fig. 1 Conceptual framework

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Gender-driven Talent Migration and its Implication to Talent Management

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Abstract:
This paper investigates gender-specific determinants of talent migration and the role of talent management practices in mitigating their effect in the Russian context. Using the data from 557 senior students which were considered as potential talent, we found that men and women are influenced by diverse factors when deciding on migration. While men are more prone to industry-level push factors, women are more sensitive to socio-individual push factors such as equality, status inconsistencies, and self-actualization. Moreover, both men and women who are notably influenced by push factors, highly evaluate the possibility of talent management practices to change their migration intention.

Keywords: *Talent Management, Gender Migration, Labor Mobility, Brain Drain, Diversity Management, Russia, Female Talent*

1. Introduction

There is plenty of research that study talent migration, in particular brain drain, its determinants, and consequences. However, less attention has been paid to the investigation of gender-specific talent migration (Dustmann, Schonberg, & Stuhler, 2016) though it is an important issue as their determinants may differ. Brain drain is of particular importance due to its possible negative outcomes for countries of origin (COO) among which are lower productivity of remaining workforce, losses of the investments made into those who left (Pires, 2015), and inequality (Bhagwati & Rodriguez, 1975). Drawing on both diversity management and talent management (TM) theories, we claim that TM practices applied with respect to gender in local firms may mitigate the influence of talent migration factors and prevent brain drain. The research is aimed at defining determinants of diverse talent groups' migration in the Russian context and assessing the role of TM practices in preventing gender-specific talent migration.

2. Theoretical Background

2.1. Gender-driven migration phenomenon and its determinants

Most research investigate migration through the combination of push and pull factors (Baruch, Budhwar, & Khatri, 2007). While the proportion of male and female migrants is almost equal (International Labor Organization, 2018), these groups have different reasons for migration (Docquier et al., 2012). For instance, women are sensitive to gender inequality and discrimination in a COO (Ruyssen & Salomone, 2018) making it a significant push factor in this gender group. Therefore, in order to prevent mass talent outflow, its determinants with respect to gender should be investigated in the first place.

RQ1: *What factors influence migration intentions of men and women and how are those intentions different with regard of gender?*

2.2. Turning brain drain into brain gain

Given the demographic changes, globalization, and increased competition, both TM and diversity management are of great importance for companies aiming at gaining competitive advantage and improving performance (Latukha & Veselova, 2018; Özbilgin, Tatli, & Jonsen, 2015). While TM addresses attraction, development, and retention of talent (Tarique & Schuler, 2010), diversity management promotes the inclusion of all employees (Özbilgin et al., 2015). It is claimed that TM may be connected to talent mobility (Collings, 2014). However, there is lack of empirical studies on this relationship. Having in mind the diverse nature of talent migration, as

well as potential link between TM and migration, the following research questions were formulated:

RQ2: *What is the role of TM practices in migration of diverse talent groups?*

RQ3: *How different TM practices serve as migration barrier and are able to attract and retain female talent?*

3. Data and sample

The quantitative research was done using data obtained from 557 Russian students – the most potential Russian students with high learning abilities, participants of "Management of the Future" conference. The respondents fit into the "talent-as-potential" definition (Silzer & Church, 2010).

The questionnaire consists of 206 questions is aimed at identifying demographic and other individual characteristics of the respondents, field of study, working experience, migration intention and push and pull factors that influence it, and evaluation of TM practices as means to change their migration decision. In the logistic regression the binary variable migration intention of a student was used as a *dependent variable*, whereas push and facilitating factors were used as *independent variables* measured with 7-point Likert-style questions.

After the factor analysis the following factors of migration were obtained: country-, industry-, socio-individual-level push factors, international experience, cultural adaptiveness, and family closeness. In order to evaluate the role of TM practices in migration of diverse talent groups, we elaborated a block of questions based on previous research.

4. Empirical results and conclusions

The results showed that women were affected by higher amount of factors than men. The most influential factor for men is industry-level push factor which represent salary level, innovativeness, competitiveness of chosen for future employment industries, investment in R&D. The most important factor for women is socio-individual factor, showing higher sensitivity of women towards self-realization, equality, status inconsistencies. Furthermore, for both men and women who are sensitive to the factors of migration, TM practices play an important role in changing migration intention. Talent retention practices which deal with performance assessment, compensation, and engagement, are the most influential among others.

Our research contributes to both theory of migration and TM theory by providing gender-specific perspective on determinants of migration and perception of TM practices. Moreover, we contribute to the studies of TM in emerging markets context by showing the new role that TM practices may play in solving such country-level issue as brain drain. Companies seeking for attracting and retaining talent should build TM systems with respect to gender.

