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**THE INFLUENCE OF STRATEGIC ENTREPRENEURSHIP ON FIRM
PERFORMANCE**

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ABSTRACT

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In the study the recently developed concept of strategic entrepreneurship was addressed with the aim to investigate the underlying factors and components constituting the concept and their influence on firm performance. As the result of analysis of existing literature and empirical studies the model of strategic entrepreneurship for the current study is developed with the emphasis on exploration and exploitation parts of the concept.

The research model is tested on the data collected in the project "Factors of growth and success of entrepreneurial firms in Russia" by Center for Entrepreneurship of GSOM in 2007 containing answers of owners and managers of 500 firms operating in St. Petersburg and Moscow.

Multiple regression analysis showed that exploration and exploitation presented by entrepreneurial values, investments in internal resources, knowledge management and developmental changes are significant factors constituting strategic entrepreneurship and having positive relation to firm performance.

The theoretical contribution of the work is linked to development and testing of the model of strategic entrepreneurship. The results can be implemented in management practices of companies willing to engage in strategic entrepreneurship and increase their firm performance.

АННОТАЦИЯ

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Данное исследование затрагивает относительно новую концепцию стратегического предпринимательства (СП), привлекающую все больше внимания исследователей в области стратегического менеджмента и предпринимательства. Главной целью данного исследования является выявление факторов, входящих в состав данной концепции, и определение их влияния на результаты деятельности фирмы. Была разработана модель СП, включающая ориентацию на поиск нового и ориентацию на использование существующего. Модель была протестирована с помощью регрессионного анализа на основе данных по 500 компаниям из Санкт-Петербурга и Москвы, собранных в ходе реализации проекта «Факторы роста и успеха предпринимательских фирм в России», выполненного в Центре предпринимательства ВШМ СПбГУ. В результате анализа, предпринимательские ценности, инвестиции во внутренние ресурсы компании, уровень управления знаниями и развивающие изменения были признаны значимыми факторами стратегического предпринимательства, положительно влияющими на результаты деятельности фирмы. Ориентация на поиск нового и на использования существующего позитивно влияют на результаты деятельности фирмы. Теоретическая значимость исследования связана с разработкой и тестированием модели СП. Практическая значимость связана с возможностью применения результатов на практике для повышения результатов деятельности фирмы.

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Introduction

Relevance of the topic

The concept of strategic entrepreneurship is relatively new in entrepreneurship and management studies. It arises many questions and debates on whether the combination of strategic management and entrepreneurship is valid and how to differentiate it from other entrepreneurship related concepts such as corporate entrepreneurship, entrepreneurial orientation, entrepreneurial strategy and others. It is also unclear if SE is a framework, model, theory, paradigm, concept, or a simple point of interface (Schindehutte, Morris, 2009).

Strategic entrepreneurship is defined as “the integration of entrepreneurial (i.e., opportunity-seeking behavior) and strategic (advantage-seeking behavior) perspectives in developing and taking actions designed to create wealth” (Hitt et al., 2001, p. 481). The analysis in the studies is mainly based on the firm level and the emphasis is made on opportunity-seeking and advantage-seeking behaviors of the firm which need to be balanced in order to achieve maximization of wealth.

In this master thesis the concept of strategic entrepreneurship and its antecedents are analyzed and empirical research is aimed at identifying the significant factors and studying the relationship between strategic entrepreneurship and firm performance.

Empirical studies in the field of strategic entrepreneurship are rather limited as the result of theoretical ambiguity and mostly concentrate on corporate entrepreneurship and venture entrepreneurship, so the current study will add the empirical evidence on the subject.

Nowadays the dynamic business environment and fast technological change require from the companies to develop new ways of conducting business. Strategic entrepreneurship represents a possible solution to the arising problems of sustaining efficiency while constantly adapting to rapid changes and innovating to stay competitive on the market. That is why the understanding of the strategic

entrepreneurship and the way it can influence the firm performance is crucial for companies to achieve competitiveness.

For the managers in the companies it is most important to know the concrete measures they can implement and specific factors they have to focus their attention on to increase the performance of their company. For the Russian companies this is especially important as they have a short history of market economy and lack experience in entrepreneurship. Most of the companies have very limited resources to implement their strategies and are unable to engage in many different activities without being sure to get positive results. The systematic view on implementation of strategic entrepreneurship in their company is needed specifying the combinations of factors which can provide increase in firm performance in short-term and long-term period.

The goal and objectives of the study

The research question of the thesis is: How strategic entrepreneurship influences the firm performance?

The sub-questions of this research are:

1. What is understood by strategic entrepreneurship?
2. What are the factors influencing SE in a company?
3. What impact has SE and its factors on companies' performance?

The main goal is to reveal the factors influencing strategic entrepreneurship and consequently performance of the companies and propose the ways to improve SE.

The objectives within the main research objective are:

- to analyze the evolution of strategic entrepreneurship concept
- to analyze the main directions of empirical research of strategic entrepreneurship
- find out research gaps in SE

- to develop a model of SE and make hypotheses on the influence of SE and its factors on firm performance
- to test hypotheses on the data collected by the center of entrepreneurship in GSoM
- to find the relation between SE and performance of companies
- to propose ways of development of SE in companies

All measurements are subject to limitations caused by the method of data gathering. As the companies only operate in Moscow and St. Petersburg, the results of the study can't be extrapolated on the whole Russia.

The research is limited to the influence of strategic entrepreneurship on firm performance, and doesn't take into consideration other external and internal factors which can as well impact firm performance.

Research strategy

The empirical research is conducted by regression analysis of the data, collected by the Center of entrepreneurship of GsoM. The data was collected with the help of questionnaires in 500 companies operating in Moscow and St. Petersburg in 2008. The companies operated in three different industries: whole and retail sale, HoReCa (hotels, restaurants and cafes), and IT.

The questionnaires included questions on various aspects of the company, including general information on the company, structure of ownership and management, management style (level of formalization, organizational structure, centralization, values and changes), business model of the company, company external environment, internal resources of the organization, and internalization process.

The quantitative study with the help of SPSS 17.0 was carried out on the data sample. The multiple regression analysis was used to test the hypotheses of the study.

Structure of thesis

The thesis consists of introduction, two chapters and conclusion. In the first chapter of the thesis the main theoretical concepts are described starting with the approaches to the definition of strategic entrepreneurship. In the second part of the first chapter the main directions of empirical research in strategic entrepreneurship are described and the research gaps in the empirical studies are identified. Further on, the model of strategic entrepreneurship based on combination of exploration and exploitation is developed and hypotheses on SE influence in a company are specified.

The second chapter of the thesis is devoted to testing the hypotheses. The quantitative research is conducted by multiple regression analysis. The discussion on results of the analysis is followed by conclusions and propositions for future research.

1. Theoretical model of Strategic entrepreneurship

1.1. Approaches to definition of the concept

Strategic entrepreneurship is a relatively new term introduced in the works of Hitt et al. (2001, 2002) and Ireland, Hitt, Sirmon (2003). It combines the strategic management studies with entrepreneurship research and focuses on the ability of the company to engage in entrepreneurial actions with strategic perspective and take strategic actions with an entrepreneurial mindset (Hitt et al., 2001).

The concept can be clarified through introduction of the both perspectives – entrepreneurship and strategic management, and an overview of their development, which led to establishment of strategic entrepreneurship concept.

1.1.1. Entrepreneurship perspective

The origin of the word “entrepreneurship” comes from seventeenth-century France where an entrepreneur was an individual commissioned to undertake a particular commercial project (Wickham, 2001).

The start of entrepreneurship research is associated with the works of Joseph Schumpeter concerning the innovativeness of the firm and concept of creative destruction. It can be noticed that in the last 25 years the field of entrepreneurship research has evolved significantly. In the early 1980s it was characterized with a narrow focus on personality psychology, but then expanded to sociology and organization studies, economic theories and later on to the wide range of topics (Gregoire et al., 2006). It is important to mention that between 1993 and 1998 the entrepreneurship research was influenced by the resource-based view of the firm which later on resulted in integration of strategic management and entrepreneurship research.

There are various definitions offered for the concept of entrepreneurship. With the regard to Strategic Entrepreneurship concept, entrepreneurship can be defined as

identification and exploitation of previously unexploited opportunities (Hitt et al., 2001).

The exploration and exploitation of opportunities is underlined in other definitions of entrepreneurship. Stevenson and Jarillo (1990) define entrepreneurship as the process of pursuing opportunities by individuals when the resources currently controlled by them are not taken into consideration, so the ability to exploit the opportunity is not important in the process. Entrepreneurship is viewed as a management approach which is based on the passion for the pursuit and exploitation of opportunity and is contrasted to administrative behavior (Brown, Davidsson, Wiklund, 2001).

In studies of Lumpkin and Dess (1996) and Daily et al. (2002) the focus of entrepreneurship is set on newness and novelty in the form of new products, new processes, and new markets as the drivers of wealth creation. In other research (Shane, Venkataraman, 2000) the authors suggested that discovering and exploiting profitable opportunities is the foundation for wealth creation through entrepreneurship.

This combination of exploration and exploitation activities has moved the entrepreneurship towards strategic management perspective.

The need to separate entrepreneurship and its contributions from strategic management was mentioned in different studies among the other directions of research in entrepreneurship which require convergence. Entrepreneurship as a field of study is characterized by low level of convergence which is often mentioned in the literature. Common agreement on the following core issues of entrepreneurship theory is needed (Gregoire et al., 2006):

- The clear definition of the concept;
- The theories that can clarify the study of entrepreneurship;
- The field's purpose, its practical impact, and especially the contribution separated from the other management sciences, particularly, strategic management;

- The methods and measures used for studying entrepreneurship;
- Entrepreneurship's legitimacy among the management.

Though the general field of entrepreneurship has conceptual difficulties, some areas of entrepreneurship research have developed significantly. One of such areas is the concept of entrepreneurial orientation (EO) which attracted a lot of research. According to Covin, Green, Slevin (2006) EO has received much attention in theoretical as well as in empirical which allowed it to be accepted as an established concept central for the field of entrepreneurship.