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Talent Migration in Emerging Markets: Agenda for Global Talent Management

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Abstract:
Although the problem of talent migration (brain drain) is not new and many countries, especially emerging markets, experience it currently, there is no universal remedy for solving it. Most research connect brain drain with macro-level determinants (institutional, economic, political). Little attention has been paid to firm-level talent management (TM) as a possible tool for overcoming national-level brain drain. Using primary data from 557 talented graduates of Russian universities we find that business- and country-level push factors which determine their migration intension may be influenced by talent attraction, talent development and talent retention practices if implemented in local companies. The result implies the possible positive effect of TM development on brain drain problem at a country level.

Keywords: *Brain Drain; Student Migration; Determinants of Talent Migration; Talent Management; Strategic Human Resource Management; Emerging Markets; Human Capital*

1. Introduction

While scholars actively discuss policy implications that could mitigate brain drain adverse influence, a role of managerial actions and, specifically, global talent management (TM) practices are not linked directly to this problem. Hooks et al. (2007), for example, address how human resource management (HRM) practices can mitigate push factors that make valuable employees to emigrate, and reverse brain drain at the firm level. Within HRM framework, TM is perceived as the main tool of attracting, developing and retaining talent (Collings, 2014; Tarique & Schuler, 2010), which strongly implies its potential application to the problem of talent migration that is being experienced by emerging market countries, including Russia. In this paper we argue that TM practices may contribute to mitigating brain gain by providing mechanisms for talent attraction, development and retention at firm level, thus showing the importance and the new role of TM in overcoming macroeconomic challenges. We set the research questions aiming to investigate what factors influence migration intention of talented graduates and in which direction, and what is the role of TM practices in preventing brain drain in the Russian context.

2. Research motivation

2.1.Global talent management

Considering a very dynamic and turbulent environment, as it is now, there is need not only to achieve sustained competitive advantage through valuable and rare resources (Barney, 1991), but also to adapt and support organizations' systems to changes. Globalization, economy's complexity, dynamic environment, growing knowledge intensity, and increasing role of emerging economies makes talent a unique resource and a driving force for the economies around the world (Schuler, Jackson, and Luo, 2004; Ahammad, Glaister, Sarala, and Glaister, 2018). Those companies that fail to manage talent properly end up losing their competitive advantage on the global arena (Morris, Snell, & Björkman, 2016). In order to address the issue, global talent management (GTM) has been acknowledged for the recent several years.

Despite the growing interest of researchers to TM, there is still no single definition of talent (Muratbekova-Touron, Kabalina, & Festing, 2018). However, from the definition of TM "activities and processes that involve the systematic identification of key positions which

differentially contribute to the organization's sustainable competitive advantage, the development of a talent pool of high potential and high performing incumbents to fill these roles, and the development of a differentiated human resource architecture to facilitate filling these positions with competent incumbents and to ensure their continued commitment to the organization" (Collings & Mellahi, 2009: 304), it is seen that talent is regarded as an individual who possesses high level of knowledge and skills that are strategically important to a particular firm's core business (Michaels, Handfield-Jones, & Axelrod, 2001; Lewis & Heckman, 2006; Ulrich, 2006; Gallardo-Gallardo, Nijs, Dries, & Gallo, 2015; Gallardo-Gallardo, Dries, & González-Cruz, 2013), perform well (Michaels et al., 2001), occupy positions that create substantial contributions to a firm's strategic success (Becker, Huselid, & Beatty, 2009). That is, talent is highly valuable and unique human resource with high level of human capital (Coff, 1997; Lepak & Snell, 1999; Collings, 2014).

GTM in a broader sense is related to international human resource management (IHRM) practices in organizations aiming at attracting, developing, and retaining talents, i.e. individuals with high levels of human capital (Al Ariss, Cascio, & Paauwe, 2014; Tarique & Schuler, 2010). In turn, human capital may be defined as an individual's asset, which consists of knowledge, skills, experience, and personal characteristics (Becker, 1964; Tarique & Schuler, 2010). Ultimately, GTM practices are devoted to achievement of organizations' strategic goals, such as for instance increasing performance and gaining competitive advantage (Mellahi & Collings, 2010; Schuler, 2015).

2.2.Global talent management challenges

Though the concept of GTM is rather novel, much research have been done on this topic, which investigate the notion of GTM, its functions, practices, and fundamental distinctions from IHRM (Crane & Hartwell, 2019; Schuler, Jackson, & Tarique, 2010). In this vein, GTM challenges are being actively discussed, suggesting several directions in which GTM practices may be used in order to solve certain business issues, in particular that of human resource nature (Collings, 2014; Tarique & Schuler, 2010). Those challenges may be both endogenous and exogenous to an organization. Endogenous challenges are internal to a firm or an industry and represent, for instance organizational culture, structure, international orientation, strategic position, etc. (Tarique & Schuler, 2010). Exogenous challenges which, on the contrary, are external to a firm and thus are not under its control (Tarique & Schuler, 2010), are of particular interest for our study. Among them there are globalization, demographics, demand and supply of highly skilled workers (Al Ariss et al., 2014; Schuler et al., 2011; Tarique & Schuler, 2010).

Globalization processes nowadays are making existing geographical, cultural, and organizational boundaries blur, which results in freer movements i.e. mobility of highly skilled individuals between countries (Baruch, Budhwar, & Khatri, 2007; Khilji, Tarique, & Schuler, 2015). This talent migration is one of the remarkable features of the global economy and is driven by a number of socio-economic, natural and climatic, ecological, demographic and political factors, which are usually being classified into push and pull drivers (Baruch et al., 2004; Lewin, 1951). Among these factors there are economic crises, demographic shifts in terms of aging ratios, wage and standards of life disparities between developing and developed countries (Carra, Inkson, & Thorn, 2005; Clemens, Montenegro, and Pritchett; 2008; Tung, 2016). Another very important reason for the increased talent mobility is a global competition for talent, i.e. for unique human capital asset that may contribute to firms' and economies' economic growth (Khilji & Keilson, 2014; Tarique & Schuler, 2010; Tung, 2008). In this regards, organizations worldwide are faced with the necessity for attracting, developing, and retaining talent in order to fill the critical positions that are of strategic importance for a firm's success (Al Ariss et al., 2014; Collings, 2014; Tarique & Schuler, 2010).

2.3.Talent migration

Talent mobility may be beneficial for both countries of origin (COO) and destination countries (DC) in a way that it facilitates knowledge sharing (Agrawal, Kapur, McHale, & Oettl, 2011; Shukla & Cantwell, 2018) and increase in social capital of employees (Collings, 2014).

However, at the extreme, when the talent outflow exceeds the inflow, the phenomenon of brain drain occurs in a COO (Salt, 1997). Brain drain is being experienced by developing countries where wages, living conditions, career development opportunities are not as attractive as in developed countries (Baruch et al., 2007; Schuler et al., 2011). For instance, the annual number of highly qualified emigrants doubled since 2013 and resulted in 44 thousands of people in 2016 (RBC, 2018). Significant number of Russian emigrants is either high potential graduates seeking better postgraduate education opportunities or qualified specialists that look for more attractive career options (Russian Federal State Statistics Service, 2018). This situation may be detrimental to these countries as brain drain may reduce per capita growth (Haque & Kim, 1995; Mandelman & Zlate, 2017), erode domestic knowledge networks (Agrawal, Kapur, McHale, & Oettl, 2011), affect overall competitiveness level (Khilji, Tarique, & Schuler, 2015), and slow down their economic development (Beine, Docquier, & Rapoport, 2001). At the firm level, organizations of COOs may observe legitimacy issues (Thunnissen, Boselie, & Fruytier, 2013), loss of competitive advantage (Tarique & Schuler, 2010), and as result decrease in firm performance. Moreover, as long as the most skilled employees leave a COO, talent emigration affects its employment level resulting in a negative welfare effect for a COO (Bhagwati & Hamada, 1974). Finally, losses associated with brain drain are not just a number of emigrants but their talent, therefore, a COO may be suffering from decrease in human capital in long-term perspective (Baruch, Budhwar, & Khatri, 2007). Hence, in order to solve the issue of brain drain, it is necessary in the first place to examine the determinants of talent migration.

Within the research on brain drain, many studies focus on methods for returning already migrated individuals (Crowley-Henry & Al Ariss, 2018; Tung, 2008) or retaining returnees in a country (Kenney, Breznitz, & Murphree, 2013; Miao & Wang, 2017), whereas some claim that it is easier and more beneficial to prevent initial talent migration (Kenney et al., 2013). Indeed, research in human capital area highlight the importance of retaining human capital in the context where it was developed (Coff, 1997; Hitt, Bierman, Shimizu, & Kochhar, 2001) as it represents a strategic firm-specific asset (Coff, 1997).

Despite the growing interest to the concepts of GTM and talent mobility in particular brain drain, research that link these concepts and investigate the potential role of GTM in managing talent flows are scarce. The study of Collings (2014) builds a theoretical basis for the linkage between talent mobility and GTM systems that may be expanded to national-level talent flows by grounding on human and social capital theories. By introducing TM practices and routines, companies may leverage the advantages human capital may bring to them by attracting both local and foreign highly skilled employees and retaining them. In turn, attracting and retaining local talent may decrease the emigration rates. Therefore, TM may play an important role in prevention of country-level talent outflows. Hence, it is necessary to find out whether implementation of TM practices in local companies helps in overcoming individual-, business, and country-level push and pull factors (Collings, 2014; Schuler, 2015).