Entrepreneurship orientation provides a foundation for entrepreneurial decisions and actions and is embedded in the policies and practices of organization (e.g., Lumpkin, Dess, 1996; Wiklund, Shepherd, 2003). It represents the entrepreneurial strategy-making processes that are used to achieve the firm's organizational purpose, sustain its vision, and create competitive advantage (Rauch et al., 2009).

Other important concept related to entrepreneurship is Corporate Entrepreneurship (CE). Zahra (1993) defines CE as organizational renewal with two main dimensions of innovation and venturing, and strategic renewal. Covin and Slevin (1989) have identified three main components of CE: proactiveness, innovation, and risk taking. Lumpkin and Dess (1996) expanded the model to five components: autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness, as a set of behaviors that reflect CE.

CE refers to renewal activities that enhance a corporations' ability to compete and take risks, not necessarily, but possibly including addition of new businesses to a corporation (Phan et al., 2009). CE has a close relation to the concept of strategic entrepreneurship which is sometimes considered as a part of CE, related to strategic actions of renewal by corporations (Morris, Kuratko, Covin, 2008; Kuratko, Audretsch, 2009).

In this study the definition of entrepreneurship proposed by Covin and Slevin (1989) as the combination of innovativeness, proactiveness and risk-taking is used as the basic one.

1.1.2. Strategic Management perspective

Strategic management is a process that defines the approach to the work of the organization, guides firm's operations, and is aimed at achieving continuous growth of the firm (Schendel, Hofer, 1979).

The concept of strategic management includes strategic planning and strategic thinking. While the first one refers to the primary step in determining future direction of the business, the second gives an external view and concentrates on the search for sources of competitive advantage (Kuratko, Audretsch, 2009).

Strategic management focuses on the activities which should be undertaken to achieve competitive advantage and increase performance of the firm (Schindehutte, Morris, 2009). Some authors (Ireland et al., 2001) see this as a context for entrepreneurial actions which are aimed at identifying and exploiting opportunities.

In contrast to the entrepreneurship literature view of the entrepreneur as a taker of the exogenous opportunity, strategy has long viewed firms as creating or making opportunities (Ireland, Hitt, Sirmon, 2003). Cooper, Markman, Niss (2000) pointed out that unlike entrepreneurship which is concerned with new venture creation, strategic management is examining the influences of various factors on firm performance, and puts emphasis on the sources of sustainable competitive advantage.

1.1.3. Strategic Entrepreneurship concept

There is no common understanding of the term "strategic entrepreneurship". It is regarded by researchers through different lenses: organizational lens or entrepreneurship perspective (Ireland, Covin, Kuratko, 2009), strategic perspectives (Shepherd, Wiklund, 2009) and complexity theory (Schindehutte, Morris, 2009), economic police perspective (Fernhaber, McDougall-Covin, 2009).

The term “strategic entrepreneurship” was first introduced by Hitt et al. (2001) in their article “Guest Editors’ Introduction to the Special Issue Strategic Entrepreneurship: Entrepreneurial Strategies for Wealth Creation”. In the early research on integration of entrepreneurship and strategic management the main focus was on the concepts relevant to both (Covin, Miles, 1999). Consequently, the early SE studies were examining innovation, internationalization, organizational learning, growth, alliances and networks, top management teams and governance (Hitt et al., 2001, 2002; Ireland et al., 2001).

As it was mentioned earlier, some authors like Covin and Kuratko (2008) view strategic entrepreneurship as a component of the corporate entrepreneurship concept. It is related to entrepreneurial activities of firms, including mergers and acquisitions as well as establishment of new businesses but not limited to them (Kuratko, Audretsch, 2009).

Lumpkin and Dess (1996) examine the management processes resulting in entrepreneurial activity, and identify the elements which impact such activity. They introduce the concept of entrepreneurial orientation which is placed at the intersection between strategy and entrepreneurship and represents a force or influence associated with entrepreneurial activity and firm performance (Luke, Verreynne, 2006).

One of the main works conceptualizing strategic entrepreneurship is the study by Ireland, Hitt, Sirmon, (2003). Strategic entrepreneurship, according to the authors, involves the identification and exploitation of opportunities, while at the same time creating and sustaining a competitive advantage (Ireland, Hitt, Sirmon, 2003). The four major dimensions of SE identified in the work are: entrepreneurial culture and entrepreneurial leadership, entrepreneurial mindset, strategic management of resources and development of innovations through creativity (Ireland, Hitt, Sirmon, 2003). The model of SE is presented in Figure 1.

Ireland, Hitt, Sirmon, (2003) view SE as a unique instrument with the help of which firms are able to create wealth through developing sustainable competitive advantage. Both entrepreneurship and strategic management are concerned with

growth and wealth creation. Entrepreneurship is increasingly viewed as a stimulus to wealth creation in emerging, developing, and developed economies as a result of the actions of individual firms, while strategic management is studying the reasons for differences in firms' wealth creation in various economies (Ireland, Hitt, Sirmon, 2003).

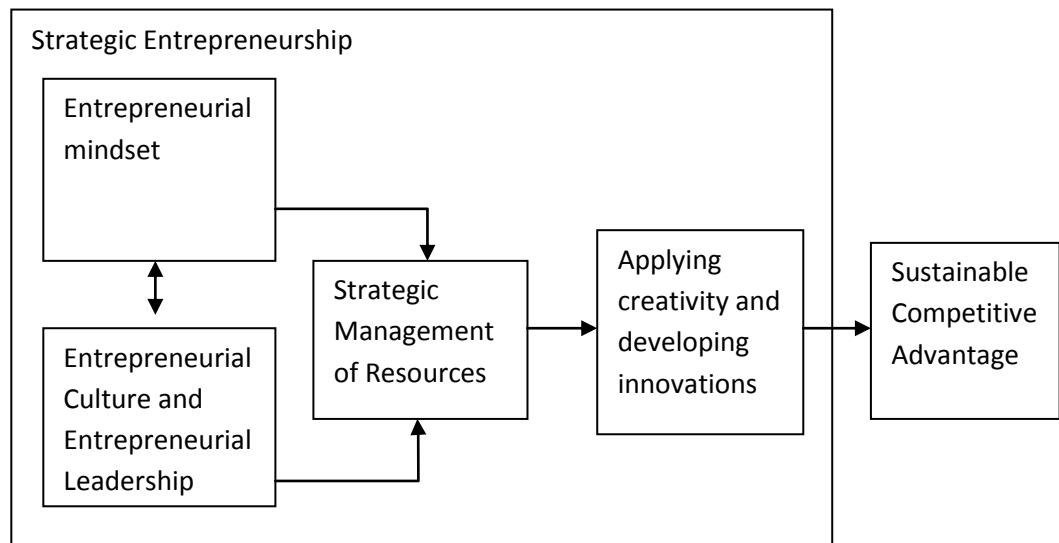


Figure 1. Strategic entrepreneurship theoretical framework
Source: Ireland, Hitt, Sirmon (2003).

Ireland Hitt, Sirmon (2003) argue that both opportunity-seeking and advantage-seeking behaviors are necessary for wealth creation as many companies fail to motivate people to pursue entrepreneurial opportunities (Day, Wendler, 1998), entrepreneurs may identify and exploit opportunities that create temporary rather than sustainable competitive advantages as a result of not managing the resources strategically (Hitt et al., 2001). A strategic entrepreneurship perspective, based on the resource-based view of the firm, provides recognition of the resources required to exploit growth opportunities in order to create and sustain competitive advantage (Ireland, Hitt, Sirmon, 2003).

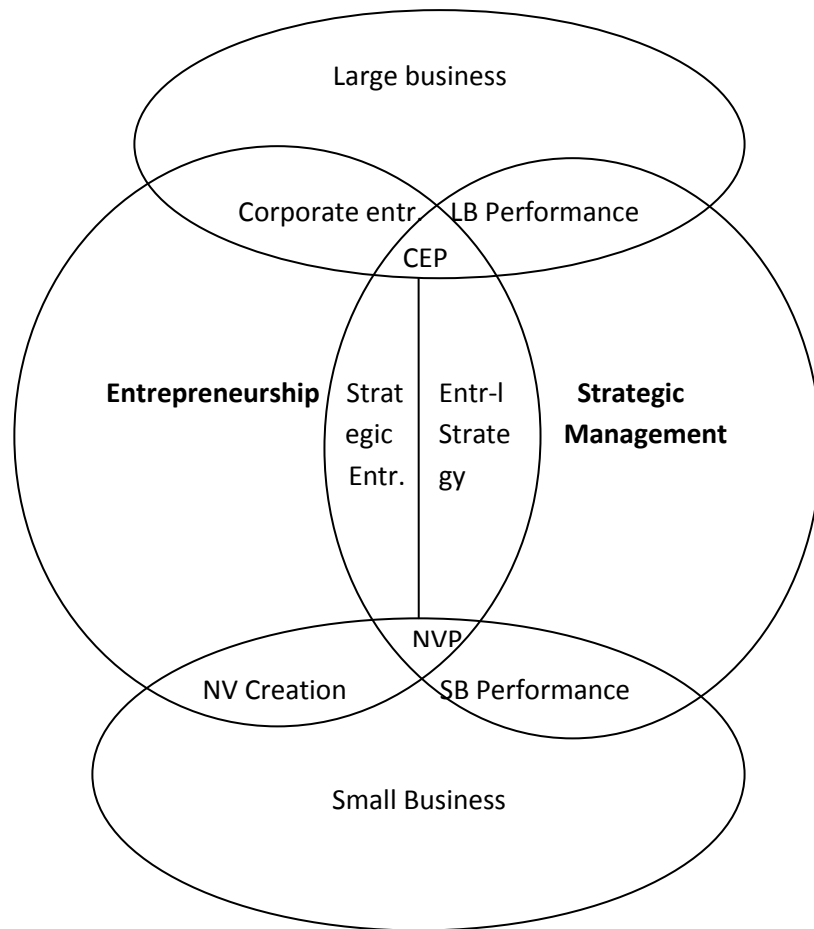
Strategic management implies establishment and exploitation of competitive advantages in a particular environmental setting, while entrepreneurship is devoted to the search for competitive advantages through various kinds of innovations (product, process or market) (Kuratko, Audretsch, 2009).

The strategic management and entrepreneurship are viewed as complementary. Some researchers suggest that the entrepreneurship and strategic management disciplines are inseparable as the research findings of one field are difficult to understand without studying the other field (Meyer, Heppard, 2000). Barney and Arian (2001) identified a close, although not fully specified relationship between theories of competitive advantage and theories of creativity and entrepreneurship.

According to Ireland, Hitt, Sirmon (2003) firms pursuing SE seek fundamentally new opportunities (i.e. opportunity-seeking behavior) either to change existing competitive conditions in the industry or to create new market spaces (i.e., advantage-seeking behavior).

Covin and Miles (1999) have identified five forms strategic entrepreneurship can take: organizational rejuvenation, strategic renewal, domain redefinition, business model reconstruction and sustained regeneration. Strategic renewal implies change of relationship a firm has with its markets and competitors through significantly altering the way it competes. Sustained regeneration implies regular and continuous product-innovation activities: introduction of new products and services, entering new markets. Domain redefinition refers to creation by a firm of a new product-market arena which haven't been explored or exploited by others. Organizational rejuvenation implies sustaining or improving competitive position through internal innovative activities: changing internal processes, structures, and capabilities. Business model reconstruction refers to the case when the firm changes its core business model with a goal to improve operational efficiencies or differentiate itself from industry competitors in other ways which can bring value at the market (Covin, Miles, 1999).

In general the combination of concepts and theories presented in the literature can be described by the Figure 2.



CEP – corporate entrepreneurship performance; NVP – new venture performance

Figure 2. Combination of theoretical concepts

Source: Meyer (2009)

1.1.4. Exploration and exploitation

The further research in the field of strategic entrepreneurship has concentrated on the tension of the concept: the necessity to balance both exploration and exploitation activities. According to Ireland and Webb (2007) effective SE helps the firm develop relatively sustainable competitive advantages. Sustainable advantages are valuable, rare and also difficult for competitors to fully understand, and difficult to imitate (Barney, 1991). The firms which are able to balance exploitation and exploration achieve continuous innovation as a result.

There are several factors which make exploitation through following familiar organizational routines more preferable for many companies compared to exploration. These factors include uncertainty avoidance of different stakeholders: employees and suppliers; experimental nature and lack of certainty from explorative actions, need for novel routines. This negatively impacts the companies' desire for exploration which requires exercising unfamiliar routines (March, 1991).

The tension between exploration and exploitation should be balanced in the company by transition from one way of making business to another. This process of transition from exploration to exploitation is difficult – requires different operational, structural and cultural changes (Ireland, Webb, 2007).

As it was mentioned earlier, strategy is concerned with the firm's long-term development (Ghemawat, 2002). A firm's long-term development includes a number of elements, such as decisions regarding scope, how resources are to be acquired and managed, and intended sources of competitive advantage (Hofer, Schendel, 1978). Entrepreneurship, on the other hand, is concerned with actions taken to create newness (Ireland, Hitt, Sirmon, 2003). Newness results from actions aimed at creating new organizational units, establishing new organizations, or renewing existing organizations (Sharma, Chrisman, 1999).

Implementing SE the firm combines exploration-oriented attributes with exploitation-oriented attributes to develop consistent streams of innovation and to remain technologically ahead of competitors. Sustainable competitive advantage can only be achieved by a combination of product, process, and administrative innovations, none of which is enough by its own (Ireland, Webb, 2007).

There are different organizational cultures and structures for exploration and exploitation. The first is supported by decentralized authority, semi-standardized procedures and semi-formalized processes. The organizational culture at the same time should emphasize experimentation, acceptance of uncertainty and tolerance of failure. Exploitation, on the other hand, demands strong centralization, highly-specialized and formalized routines, in organizational culture there is a need in

greater certainty on task and outcomes, preference to short-term goals and focus on existing competencies (Ireland, Webb, 2007).

For facilitation of balance between exploration and exploitation Ireland and Webb (2007) suggest several steps including understanding of balance and underlining factors, analyzing external and internal environment and introducing middle manager role as balancing instrument between strategy and reality.

In the further research Ireland and Webb (2009) expand their theory introducing some tools for transition from exploration to exploitation. These tools include setting expectations, developing contingency plans and justifying changes.

1.1.5. Approaches to SE modeling

The study by Schindehutte and Morris (2009) suggests different view on SE and further research on this topic developed through the lens of complexity theory.

The authors emphasized the problems of conceptual clarity of SE which hasn't been clearly defined as a framework, a model, paradigm or anything else. Integrating strategy and entrepreneurship, SE does not represent a new theory of strategy or entrepreneurship (Schidehutte, Morris, 2009). Some authors were proposing the role of paradigm¹ for research in entrepreneurship (Hitt et al., 2001). But according to Schindehutte and Morris (2009) till now it has not emerged. Ireland et al. (2001) viewed SE as a concept which emphasizes the role of simultaneous entrepreneurial and strategic actions for wealth creation.

Schindehutte and Morris (2009) identify five areas in which more development is needed. As exploration and exploitation are antagonistic in nature, there is a need for research whether a firm can simultaneously pursue both. Then, the nature of entrepreneurship and entrepreneurial opportunities is unclear. The two other important areas for research are dealing with novelty or innovation and its effect,

¹ A paradigm includes shared assumptions, concepts, and methods that constitute a way of viewing reality (Kuhn, 1970)

as they create change and transform, leading to further novelties and innovations. Finally, the dynamics view on strategic entrepreneurship needs attention.

The authors propose that a new paradigm for SE must (1) consider the interactive effects of a multitude of interplays in the exploration–exploitation framework, (2) address critically differences between entrepreneurship, innovation, and newness rather than treat them synonymously or as a single construct, (3) disentangle the different loci of innovation, (4) develop a suitable architecture for an organizational form that accommodates activities across different spatial dimensions, and (5) provide a sound ontological basis for theorizing change (Schindehutte, Morris, 2009).

It is suggested that the level of analysis should be moved to the opportunity space in contrast to the focus of entrepreneurship (the individual) and strategic management (the firm) for investigation of innovation associated with entrepreneurial opportunities. SE as a paradigm should be able to address circular causality (when effect becomes a cause), multicausality, nonlinear linkages, feedback loops, metastable discontinuities, time-dependent processes, and self-reinforcing mechanisms. As a result it can “address the what (fluctuations and transformations), why (complexity), how (self-organization and emergence), who (different perspectives, e.g., entrepreneur, firms, institutions, or peripheral), and where (the opportunity space) of stability and change” (Schindehutte, Morris, 2009, p. 265).

The primary goal in SE is viewed as simplification of understanding of relations in the opportunity space, how these relations change and evolve in respond to processes, events, and structures at each level, and how these processes are linked across different levels (Schindehutte, Morris, 2009).

The difference of SE from entrepreneurship, corporate entrepreneurship, strategic management, or evolutionary economics and their respective theories is underlined and emphasized in the proposed change of paradigm. SE is supposed to deal with managing the creative potential of complex dynamics in a systemic

approach that creates, grows, and amplifies value throughout the system (Schindehutte, Morris, 2009).

Kyrgidou and Hughes (2010) review the model suggested by Ireland, Hitt, Sirmon (2003) arguing that it doesn't fit the exact definition of simultaneous pursuit of opportunity-seeking and advantage-seeking behavior but rather suggests linear view of separate entrepreneurial and strategic behaviors without feedback loop.

The authors suggest including learning dynamic capability renewal as a feedback link and internal environment and top management vision as important context of S.E. The extant model of S.E. is illustrated in Figure 3.

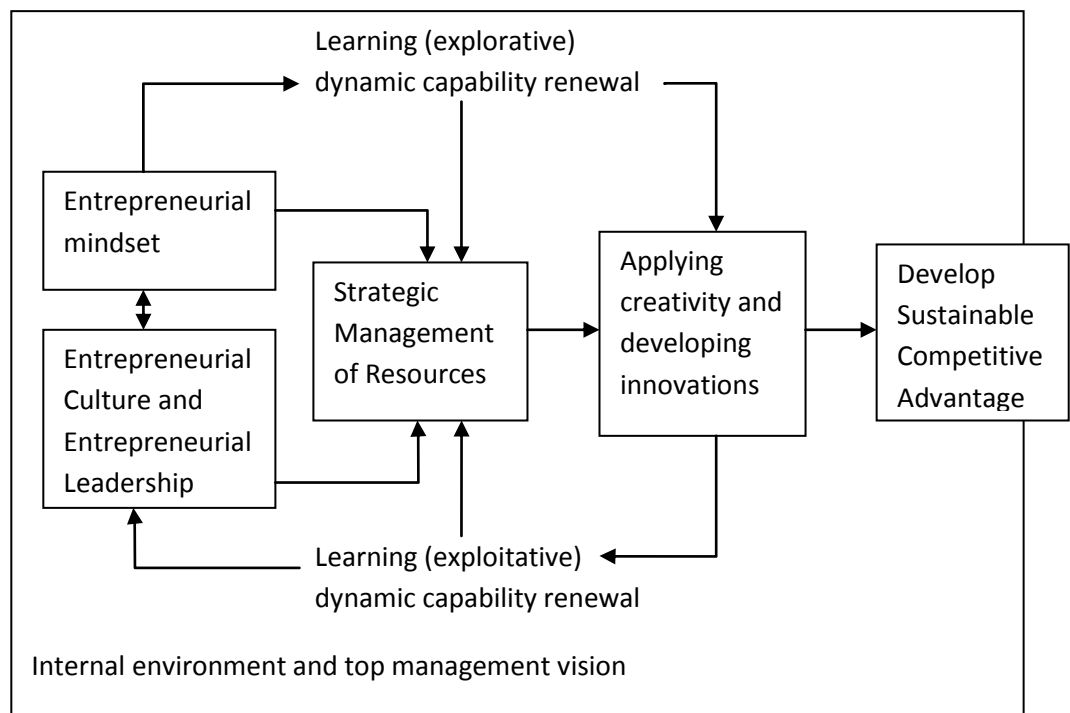


Figure 3. Model of Strategic entrepreneurship

Source: based on Ireland, Hitt, Sirmon (2003) and Kyrgidou, Hughes (2010).