2.4.Russian perspective on talent management and talent migration

There is a dearth of research on the talent migration in the Russian context (Korobkov & Zaionchkovskaia, 2012). Existing research focus primarily on narrower definition of brain drain and are limited to investigation of scientists' migration, without paying attention to the migration reasons and patterns. In general, the motives of migration may be career- and life-related (Ledeneva, 2014). Among the determinants of highly skilled emigration from Russia scholars mention poor financing of fundamental science, unfair policy in wages and salaries and raise of unemployment rates in the country (Naumova, 1998). Crisis of Russian science is mentioned to be the most important factor pushing intellectuals out of the country (Ushkalov & Malakha, 2000). Low salaries, poor scientific infrastructure, low demand for the research results lead to situations where people with high level of human capital, including graduates, either change the area of their employment or leave Russia (Ryazantsev & Pismennaya, 2013; Trofimova, 2012). Another reason for intellectual migration in Russia lies in the gap between personal development of individuals, their needs and potential and opportunities for meeting these needs (Ledeneva,

2014). These assumptions are not always statistically supported and justified whereas understanding the causes of talent migration is the crucial step for preventing brain drain (e.g., Baruch et al., 2007).

TM is a relatively young concept for Russia but is gaining popularity rapidly. Low engagement of top management into implementation of TM systems is a serious barrier to effective use of TM practices in Russia: managers often refuse to invest in TM systems due to the lack of visible related financial outcomes (Latukha, 2015). In addition, Russian companies are often characterized by a high level of bureaucracy, lack of freedom in decision-making, focus on short-term results, and low innovativeness, which in turn hinders the development of TM in the country. Finally, the doing business culture and the institution of business education emerged in Russia quite recently, which also slows down the progress in implementation of TM (Fey & Shekshnia, 2011; Latukha, 2015). At the same time, over the last two decades, many Russian companies have been seeking for the sources of competitive advantages in local markets for entering the global market (Panibratov, 2012), which ensures both new challenges and opportunities for TM. While the importance of TM in increasing firm's competitive advantage on both local and global markets is getting more attention by Russian companies, they hardly perceive it as a mean of dealing with outward human capital outflow and preventing talent migration on the national scale.

This research is aimed at identifying factors that influence talent migration from Russia and investigating the role of talent management practices in preventing talented graduates' migration from Russia. As a result of the study, we expect to develop a model which links determinants of talent migration with certain TM practices.

In order to achieve the goal, three research questions were set:

Research question 1. What factors influence migration intention of talents in Russia?

Research question 2. How do push, pull and facilitating factors influence their migration intentions?

Research question 3. What is the role of TM practices in preventing migration in the Russian context?

3. Data and sample

The unit of analysis in the current research is student. To obtain data, online and paper-based questionnaires are being used. The respondents are students at the last year of education – participants of the "Management of the Future" conference from leading Russian Universities with Russian citizenship. The respondents are being reached via emails which are explaining the aim of the research and are including a link to the questionnaire The questionnaire consists of 11 blocks, aiming to identify following aspects of the respondents: demographic profiles, family ties, international experience, cultural adjustment abilities, educational background, migration intension (career expectations, perception of local labor market, push and pull factors) and the role of TM practices in changing their migration decisions.

The fit of respondents to the concept of talent introduced earlier in the paper is determined by the nature of the database. "Management of the Future" is a platform for interaction between the best Russian students and the leading Russian companies (Management of the Future, 2018). Over the seven years since its emergence, the conference has built strong reputation, which ensures high quality of applications. Although the respondents are still studying and haven't enter the labor market yet, in the research they are considered as potential (Ulrich, 2006; Silzer & Dowell, 2010), the potential human capital that will contribute to their countries' development (Freitas, Levatino, & Pécoud, 2012). Moreover, it is important to investigate student migration as migration of youngsters from emerging market countries for studies or initial work experience gain often leads to drastic brain drain effects (Tung, 2008).

3.1.Method

In order to answer the research questions developed from the literature review, a number of statistical tests will be conducted in Stata14 and IBM SPSS AMOS software. Factor analysis will be used for identifying and measuring factors of migration and TM practices. Logistic regression

is approached to identify the factors that influence migration intention of talented Russian graduates because the dependent variable is dichotomous (Wooldridge, 2013). Descriptive statistics and analysis of variance (ANOVA) test were utilized in order to evaluate the role of TM practices in changing respondents' migration decision.

Variables. Migration intention of respondents is a dependent variable in the research, which is binary – "0" indicated the decision to stay in the home country and "1" indicates the decision to emigrate. Determinants of talent migration represent a set of independent variables, which will be measured using the Likert scale questions where "1" stands for a weak influence and "7" on the contrary, for strong influence of a certain factor on the migration decision of a respondent. TM practices will be measured using a scale developed earlier (Latukha, 2015).

4. Discussion

As talent migration is claimed to lead to brain drain and, consequently, decrease the national human capital, the first objective of the study is to identify determinants of talent migration and analyze their peculiarities in the Russian context. Moreover, due to the role of TM practices in tackling talent migration problem is not fully covered in contemporary literature, the second objective of our study is to understand whether TM practices are able to contribute to prevention of brain drain in the Russian context. The results of the research are proposed to be communicated to both policy makers and emerging market firms in order to show the importance of the issue, potential threats, causes, and ways to overcome it.

4.1.Contribution to theory

The proposed research contributes to the talent migration theory, in particular to the studies on factors driving talent migration. The developed approach for classification of these factors and developed scales can be adopted in further research. Moreover, the paper contributes to the TM theory in several ways. First, the definition of talent as high potential, as a potential human capital that may contribute to a country's development (Freitas et al., 2012) is being employed. Second, we develop, adjust, and validate TM scale as a combination of talent attraction, development, and retention practices (Schuler, Jackson, & Tarique, 2011; Tarique & Schuler, 2010). Furthermore, the findings are expected to link talent migration and firm-level TM practices and show that these practices might be used as a tool for managing talent flows at a national level (Collings, 2014; Papademetriou & Sumption, 2013; Saxenian, 2005), significantly contributing to both research fields. Focusing on the Russian context, this study tackles the issue of controversial or partial results of previous research on talent migration and TM in the emerging markets context (Tung & Lazarova, 2006; Daugėlienė & Marcinkevičienė, 2009; Ryazantsev & Pismennaya, 2013).

4.2.Contribution to practice

The research have important implications for organizations in Russian and other emerging markets which fight with migration, strive for increasing their performance and gaining competitive advantage. First, TM practices, implemented at the firm-level may partly solve country-level migration. This shows the role of organizations in TM in overcoming brain drain. The research proposes a set of practices that firms should implement in order to attract, retain and develop local talent.

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Cultural Sensitivity to HR Business Partner's Competencies: Insights from Job Advertisements Across Six Countries

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Abstract:
Purpose - Over the past decades, Russian businesses have demonstrated rapid growth that leads to urgent needs in developing Human Resource (HR) management knowledge. However, there is a lack of details about similarities or differences between HR practices in Russia and other countries. The aim of this study is to identify the key job requirements and skills for HR business partners sought by employers in both Russia and five English-speaking countries (Australia, Canada, India, the UK, and the US) and juxtapose them with cultural values according to the Hofstede cultural dimensions. Design/methodology/approach - Having followed the proportion of 300 job posts for each country, 1 800 vacancies randomly selected from two sources (www.hh.ru and LinkedIn) were studied. Findings - Russian job ads frequently emphasize local employment law and recruitment that could reflect the high Power Distance and Uncertainty Avoidance with a low level of Individualism. While highly individualistic countries have demonstrated a successful background in working on Employee relations or Performance Management.

Keywords: *Cultural Values, Recruitment Advertising, HR Business Partner, Content Analysis, Cultural Differences*

1. Introduction

Initially, job advertisements are the first connections between applicants and the employer. Since hiring workers all around the world are quite developed today, the way in which a job advert presents the vacancy will directly influence the choice of this position by a person from a particular country. Every culture has its own norms of behavior, communication, interaction, as well as features of expectations and priorities in the workplace that is why employers face some problems of cultural misunderstanding.

The purpose of this study is to identify the key job requirements and skills for HR business partners sought by employers in both Russia and five English-speaking countries (Australia, Canada, India, the UK, and the US) and, afterward, juxtapose them with cultural values.
The research was guided by two questions:

1. What specific knowledge, skills and competencies do employers seek for the HR Business Partner designation across six countries?
2. To what extent the job requirements of HR business partner can be connected with cultural dimensions developed by Hofstede?

2. Research method

To explore the cultural values that possibly emerge in job ads, we use the Hofstede dimensional model of national culture. This framework comprises five dimensions based on a 100-point scale that match values in the workplace to cultural context: *Power distance, Individualism vs Collectivism, Masculinity vs Femininity, Uncertainty Avoidance, Long vs Short Term Normative Orientation* (de Mooij, Hofstede, 2010).