1.2. Analysis of empirical research in Strategic Entrepreneurship

Strategic entrepreneurship is a rather young concept which hasn't attracted many empirical researches. Mostly, so far attention is paid to conceptualization and

theoretical contributions to the concept and not many empirical studies were conducted with regard to S.E. (Luke, Verreynne, 2006).

In this sub-chapter the main empirical studies on strategic entrepreneurship are reviewed with the emphasis on the factors researchers have identified as constituting strategic entrepreneurship. The few works concerning corporate entrepreneurship research were also mentioned as the ones closely connected to S.E. and having an important impact on other empirical studies in the field. The comparative analysis of different studies is presented in the Table 1.

Table 1. Empirical research on strategic entrepreneurship

Authors	Unit of analysis	Research method	SE definition	Results
Messeghem (2003)	SMEs	Survey	SE as entrepreneurial orientation	Entrepreneurial orientation is related to complex organizational structure
Ramachandran, Mukherji, Sud (2006)	Pharmaceutical company	Multiple case studies	SE as combination of risk seeking entrepreneurial behavior with advantage sustaining strategic behavior	Less failures and better results for company balancing opportunity-seeking and strategic behavior Tendency to involve both in the long term
Luke, Verreynne, (2006)	State-owned enterprise	Multiple case studies	SE as combination of opportunity identification, vision, innovation, growth, acceptance of risk and flexibility	Identification of core and supportive elements of SE
Patzelt, Shepherd (2009)	Academic venture	Survey	SE as setting and achieving strategic developmental goals by entrepreneurial ventures	Access to financial resources is the primary measure of policy programs; it enhances perceived benefits from access to nonfinancial resources and reduction of administrative burdens but substitutes tax

				incentives
Audretsch, Lehmann, Plummer (2009)	German IPO firm	Survey	SE as a balance of opportunity-seeking and advantage-seeking behavior	Patent ownership of the top manager significantly increases the percentage of equity held; number of patents held by the firm significantly decreases the percentage of ownership
Meuleman, Amess, Wright, Scholes (2009)	Private equity-backed buyouts	Survey	SE as recognition of resources needed for growth and creation of sustainable competitive advantage	Divisional buyouts are associated with increases in efficiency; higher levels of PE firm experience are associated with higher levels of growth; PE firm experience and intensity of follow-up is mainly important in achieving growth
Monsen, Boss (2009)	Managers and staff in hospital units	Survey	SE as integration of entrepreneurship and strategic management, model of Ireland, Hitt, Sirmon (2003)	Risk taking, innovativeness and proactiveness influence negatively the role ambiguity and intention to quit. The effect is higher for managers than staff members

Ramachandran, Mukherji, Sud (2006) in their work “Strategic Entrepreneurship in a Globalising Economy: Evidence from Emerging Economies” conducted a case study of two pharmaceutical companies from India in their internalization process.

Authors have identified the impact of strategic entrepreneurship on the success of the companies, one of which was aggressive and overtly risk seeking, while the other managed to balance its risk seeking behavior with systematic planning and structural changes (Ramachandran, Mukherji, Sud, 2006).

It was found that as a result of risk-seeking behavior the first company has faced higher amount of failures than the second, which moreover enjoyed greater

success. This has led the authors to conclude that synthesis of entrepreneurship and strategic management leads to a superior position than a dominantly entrepreneurial behavior (Ramachandran, Mukherji, Sud, 2006).

The authors concluded that although the companies need entrepreneurial behavior in the start of their internalization process, it is not enough to get a sustainable position based on competitive advantage. This position is gained through implementing the right organizational structure, necessary processes and policies, planning and carrying out activities and balancing and eliminating the different kinds of risks that are connected to the process of internationalization (Ramachandran, Mukherji, Sud, 2006).

By entrepreneurial behavior the authors consider definition suggested by McDougall and Oviatt (2000) as combination of innovative, proactive and risk-seeking behavior. Strategic entrepreneurship is defined as implementation of both entrepreneurial behavior, i.e. their ability to proactively identify opportunities, to anticipate possible difficulties and to seek and mitigate high degrees of risk through innovative means, and strategic actions including adaptation of organizational structure and culture and risk mitigation efforts.

Luke and Verreynne (2006) in their work “Exploring strategic entrepreneurship in the public sector” have concentrated on the entrepreneurial activities with strategic potential in state-owned enterprises (SOEs).

As the outcome of qualitative research it was found that entrepreneurial activities in each case study were approached strategically. The authors identified five major elements of the construct and six supporting element. Major elements which were identified in each case included: development of innovation, risk acceptance, flexibility, vision and growth. Six supporting elements included strategic processes related to vision, organizational culture with confidence in organization’s capabilities and concern for people, branding as a form of differentiation, operational excellence in core capabilities, cost efficiency and transfer and application of knowledge (Luke, Verreynne, 2006). At the same time,

the research didn't confirm the importance of some other elements identified in theoretical studies as key for SE: internationalization (Hitt et al., 2001) and top management teams and governance (Ireland et al., 2001).

Messeghem (2003) in the work "Strategic Entrepreneurship and Managerial Activities in SMEs" is studying entrepreneurial orientation and organizational structure of SMEs in food industry.

The quantitative study showed that firms with a very strong entrepreneurial orientation also have a highly bureaucratic structure which contradicts the Mintzberg's research (1973) which states that for strong entrepreneurial orientation a simple organizational structure is needed (Messeghem, 2003).

Studying strategic entrepreneurship the authors focus mainly on entrepreneurship orientation including innovation, proactiveness and risk-taking, and organizational structure characterized by five variables: standardization, formalization, specialization, the planning and control system and the information system (Messeghem, 2003).

Patzelt and Shepherd (2009) in their work "Strategic Entrepreneurship at Universities: Academic Entrepreneurs' Assessment of Policy" study how entrepreneurs perceive usefulness of policy programs for the strategic development of existing academic ventures focusing on measures providing academic ventures with access to important resources and adjusting the regulatory and legal environment to the needs of entrepreneurial ventures (Lundström, Stevenson, 2005).

As the result of quantitative analysis, access to finance was identified as the most important measure of policy programs for entrepreneurs and it increases the entrepreneurs' perceived benefits of other policy measures such as access to nonfinancial resources (networks, business knowledge) and reducing

administrative burdens, but diminishes the perceived benefits of tax incentives (Patzelt, Shepherd, 2009).

Audretsch, Lehmann, Plummer (2009) in the study “Agency and Governance in Strategic Entrepreneurship” look into strategic entrepreneurship through the lens of agency theory and research the link between the control of critical resources by new venture and the distribution of equity between principal and agent.

Managing of organizational resources in strategic way is one of the core elements of the strategic entrepreneurship model suggested by Ireland, Hitt, Sirmon (2003). The authors of this empirical study are focusing on the question how a firm can control resources it doesn't own, meaning the managers of the company. The results of analysis are consistent with hypothesis that the share of equity held by top manager increases with the number of patents he owns and decreases with the number of patents a firm owns. As the role of top manager is increasing in S.E. context, the agency problem has a crucial impact on the firm performance. It is also supported by the need for collective entrepreneurial mindset and culture as core elements of S.E. while the conflicts of interests can endanger S.E. in the company (Audretsch, Lehmann, Plummer, 2009).

The study by Meuleman et al. (2009) “Agency, Strategic Entrepreneurship, and the Performance of Private Equity-Backed Buyouts”, as well as the previous work, looks on interrelation of agency theory and strategic entrepreneurship. The two perspectives are combined in relation to PE-backed buyouts. The main question addressed is the relation of the type of PE-backed buyout and its further performance. S.E. in this context relates to a concept which perceives access to resources and capabilities as important factor in value creation through growth (Ireland, Hitt, Sirmon, 2003).

As the result of the study it has been found that divisional buyouts compared to other types of buyouts are not characterized by higher profitability change, though

efficiency and growth changes are remarkably higher. PE firm experience is identified to have positive relation to growth but not profitability or efficiency of buyouts, while this effect is stronger for divisional buyouts. The impact of the study for S.E. lies in identifying a relationship between the type of buyout and consequent growth of a firm, thus linking access to resources and capabilities with value creation (Meuleman et al., 2009).

Monsen and Boss (2009) in their study “The impact of strategic entrepreneurship inside the organization: examining job stress and employee retention” raise the question of S.E. effect on human resources of the company, specifically, job stress and desire of employees to quit. S.E. implies readiness for change and disruptive innovation in the company, which is mostly perceived negatively by managers who will try to protect firm and their routines (Ireland, Hitt, Sirmon, 2003; Covin, Slevin, 2002).

The authors are addressing the model of S.E. by Ireland, Hitt, Sirmon (2003) and the model for middle-level managers by Kuratko et al. (2005). The perception of S.E. on the workplace by managers and staff in this study is equated to their perception of entrepreneurial orientation, evaluated by the scale of Covin and Slevin (1989).

As the result of the analysis, it was revealed that the three dimensions of EO are generally associated with less role ambiguity and intention to quit, which contradicts the initial hypotheses. This can be explained by suggestion of Ireland, Hitt, Sirmon (2003) that effective S.E. can help managers to overcome fear of disruptive innovations and new ways of conducting business. The role ambiguity was proved to have mediating effect, when three characteristics of EO influence role ambiguity and then it consequently influences the desire to quit. Staff members were proved to react less to EO elements (Monsen, Boss, 2009).

The empirical research on strategic entrepreneurship is rather limited. The analysis of the model of strategic entrepreneurship and factors constituting the concept and its influence on firm success are mainly studied in case study

analysis. The quantitative research is concentrated on studying other aspects of business in strategic entrepreneurship context. In two works SE was represented by entrepreneurial orientation including innovativeness, proactiveness and risk-taking. It can be noticed that there is no established model of SE used in empirical studies and the topics of researches are very different and do not fully cover any specific aspect of strategic entrepreneurship. This shows the big research gap on the subject.