3. Data and sample

Job ads in both English and Russian were collected over a two-month period in 2018. We randomly selected 1 800 vacancies following the proportion of 300 job posts for each country. All English ads were collected from LinkedIn while Russian advertisements came from one of the largest job sites titled HeadHunter. To measure the occurrence of keywords and simple noun phrases in the job ads of each country, we employ Rapid automatic keyword extraction (RAKE) based on R-Studio for Windows (Rose et al., 2010). Keywords with a ratio of RAKE value at least 2.5 were included.

4. Empirical results and conclusions

To answer the first question, the software package was performed to count the simple noun phrases that occurred in vacancies. As a result, the seven most frequent job requirements for each country were identified as shown in Table 1.

Table 1. Job requirements frequently occurred in the ads

Job requirements	The UK	The US	Russia	Australia	India	Canada
1. Employee relations	198	440	41	91	131	222
2. Performance management	115	*329*	52	149	121	238
3. Talent management	71	129	23	50	108	103
4. Change management	72	116	42	51	33	112
5. Employee engagement	59	112	29	43	133	118
6. Employment law	110	119	99	26	21	41
7. Talent acquisition	36	108	58	48	117	108

Additionally, the Russian job ads demonstrated the high demand for recruitment competencies (frequency of occurrences was 263) that was not the case for other studied countries. Another interesting result in Russian adverts was Training and development competencies, which HR business partners need to perform in a company (frequency of occurrences was 196). Moreover, employers in studied countries highlighted the importance of communication and managerial skills with the frequency of occurrences presented in Table 2. However, Management skills are much more popular in Russian and the US` texts of job vacancies in comparison to the other four countries.

Table 2. Personal skills frequently occurred in the ads

Personal skills	The UK	The US	Russia	Australia	India	Canada
Communication skills	69	146	117	51	66	105
Management skills	47	86	180	48	26	54

Finally, we matched the frequency of occurrences for simple noun phrases and keywords from RAKE to Hofstede cultural dimensions (Chipulu et al., 2016). Scores based on a 100-point scale were taken from Hofstede website for each dimension in a particular country.

The findings have indicated that Russian job ads frequently emphasize local employment law and recruitment that could reflect the high Power Distance (93) and Uncertainty Avoidance (95) together with a low level of Individualism (39). While highly individualistic countries (80-91) with low rates of Uncertainty Avoidance (35-51) and Power Distance (35-40) (Australia, Canada, the UK, and the US) have demonstrated the successful background in working on Employee relations or Performance Management as frequent job requirements for this position. As for India, Employee engagement has occurred repeatedly in the job ads that could be relevant to a middle rate of Individualism (48) and a sufficient level of Power Distance (77). Notably, communication skills have been widespread for HR business partners across all these countries

with varieties of keywords relating to them, and managerial skills are typical mostly for Russian and the United States` ads.

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HRM Humanization as Core Factor of Success in Digital Economy

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Abstract:
This paper investigates a core role of HRM humanization for successful digital transformation of Russian companies in Digital Economy. This economy based on digital technologies which are penetrating to any economic and social areas. The paper focuses on factors that determine human potential utilization and development for digital growth strategy. Poor HRM system based on hard methods establishes a set of barriers of human resources involvement on innovation and professional development during digital transformation. The term "humanization" is applied to an iterative method of human relation development for human resources satisfaction and high results of organizational performance in Digital Economy. Humanization of HRM bases on a set of Strategic HRM values and principles. Humanization as a mainstream of HRM. The core direction for humanization HRM system are Management by Value, Talent Management, human resource development, motivation and expanding work opportunities. The best way to provide it - create good organizational condition for teamwork and delegation. The paper grounds linkage between HRM humanization and digital transformation projects effect by example of Russian.

Keywords: *Humanization, Human Resource Management, Digital Economy, Soft Management, Labor Market, Talent Management, Human Resource Potential, Digital Technologies Leaders and Leadership*

1. Introduction

The term "humanization" is applied to an iterative method of human relation development for human resources satisfaction and high results of organizational performance in Digital Economy. Humanization of HRM bases on a set of Strategic HRM values and principles, such as mutual trust, respect and understanding, collaboration, delegation, development, cross-functional teams, engagement, flexibility. Nowadays Digital Technologies (DT) are widely used not only in software engineering, that is why it requires the introduction of methods that are linking best Soft Management with DT to provide competitive advantage in Digital Economy.

Digital Economy generates an opportunity for developing companies and economics to overtake the leaders. In this paper we share the definition "Digital Economy " as production based on digital technologies, including new methods of data processing, storage and transmission [MeasuringtheDigitalEconomy,2018]. Modern digital companies use managerial models based on Internet platforms, digital supply chains, e-Commerce and digital content. It lets develop labor productivity and business environment challenge quick response. At the same time highly qualified personnel replaces the low-skilled staff.