1.3. Development of Strategic Entrepreneurship model and hypotheses of the study

There are several key elements which form Strategic entrepreneurship. Ireland, Hitt, Sirmon (2003) in their model of strategic entrepreneurship suggest entrepreneurial mindset, entrepreneurial culture, and entrepreneurial leadership as the basis for opportunity-seeking behavior, while the other part of advantage-seeking behavior is represented by strategic management of resources and development of innovations.

Schindehutte and Morris (2009) have noticed that both entrepreneurship and strategic management are dealing with exploration and exploitation activities. There is the entrepreneurship of exploration which is different from the entrepreneurship of exploitation. Entrepreneurship includes both exploration of opportunities and exploitation of the reveal opportunities, while strategic management is focused on exploitation of core business opportunities and exploration of new opportunities of growth (Burgelman, Grove, 2007).

Exploration and exploitation represent two antagonistic concepts. According to March (1991) things which are known and considered to be stable can be exploited through selection, implementation and efficiency. Unknown has to be discovered through exploration activities including search, experimentation and variation.

On the level of the firm it can be stated that strategic entrepreneurship implies developing entrepreneurial culture and mindset in the firm, analyzing the current internal resources of the firm, implementing activities to increase existing resources necessary for the firm and conducting strategic management actions. Knowledge management in the company supports the strategic entrepreneurship activities, enables organizational learning and develops internal resources of the company.

As it was mentioned in later works criticizing the model by Ireland, Hitt, Sirmon (2003) (e.g., Kyrgidou, Hughes, 2010), the linear representation of entrepreneurial aspects followed by strategic management activities can't represent the underlined necessity for combining and balancing both exploration and exploitation. The company needs to simultaneously engage in these activities (Ireland, Webb, 2007). To support this important aspect of strategic entrepreneurship concept, it is suggested to look on the impact of both exploration and exploitation activities on firm performance.

Figure 4 presents the general model of current study which includes two major parts of exploration and exploitation influencing firm performance.

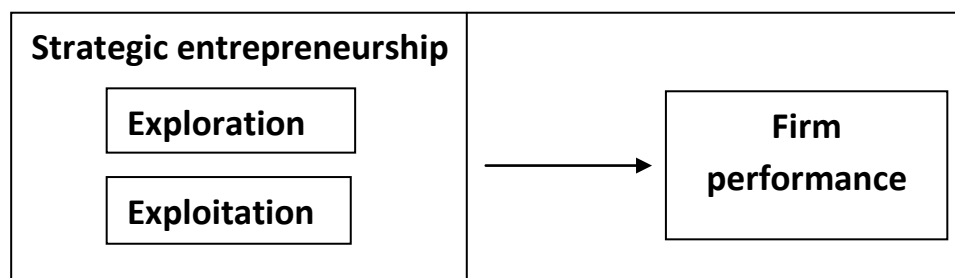


Figure 4. General model of the current study

Exploration defined in the work of March (1991) is focused on the search of new opportunities, experimentation and variation. These processes in the company are achieved through entrepreneurial orientation and entrepreneurial culture. To engage in explorative activities the company should be innovative, proactive, risk-taking and employees should share entrepreneurial values aimed at innovation, market leadership, personal initiatives, creativeness and readiness to take risk.

Entrepreneurial orientation can represent some of the factors proposed for strategic entrepreneurship model by Ireland, Hitt, Sirmon (2003). Entrepreneurial mindset refers to the way of thinking about business capturing the benefits of uncertainty. (McGrath, MacMillan, 2000). The managers should be ready for new opportunities arising from situations characterized with high uncertainty and risk. Ireland, Hitt, Sirmon (2003) introduced several components of entrepreneurial mindset. They are: recognizing entrepreneurial opportunities, entrepreneurial alertness, real options logic and entrepreneurial framework. It can be noticed that these components are related to main dimensions of entrepreneurial orientation but was well connect to the “entrepreneurship of exploitation”.

Entrepreneurial leadership in the model of Ireland, Hitt, Sirmon (2003) represents the role of leadership in developing strategic entrepreneurship in a firm. The entrepreneurial leader is expected to nourish entrepreneurial capability, protect innovations threatening the current business model, make sense of opportunities, question dominant logic, revisit “deceptively simple questions”, and link entrepreneurship and strategic management (Ireland, Hitt, Sirmon, 2003). According to this description, the entrepreneurial leader has to be innovative, risk-taking and proactive, or entrepreneurially oriented.

According to Miller (1983), entrepreneurial firm makes product innovations, undertakes risky ventures, and is leading in ‘proactive’ innovations. This definition introduced three elements on which entrepreneurial orientation construct was developed: innovation, risk-taking, proactiveness. Though some of the authors introduced other elements to the concept, the three key characteristics of entrepreneurship remained the same and appeared in each model of EO (Wiklund, Shepherd, 2005).

The innovativeness dimension of EO implies that the company often engages in new activities, supports new ideas, novelty, experimentation, and creative processes, in contrast to established practices and technologies. Proactiveness reflects the tendency to continuously anticipate the future needs of the market and act on them, gaining a first-mover advantage against the competitors (Lumpkin, Dess, 1996). Proactive firms are looking forward to the new opportunities and are

ready to capitalize on them. Risk taking refers to the willingness of the company to engage in risky projects and readiness to spend significant resources on the projects with unknown outcomes (Miller, Friesen, 1982).

Many empirical studies have regarded the influence of EO on firm performance. Some of the authors (e.g. Lumpkin, Dess, 1996; Covin, Slevin, 1989) have come to the conclusion that relationship between EO and performance depends on the external and internal characteristics of the organization.

Each of the individual dimensions of EO has a positive influence on performance (Wiklund, Shepherd, 2005). The companies constantly innovating through bringing on the market new products and technologies can generate extraordinary returns. Schumpeter (1934) has considered them as the engines of economic growth.

Proactive companies, as it was mentioned earlier, can achieve first-mover advantage. Being the first company on the market with new product or service it can charge higher prices than average and get high returns before competitors make a move. The first-mover advantage also enables them to control the market by taking control over distribution channels and establishing brand recognition (Zahra, Covin, 1995).

According to some of the research, risk taking has a positive effect on firm performance in a long run as a result of higher performance variation (March, 1991; McGrath, 1999).

The research by Rauch et al. (2009) supports the idea that EO dimensions (innovation, risk taking, and proactiveness) have equal importance in explaining business performance and consequently can be used as a summed index in future studies aiming at explaining performance (Rauch et al., 2009).

Organizational culture is a system of shared values and beliefs that shape the firm's structural arrangements and its members' actions to produce behavioral norms (Dess, Picken, 1999). According to Ireland, Hitt, Sirmon (2003)

entrepreneurial culture has to enhance new ideas, creativity and risk taking, promote learning, innovations and change.

Entrepreneurial culture is related to entrepreneurial orientation presented by innovativeness, risk-taking and proactiveness of the company and its employees but the entrepreneurial values are added to emphasize the devotion of people in the company to entrepreneurial behavior and especially to exploration.

The company which has developed internal culture favoring exploration will be constantly innovating, improving and finding new ways to increase profits and grow. The fact that these exploration activities are conducted constantly in the company means that even in short-term period there will be some results of these actions increasing firm performance of the company.

H1: Exploration is positively related to firm performance.

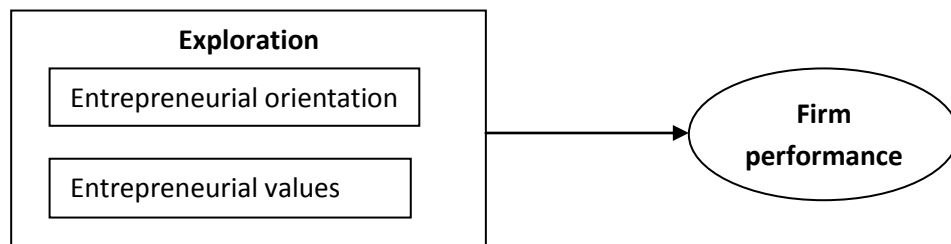


Figure 5. Illustration of hypothesis 1.

While entrepreneurial orientation and culture enable exploration of new opportunities, strategic management of resources and executed changes have to enable the firm to continuously exploit existing opportunities of growth and explored entrepreneurial opportunities.

Exploitation should include such factors as investments in internal resources, valuing knowledge-related resources, organizational learning, developmental and transitional changes.

The resource-based view of the firm has been investigated by researchers both in strategic management and in entrepreneurship field. The resource-based view of the firm suggests that competitive advantages are a function of the resources the firm develops to implement its product market strategy (Wernerfelt, 1984). It

explains differences in performance of the firms by their ability to find and exploit unique resources which are difficult to imitate and thus can provide a firm with sustainable competitive advantage (Alvarez, Barney, 2002). It has been proved that the use of resources by a firm has stronger influence on performance than industry characteristics (Barney, Arkan, 2001).

Ireland, Hitt, Sirmon (2003) suggest strategic management of resources as an important part of strategic entrepreneurship. To exploit opportunities a firm needs to manage its resources according to strategic goals. Management of resources includes acquiring, accumulating and bundling tangible and intangible resources.

Firms are acquiring resources necessary to identify and exploit opportunities on external markets. The combination of these resources with internal resources of the firm can create additional value exceeding the sum of individual resources.

Accumulation of resources implies development of firm resources internally by integration of external and internal resources, which can lead to achieving the sustainable competitive advantage.

Bundling of tangible and intangible resources enables to reorganize them in ways that promote exploitation of new opportunities. This creates different capabilities such as R&D, marketing, production and others. Unique capabilities differentiate companies and influence the firm performance (Ireland, Hitt, Sirmon, 2003).

Acquisition and development of new resources can be presented by company's investments in internal resources. The investments in internal resources are showing the level of strategic development of the company, orientation on growth and ability to exploit opportunities. Without sufficient investments the company won't be able to grow and develop capabilities.

For accumulation and bundling of resources the company needs to have necessary internal resources which could bring value added to the resources bought on external market. These internal resources are mainly represented by intangible assets of the company including human capital. Intangible resources can provide sustainable advantage to the company through integration with tangible resources.

The knowledge-related resources such as know-how, technologies, patents and licenses, qualified personnel and professional managers represent the assets of the company which can bundle with new resources and create unique capabilities and sustainable competitive advantage being valuable, rare, imperfectly imitable and non-substitutable in their combinations.

Barney (1991) recognized the role of management in effecting the firm performance through their ability to manage resources of organization and appropriate value. The role of the management is both direct and indirect as they are shaping managerial processes and resource deployments (Bhardwaj, Sushil, Momaya, 2007).

The evaluation by the top managers and owners of the companies the importance of specific resources is closely related to their idea on strategic development of the company. The high evaluation of knowledge-related resources implies long-term oriented development of the company to achieve competitive advantage according to the knowledge-based view of the firm, and their focus on exploitation.

Knowledge is considered to be one of the most important resources for modern entrepreneurial companies. The ability of organization to learn enables it to constantly develop. If the company is accumulating all of its knowledge and experience and is ready to use external knowledge coming from different industries and businesses, it is better in analyzing the arising opportunities and has sufficient resources to exploit it. Kyrgidou and Hughes (2010) have also stressed learning as one of the important factors which should be added in the model of strategic entrepreneurship. Thus, organizational learning will enhance exploitation activities of the company.

Changes are another important factor influencing the exploitation of revealed opportunities by a company. The firm has to be able not only to define the opportunities but also to bring them to reality through change.

Schumpeter (1934) has first introduced the idea of innovations through which firms pursuit opportunities in the markets. It has been previously proved that innovative first movers are likely to get monopoly advantages and have abnormal

profits while competitors try to imitate or substitute the innovation (Thesmar, Thoenig, 2000). Innovations have positive relation on performance of the firms from different sectors (Kluge, Meffert, Stein, 2000).

Innovations can both refer to entrepreneurship and strategic management (Hitt et al. 2001). However, it is the form of exploitation of the revealed opportunities. Innovation has different definitions in the literature, but mostly it is perceived as new product development, product improvement or new process introduction.

The changes in the company represent explored opportunities actually brought to reality. Change is considered to be the central component to the concept of Strategic entrepreneurship which requires more attention (Schindehutte, Morris, 2009). Innovative activities of a company can be referred to significant changes related to new product or service development, changes in organizational structure, culture, strategy or business processes.

Ackerman (1997) distinguished three types of change: developmental, transitional and transformational. Developmental change is incremental change which improves some aspect of organization. Transitional change is aimed at achieving a specific desired state different from the current one. Transformational change is radical and requires shift in assumptions of organizational members. It represents significant changes in structure, processes, culture and strategy of organization.

Different changes can have short-term or long-term effect on the company performance. While the effect of improvements in products or services and in everyday work of the company can be noticed rather soon, successfulness of more significant changes can often be evaluated only over time. The companies actively innovating are more likely to develop competitive advantage and sustain it over longer period. Thus, degree of innovative activities and changes is closely connected to the main goal of SE – developing sustainable competitive advantage.

The exploitation of opportunities is aimed at improving the company performance through innovation, changes and efficient management of resources.

H2: Exploitation is positively related to firm performance.

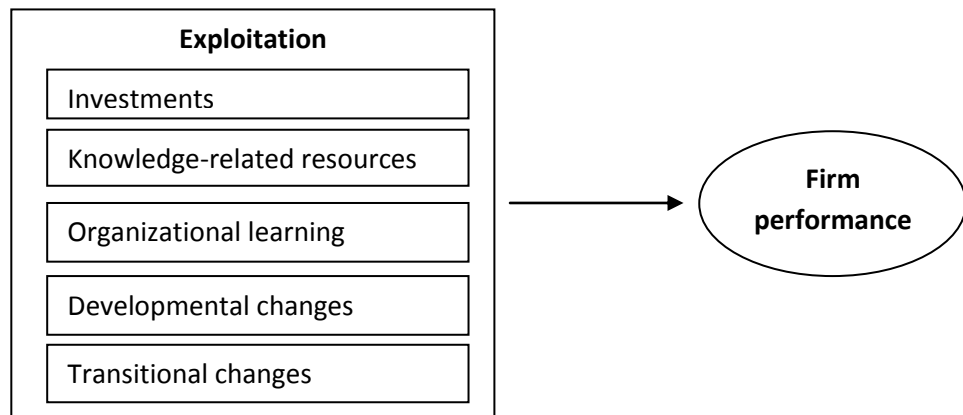


Figure 6. Illustration of hypothesis 2.

Strategic entrepreneurship is often regarded as a way to balance two different approaches such as entrepreneurship and strategic management, or from another point of view, exploration and exploitation. While concentration on exploration only can lead to many undeveloped ideas and undeveloped competence, focus on exploitation can create a ‘competency trap’ and prohibit the organization from necessary changes and innovations (March, 1991). The balance of both should then enhance performance by making an organization innovative, flexible, and effective without losing the benefits of stability, established routines, and efficiency (Simsek, 2009).

Ambidextrous organization meaning organization which can manage trade-offs between conflicting demands by putting in place “dual structures” (Duncan, 1976) is able to support a high level of both styles of learning balancing between exploration and exploitation.

The model of strategic entrepreneurship incorporates both exploration and exploitation which leads to increased firm performance.

H3: Strategic entrepreneurship has positive influence on firm performance

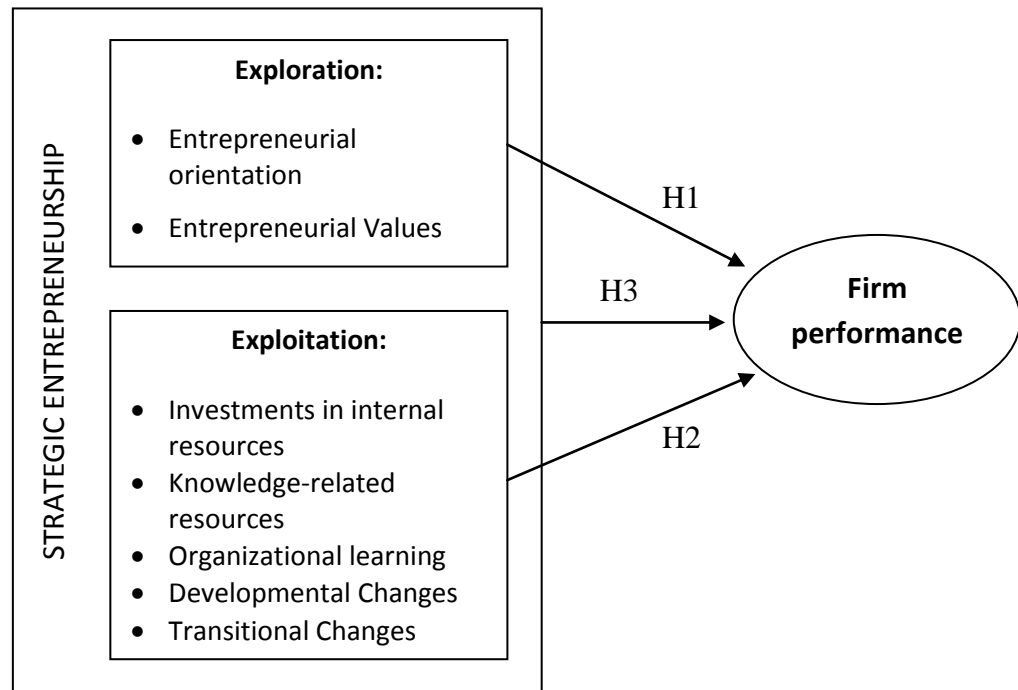


Figure 7. Combined model of research

1.4. Summary

In the theoretical part of the work, the evolution of strategic entrepreneurship theory was analyzed starting with the development of entrepreneurship research up to the integration of strategic management perspective which evolved in the new concept. Strategic entrepreneurship is considered by some researchers as the only way to create wealth (Ireland, Hitt, Sirmon, 2003).

The concept has different definitions and is viewed as combination of entrepreneurship and strategic management, opportunity-seeking behavior and advantage-seeking behavior, and finally, exploration and exploitation. Exploration and exploitation represent the two biases which need to be balanced in organization to achieve sustainable competitive advantage and create wealth. The term “ambidextrous organization” is related to strategic entrepreneurship capturing the need of organization not only to engage in explorative activities

externally and internally but also to be able to exploit the revealed opportunities through strategic management of resources and development of innovations.

The analysis of previous empirical studies on strategic entrepreneurship showed a lack of research on the topic. Although the model of strategic entrepreneurship has been discussed rather often in theoretical papers, few researchers tried to test it in empirical setting. It can be also noticed that strategic entrepreneurship was often reduced to entrepreneurial orientation in empirical research, though it can't fully represent the concept.

Based on the study of literature, the model of strategic entrepreneurship was developed which includes exploration and exploitation part. Exploration is presented by entrepreneurial orientation and entrepreneurial values. Exploitation is presented by investments in internal resources, importance assigned to knowledge-related resources, level of organizational learning in the company and developmental and transitional changes. It is proposed that exploration, exploitation and their combination presented by these factors have significant positive influence on firm performance.

2. Influence of strategic entrepreneurship factors on firm performance: results of empirical analysis

2.1. Data collection

The data used in this research was collected in the project "Factors of growth and success of entrepreneurial firms in Russia" which was carried out with support of Charity fund of development of GSoM, St. Petersburg State University and Center of entrepreneurship USA-Russia in 2007-2009.

The data was collected on 500 firms from Moscow and St. Petersburg with number of employees varying from 3 to 500 people. The chosen companies represented the three most rapidly developing industries in Russia: (1) whole and

retail sale, (2) hotels, restaurants and cafes (HoReCa), (3) ICT-industry (information technologies and telecommunication, digital television, software, etc.).