Russia has a very ambitious digital strategy in economic and social areas but negative dynamics of digitalization. Russian place in overall rating was 45 in 2017 [Ambroskin., Zaitsev, Idrisov, Knobel, Ponomareva, 2019]. The main problem consists in special features of Russian labor market that mismatches digital development. Another problem - poor HRM systems based on suppression of initiative and freedom, dehumanization of HRM for operational goals and profit. It doesn't let to discover and use all potential of human resources and digital technologies. Humanization of HRM - is the only way to be integrated in Digital Economy positive.

The goal of this paper is to investigate core factors and directions of HRM humanization within digital transformation in Russian context.

2. Theoretic base

Nowadays monitoring of trends in HRM practices is important direction of management. HRM development and HRM trends are in focus of many specialists. Thus, Deloitte investigates global HRM trends in Digital Economy [Deloitte, 2018]. Russian labor market trends discovered in BCG and Sberbank research "Russia 2025: from personnel to talent" [BCG, 2017]. Key weaknesses of HRM systems in Russian organizations are a gap between real practice and declaration values, such as double standards, violation of business ethics and labor legislation; equalizing wages, low budget for HRD. Poor HRM system determines low level of trust and understanding between management and personnel, stress, fear of losing your job or professional burnout [Yakhontova, 2019].

Humanization as a mainstream of HRM accept modern HRM theory and practice [Haak, 2019]. The core direction for humanization HRM system are Management by Value [Peters, Waterman, 1982]; Talent Management [Latukha, 2015]; human resource development, motivation and expanding work opportunities [Marin-Garcia, Tomas, 2016]. The best way to provide it - create good organizational condition for teamwork and delegation [Yin, Stecke, Li, 2018].

3. Practical case "Production Company HRM system transformation"

Empirical research based on case study focused on investigation of HRM humanization role for digital transformation in Russian context. The case study based on a set of deep interview with 4 top managers of a company, which implemented lean production, automation of planning and control system. But inefficient structure and week HRM system were obstacles. In particular, the company lost highly qualified personnel and could not ensure the involvement of personnel in the transformation project. War for talents at labor market is a problem for company too. The implementation of delegation and the development of teamwork was a response to the identified challenge. This project has three stages: 1 -structure transformation, pilot project of delegation implementation and base managerial skills development for delegation; 2 - managerial style improvement, informational system development, expansion of delegation practice; 3- new corporate culture development based on humanism and soft management. Already at the first stage of the project positive results are visible - satisfaction and engagement of participants increased.

4. Conclusions and discussions

Modern HRM trends analysis as well as case study let us conclude:

- HRM humanization role within digital transformation is very important due to direct dependence of the strategic project success on the good will and mood of the majority of employees.
- Digital technologies do not have a sustainable positive effect without trust and taking into account the interests of the staff.
- Strategic and system approach led by top managers is the only way to humanize HRM.
- It is necessary to have leaders-humanists, carriers of the values of the digital economy.

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Personality, Work Engagement, And Extra-Role Behavior

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Abstract:
Although the role of employee engagement has been intensively analyzed and discussed in the literature, individual personal characteristics, which are crucial for the success of such a process insufficiently studied. The paper explores a possible link between personality types and characteristics of engagement and its consequence in the form of extra-role behavior of production employees. An exploratory study in International brewing company X using qualitative methods showed that production employees with different personality types demonstrate different levels of extra-role behavior. At the same time, a distinct relationship between the type of personality and the level of work involvement could not be identified. Case of company X is used as an empirical evidence and background for further articulation of suggested propositions.

Keywords: *Work Engagement, Personality, Extra-Role Behavior, Individual Differences, Implementing Innovations, Functional Responsibilities*

1. Introduction

In the age of an employee "disengagement epidemic" [Gallup, 2017], organizations are left wondering how to get workers motivated and, ultimately, boost productivity. Many studies have exhibited that employee engagement positively influences the performance of the employees [Kim W, Kolb & Kim T., 2013],

Employee engagement concept become widely used after the article released by Kahn (1990), who defines employee engagement as "the harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances". Thus according to Kahn (1990), engagement assumes that employees are both psychologically and physically present themselves as much as possible during doing the job.

Then, numerous studies were conducted in which the factors causing involvement and the consequences of this phenomenon for different contexts are studied. In particular, the outcomes of the engagement included: Job satisfaction, Proactive behavior, Improved performance, Turnover intention, Organizational citizenship behavior.