In the period from September to December 2008 with the heads of the firms (general directors, owners or top management members) were held structured interviews based on questionnaires, which included different questions on various aspects of the company management, including general information on the company, structure of ownership and management, management style (level of formalization, organizational structure, centralization, values and changes), business model of the company, company external environment, internal resources of the organization, and internalization process.

The questions were related to activities of the firms in 2005-2007 and were divided on three blocks. The typical question contained an expression characterizing the firm activities on the five-point Likert-type scale.

The additional data on sales volume, profit and several coefficients such as return on equity and return on sales were taken from official financial statistics provided by database SPARK-Interfax.

The quoted sample was formed by several criteria: geography of operations, industry and number of employees. The firms were chosen randomly according to the quotas. According to the shares of firms from the three industries in Moscow and St. Petersburg, the quotas for firm types related to the number of employees were formed (Куликов, Широкова, 2010).

In the sample 356 companies were from Moscow and 144 from St. Petersburg which represents accordingly 71,2% and 28,8%. 71,8% of companies operated in whole and retail sale, 15% in HoReCa and 13,2% in ICT. The companies with less than 50 employees accounted for 27,8% of the sample, companies with 50-100 employees – 31,2%, companies with 100-200 employees – 24,4%, companies with 200-500 employees – 16,6%. The average age of the companies in the sample is 7 years. The distribution of companies by age is shown in Table 2.

Table 2. **Distribution of companies by age**

Age	Number of companies	% of total number
< 1 to 5 years	230	46
6 to 10 years	153	30,6
11 to 15 years	91	18,2
16 to 17 years	26	5,2
Total	500	100,0

The decision to focus research only on the companies operating in Moscow and St. Petersburg can be explained by unequal distribution of small and medium enterprises on the Russian territory. Historically in the two biggest cities of Russia, Moscow and St. Petersburg the biggest share of SMEs was situated. (Куликов, Широкова, 2010) According to the Report of National Institution of Systemic Research of Entrepreneurship Problems (2009) by October 1 2008 in Moscow and St. Petersburg was the highest level of SMEs on 100 thousand population: 275,1 companies in Moscow and 337,1 companies in St. Petersburg. They also showed the highest level of turnover in 2008: 752 905,9 mln. rub – Moscow, 745 455,9 mln. rub. – St. Petersburg.

The distribution of companies by cities is presented in the Table 3.

Table 3. **Distribution of companies in the sample by cities**

City	Number of companies	% of total number
Moscow	356	71,2
St. Petersburg	144	28,8
Total	500	100,0

In terms of the project “Factors of growth and success of entrepreneurial firms in Russia” the main focus of study was on the fastest growing Russian entrepreneurial companies. To choose the industries with most favorable conditions for growth the macroeconomic data on Russian economic growth was analyzed.

The most dynamically developing industries of Russian economy are the whole and retail sale (growth of 12%) and hotels, restaurants, cafes (12%) (Госкомстат, 2005).

In the sector of trade there are different tendencies of growth, so the trade can be divided on two separate sectors – retail trade and wholesale. The both of these sectors have high level of growth though using different business-models.

Though comparably smaller share of HoReCa industry in the structure of Russian GDP (0,9%) on the moment of research this industry was one of the most active and promising new market solutions. Index of growth of hotels and other companies of the industry has increased on 7,3% in 2006-2007. Many examples of most successful business models of entrepreneurship come from the HoReCa industry which is also a reason for including the industry in the survey (Госкомстат, 2008).

One of the most rapidly growing and innovative sectors of world economy is high-tech sector of information technologies and telecommunications (ICT). The companies of this industry are providing high growth rates of return on investments in entrepreneurial business. For development of this sector the big investment opportunities in the market should be available with access to credit which would compensate for the high level of risk of ICT sector. It sector includes information technologies, communication, digital television, audio and video, etc. In 2006-2008 in Russia the growth of volume in ICT sector was around 20% annually, while the export accounted for around 14% (PMR, 2007). The industry has high potential for growth and is often viewed as the example of growing entrepreneurship in the country.

The chosen segments have highest potential for entrepreneurship and, as well, represent the companies which became the real leaders of market.

Distribution of companies by industries is presented in Table 4.

Table 4. Distribution of companies by industries

Industry	Number of companies	% of total number of companies
Wholesale and retail trade	359	71,8
HoReCa	75	15,0
ICT	66	13,2
Total	500	100,0

According to official classification in Federal Law №209 from 24.07.2007, the SMEs are defined as companies with less than 250 employees. However, in the research the companies up to 500 employees were included in order to study the growing entrepreneurial firms.

In table 5 the distribution of companies in the sample by number of employees is given.

Table 5. Distribution of companies by the number of employees

Number of employees	Number of companies	% of total number
Less than 50 employees	139	27,8
51-99 employees	156	31,2
100-199 employees	122	24,4
200-499 employees	83	16,6
Total	500	100,0

2.2. Method of analysis

2.2.1. Dependent variable

Firm performance is a multidimensional construct (Delmar, Davidsson, Gartner, 2003). There are different indicators used in empirical studies to measure firm performance. Three main groups of indicators can be identified as measurements of profitability, measurements of efficiency and measurements of growth (Meuleman et al., 2009).

Growth of Sales. Sales growth is a widely used indicator in empirical analyses of entrepreneurial growth (Delmar, Davidsson, Gartner, 2003). The data sample in this research includes 84% of small and medium size companies with less than 250 employees and one of the main indicators of high firm performance for such companies is growth (Delmar, 1997).

In the sample there are 46% of companies less than 5 years old, and for such companies evaluation of sales growth as the result of their performance is most suitable. Many young companies can work with very low profit or even loss, but the growth of sales is showing their development and performance on the market.

Although the questionnaire for this study included questions on firm performance, the official financial information provides more objective view on the company performance. So for the purpose of the study archival financial performance on sales volume of the companies in three years 2005, 2006 and 2007 was taken from SPARK database. As all the data in questionnaire was taken for the period of 2007, the growth of sales for the same year is measured. As in 2008 the crises started in the Russian economy, the data from later period won't be representative for this study.

Growth of sales is calculated as a percentage increase in sales volume from 2006 to 2007. The companies less than 2 years old had missing values. For supporting the condition of normal distribution, several outsider companies with extremely high values were eliminated. The total number of companies with data on growth

of sales is 343. The mean of the scale is 96,45, standard deviation is 204,38. Growth of sales is considered the main performance indicator of this study.

Performance. To have a wider view on the concept of strategic entrepreneurship and its effect on firm performance an additional indicator for measuring firm performance - indicator of perceived nonfinancial performance - was taken. Perceived nonfinancial performance includes studies using satisfaction, goal attainment, or global success ratings as performance indicators. The firm performance in the study of Covin and Slevin (1989) was measured by subjective perceptions of respondents on the importance of different performance indicators and satisfaction by those indicators. Another study (Yoo, 2001) used employee job satisfaction and public image of a firm in the dependent variable (Rauch et al., 2009).

Denison and Mishra (1995) compared the effectiveness of objective and subjective performance and have come to a conclusion that “subjective measures of effectiveness are better suited for the comparison of a disparate set of firms than are the objective measures of effectiveness” (Denison, Mishra, 1995, p. 219). This supports the view that strategic orientation of the firm and its innovation activities can be explained by the influence of management attitudes and perceptions (Atuahene-Gima, Ko, 2001).

As the result, the firm performance in the study is measured by weighted average performance index introduced in the work of Covin and Slevin (1989) developed from the instrument of Gupta and Govindarajan (1984) and used in other empirical studies (Rauch et al., 2009).

The index is computed by multiplying the level of satisfaction of top management of the firm with several main financial performance criteria by the degree of importance they assign to each of these financial criteria. The level of satisfaction and degree of importance are indicated on the five-point Likert-type scale. The financial performance criteria of the questionnaire included: company profit, sales level, profit to sales ratio and market share. The multiplied values are summed and divided by the number of criteria to get the

weighted average performance index. The mean of the scale is 17,99, standard deviation is 26,20.

2.2.2. Independent variables

Entrepreneurial orientation (EO). In empirical studies on entrepreneurship and entrepreneurial orientation an established instrument is the scale developed by Covin and Slevin in their work “Strategic management of small firms in hostile and benign environment” (1989). In this study they developed the measuring instrument for “strategic posture” which tends to be more entrepreneurial or more conservative depending on the reliance of the firm on innovation, proactiveness and risk-taking.

Some of the items of the scale were adapted from works of other authors (Miller, Friesen, 1982; Khandwalla, 1976/77), others were originally introduced by Covin and Slevin (1989). The factor analysis conducted by the authors proved the validity of the items constituting the scale. Later on the scale of Covin and Slevin (1989) has been extensively used by researchers.

Rauch et al. (2009) in their research on empirical studies on entrepreneurial orientation have noticed that many authors have used different variations of the scales with three major types of variations: different number of dimensions, e.g. futurity and competitive aggressiveness introduced by Venkatraman (1989); different number of scale items and conversion of original statements to Likert scale. However, the most empirical studies still use the original scale of Covin and Slevin (1989) which shows its acceptance as the major instrument for measuring EO (Rauch et al., 2009).

In this study entrepreneurial orientation will be measured by the questions adopted from the scale of Covin and Slevin (1989): three questions on each dimension of the concept – innovativeness, proactiveness and risk taking.

There are different views among the researchers whether EO should be regarded as unidimensional concept so that the three main factors can be combined into a

single scale or whether EO is multidimensional and has three distinct dimensions which should be analyzed separately (Covin, Slevin, 1989; Rauch et al., 2009).

In this study the dimensions of EO and their influence on firm performance are combined in a single scale. Innovativeness is measured by three questions to which respondents gave answers on a 7-point Likert-type scale:

1. In general, the top managers of my firm favor a strong emphasis on R&D, technological leadership and innovations **vs.** a strong emphasis on the marketing of tried and true products or services
2. How many new lines of products and services has your firm marked in the past 5 years?
3. How many changes in products and services has your firm made in the past 5 years?