One of the most important effects of involvement is extra-role behavior [Dyne & Lepine, 1998]. Extra-role behavior (ERB) is a behavior that goes beyond the formal requirements of the work and is aimed at ensuring a more efficient functioning of the organization [A. J. Bambale, and et. al., 2012]. It is also can be described as discretionary effort that aims to benefit the organization. There are some examples of ERB such as supporting organizational values and acting according to it, volunteering and discretionary effort.

Extra-role behavior is a critical factor in the context of organizational changes, when in-role behavior cannot provide the introduction of new forms of business.

Though antecedents and consequences of work engagement were broadly studied, there is relatively small body of literature investigating specific relationship of personality traits and extra-role performance mediated by work engagement [C. Sulea et al., 2012].

In addition, there is the strong need to explain how an individual personal distinguishes can affects extra-role performance [Liguoii et.al., 2013; Bailey et al., 2017].

2. Research aim

The purpose of this research was to examine the link between employees' personality, work engagement, and its consequence in the form of extra-role behavior of production employees.

3. Research methods and sample

The paper uses a single case study approach to bring about new insights on the topic. In total, the exploratory study involved 20 shop-floor employees of International brewing company X. The level of their involvement, including work involvement, was evaluated with Utrecht Work Engagement Scale (UWES); to analyze the reasons of why people demonstrate extra-role performance, a questionnaire was developed; and several interviews were conducted. To research personality, were used the 16 Personalities NERIS Type Explorer designed to help understand how people naturally approach work challenges, how their character relates to other people, and what they preferred interaction style is. The NERIS explorer is an adaptation of the Myers-Briggs personality test, combined with the 'Big Five' personality traits. The main types highlighted in this approach are: Analysts, Diplomats, Sentinels, and Explorers. Also, an in-depth interview was conducted with leaders of departments, and the method of the included supervision was applied.

4. Results and discussion

In this exploratory study, we analyzed a case of the International brewing company X having its subsidiaries in the Russian Federation. The focus of research was on shop-floor employees such as production line supervisors, engineers, mechanics, shift master, technicians, and hardware engineers. All these types of jobs require a technical or analytical style of mind. Ability to work in intensive mode, because there are budget constraints and following from it the limited number of people. So one person has to know and work on different machines and lines. As a result, their work is quite challenging, intensive, and have a great variety. Variety in practice comes from often changes in production lines from one type of beer to another. The company X wants to achieve substitutability of people: one person should know as many as possible machines to be universal professional and change other employees if needed. Thus, following the company's policy, employees have to not only perform their direct work qualitatively but be highly motivated in implementing innovations and take on additional obligations associated with the expansion of functional responsibilities. In these circumstances, one of the problems faced the management of the company – was that many employees were reluctant to get involved in work outside their functional responsibilities and rarely showed a desire to participate in the changes actively.

After analysis of employees' personality types, we have found that most of the people belong to type 3 (Sentinels) (75%). There are 15% of people who belong to type 4 (Explorer role). Analyst type and Diplomats type presented in an amount of 5% each. From here we can see that the most suitable type of people for this environment is Sentinel type, because they are practice-oriented, tend to feel satisfied with an order, safety and stability. Interviews showed that these qualities are put at the forefront when hiring for these positions. Studying work engagement level of employees showed that there is no clear relationship between the personal type and the level of involvement. Herewith the highest number of people with Sentinel personality type was in the average category. Only three people with such type demonstrated a high level of work engagement. And no one reached very high level. Extra-role behavior questionnaire showed that the majority of production employees having the same personality type (Sentinel), which characterized by average work engagement also have middle extra-role behavior level. So, we can confirm that the middle level of engagement is associated with an intermediate level of extra-role behavior performed by Sentinel personality type. However, we also checked work engagement and extra-role performance of other employees who were from different personality types and identified that they have the same level of work engagement as

Sentinels (middle), but their extra-role behavior level was higher. Interviews with managers showed that these employees (not Sentinels) are the initiators and the most active advocates of any innovations that are regularly introduced in the company. From this fact, we concluded that personality type impacts on extra-role behavior. The findings of this study have several practical implications. The results of this research showed that individual differences affect extra-role behavior. Some people with specific personal types are more likely to perform extra-role behavior. So, this might mean the use of personality measures such as personality typology as a basis for workforce diversity.

Practitioners should attempt to support a climate for engaging the workforce. There are several ways how to do it. First of all, if it is expected a significant level of innovation at working place, there is the need for hiring people not from only the perspective of technical skills for a particular job, but also keeping in mind necessity for collective development and participation in change program. Knowledge of personality type not only helps to understand would this specific personality type fit to the job and team, but also helps to increase satisfaction and engagement of employees.

It is essential to mention that this exploratory study is limited by time constraint and sample constraint. So, further investigation is needed in order to test other personalities impact on work engagement and extra-role behavior.

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