Proactiveness is indicating the attitude of a firm to its competitors, their readiness and desire to compete fiercely. It was measured by the questions adopted from Covin and Slevin (1989) scale. Respondents evaluated their agreement with opposite statements on the 7-point scale, the higher score indicating higher proactiveness.

1. In dealing with its competitors my firm typically responds to actions which competitors initiate **vs.** typically initiates actions which competitors then respond to
2. In dealing with its competitors my firm is very seldom the first business to introduce new product/services, administrative techniques, operating techniques, etc. **vs.** is very often the first business to introduce new product/services, administrative techniques, operating techniques, etc
3. In dealing with its competitors my firm typically seeks to avoid competitive preferring 'live and let live' posture **vs.** typically adopts a very competitive 'undoclashes, the-competitors' posture

Risk-taking measures the readiness of the company to take risk and is evaluated by the standard questions from Covin and Slevin (1989) scale with 7 points given to most risk-taking behavior:

1. In general, the top managers of my firm have a strong proclivity for low-risk projects (with normal and certain rates of return) **vs.** a strong proclivity for high-risk projects (with chance of very high return)
2. In general, the top managers of my firm believe that owing to the nature of the environment, it is best to explore it gradually via bold, timid, incremental behavior **vs.** owing to the nature of the environment, wide-ranging acts are necessary to achieve the firm's objectives
3. When confronted with decision-making situations involving uncertainty, my firm typically adopts a cautious, 'wait-and-see' posture in order to minimize probability of making costly decisions **vs.** typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities

However, before combining the questions from three dimensions in one scale of entrepreneurial orientation the reliability test was conducted. According to test the Cronbach's alpha is 0,799, which shows the high internal consistency of the scale. The mean of the scale is 3,3 and standard deviation is 0,91.

Entrepreneurial Values. Ireland, Hitt, Sirmon (2003) defined effective entrepreneurial culture as the one supporting creativity, risk-taking, innovativeness and continuous change while tolerating failure. Among four questions in the questionnaire on different values which can be shared in a company, the entrepreneurial values were represented by the question:

- Indicate on the scale from 1 to 5 whether the following working methods are encouraged in your company: innovations, personal initiatives, creativity, ability to risk and orientation towards market leadership.

The variable "Values" has a mean of 3,53 which indicates higher than average level of entrepreneurial values in the companies of the sample, standard deviation is 1,031.

Investments. The respondents were asked what % of profit they use for different purposes connected to their internal resources.

The investment index for the model measured the % of profit which was used to develop internal resources of the company through investments in brand development, equipment, personnel training, management of intellectual property and R&D. The investments scale has a mean of 16,88 and standard deviation of 20,98. The Cronbach's alpha of the scale is 0,512. Although investments in different resources are not highly correlated, the variable needs to measure the total % of profit which is used by the company for internal development.

Knowledge-related Resources. Respondents assigned levels of importance to different internal resources on five-point scale. Knowledge-related resources include know-how, technology, patents, qualified personnel and professional management. The importance given to knowledge-related resources was taken to form a scale (variable "KnResources") with a mean of 19,57 which means that overall the companies perceive these resources as significant and standard deviation of 4,12. The Cronbach's alpha of the scale is 0,758 which indicates high internal consistency of the scale.

Organizational Learning. The organizational learning of the company is measured by four main questions:

1. In the end of any project we analyze deeply the results and exchange our experience;
2. It is common practice in our company to describe documentary the practical experience and knowledge;
3. We implement in our activities the experience of most successful companies in our industry and from other industries;
4. We implement the ideas, which come from our partners (clients, suppliers, subcontractors, etc.)

Respondents agree with expressions on five-point scale. On the base of this mean organizational learning index is computed for each firm. The scale has a mean of 3,36 and standard deviation of 0,912, which shows overall higher than average level of knowledge management in the companies of the sample. The scale is reliable as the Cronbach's alpha for the scale is 0,762.

Developmental Changes. As it was mentioned earlier, the changes can differ depending on their degree and can have higher positive effect in shorter or in longer period of time, so all changes conducted in the companies in the last 2 years were divided in two groups: Developmental changes and transitional changes.

Developmental changes include significant upgrade of an existing product line/service and introduction of new IT-system. The scale has a mean of 4,06 and standard deviation of 3,05, which indicates high activity of the companies regarding developmental changes.

Transitional Changes. Transitional changes which can have a more long-term effect include agreement to a new venture with foreign partner, changes in structure, changes in strategy, changes in company business processes, changes in organizational culture and introduction of new reward system - these changes represent different types of innovations introduced by Covin and Miles (1999). The scale has a mean of 0,56 and standard deviation of 0,79 which indicates overall low level of such changes in companies of the sample.

SE. Strategic entrepreneurship implies combination of exploration and exploitation to create wealth. The combined effect of all exploration and exploitation factors is estimated by variable SE. All factors were ranked on a 5 point scale, the exploration scale was estimated by weighted average of entrepreneurial values and entrepreneurial orientation. The scale has a mean of 3,26, standard deviation of 0,92. Exploitation scale was estimated by weighted average of investments, significance assigned to knowledge-related resources, organizational learning, developmental and transitional changes. The scale has a mean of 3,05 and standard deviation of 0,82. SE variable was computed as a multiplication of exploration and exploitation scales. The mean of SE scale is 10,14, standard deviation – 4,58.

Control variables

It is necessary to include variables in the model controlling for age of the companies and for their size. The age of the company can influence its inclination to risk-taking and entrepreneurial behavior while providing experience for more stable financial performance. The size of the company can influence as well the level of entrepreneurship and financial performance of the company. Controlling for age and size of the company enables to account for their influence in the model.

Age. The age of the company is calculated as the difference between the year of questionnaire and the year of company foundation which was verified in SPARK database. The mean of the scale is 7,85 and standard deviation is 4,52.

Size. The size of the company is represented by logarithm of number of employees. This information was provided by companies in questionnaire. The effect of increase of number of employees by 1 is different for a company with 3 people or with 500 people, so the logarithm of number of employees is taken in order to estimate the increase in growth of sales when number of employees increases by 1% (Wooldridge, 2003). The mean of the scale “Size” is 3,73, standard deviation is 1,34.

HoReCa and ICT. To control for the possible industry heterogeneity the two binary “dummy” variables “ICT” and “HoReCa” are introduced. Industry “Trade” which is the biggest in the sample is considered the basic group and is accounted for in the constant (Wooldridge, 2003). This is needed to analyze if there are significant differences in growth of sales depending on the industry factors.

To control for structural differences between the industry samples the variables HoReCa*Size and IT*Size are added in the model (Wooldridge, 2003).

All the questions of questionnaire used for computing variables of the study are shown in Appendix 1.

2.2.3. Regression model of research

To analyze the relation between strategic entrepreneurship factors and firm performance the hierarchical multiple regression analysis is used. Regression focuses on using the relationship for prediction. Hierarchical regression can be used to estimate the unique contribution of main predictor variables compared to control variables in explaining variance in outcome. Control variables are included in the model in first block, than main predictor variables are added to the model. The change of R Square shows the contribution of main predictor variables to explain variance of predicted variable (Field, 2009).

Three models are developed to test three hypotheses: model with exploration variables, model with exploitation variables, and model with strategic entrepreneurship including both parts. The econometric models of the research can be presented as following:

Formula 1. Econometric models of research

Exploration model

$$(1) Y = \beta_0 + \beta_1 \text{ Age} + \beta_2 \text{ Size} + \beta_3 \text{ HoReCa} + \beta_4 \text{ ICT} + \beta_5 \text{ HoReCa*Size} + \beta_6 \text{ ICT*Size} + \beta_7 \text{ Entrepreneurial Orientation} + \beta_8 \text{ Values} + \varepsilon,$$

Exploitation model

$$(2) Y = \beta_0 + \beta_1 \text{ Age} + \beta_2 \text{ Size} + \beta_3 \text{ HoReCa} + \beta_4 \text{ ICT} + \beta_5 \text{ HoReCa*Size} + \beta_6 \text{ ICT*Size} + \beta_7 \text{ Investments} + \beta_8 \text{ KnResources} + \beta_9 \text{ Organizational Learning} + \beta_{10} \text{ Developmental Changes} + \beta_{11} \text{ Transitional Changes} + \varepsilon,$$

Strategic entrepreneurship model

$$(3) Y = \beta_0 + \beta_1 \text{ Age} + \beta_2 \text{ Size} + \beta_3 \text{ HoReCa} + \beta_4 \text{ ICT} + \beta_5 \text{ HoReCa*Size} + \beta_6 \text{ ICT*Size} + \beta_7 \text{ Entrepreneurial Orientation} + \beta_8 \text{ Values} + \beta_9 \text{ Investments} + \beta_{10} \text{ KnResources} + \beta_{11} \text{ Organizational Learning} + \beta_{12} \text{ Developmental Changes} + \beta_{13} \text{ Transitional Changes} + \beta_{14} \text{ SE} + \varepsilon,$$

where

Age	= age of the company at the time of questionnaire
Size	= log of number of employees in a company
HoReCa	= industry hotels, restaurants and cafes

ICT	= industry information and communication technologies
HoReCa*Size	= combined effect of HoReCa industry and the size of the company
ICT*Size	= combined effect of ICT industry and the size of the company
Entrepreneurial orientation	= the level of entrepreneurial orientation in a company
Values	= the level of entrepreneurial values in a company
Investments	= investments in internal resources
KnResources	= importance assigned to knowledge-related resources
Organizational Learning	= level of organizational learning in a company
Developmental Changes	= developmental changes carried out in a company weighed by their significance
Transitional Changes	= transitional and transformational changes carried out in a company weighed by their significance
SE	=combined effect of exploration and exploitation

In the models β_i are unknown parameters of the model which describe directions and strengths of the relationship between dependent variable and independent factors holding other factors fixed. ϵ is an error which includes the influence of unobserved factors on the dependent variable Y (Wooldridge, 2003).

All the scales of independent variables were tested on internal consistency by Cronbach's alpha test and showed high results. All the variables have close to normal distribution. The regression model was tested on multicollinearity, only multiplied variables showed multicollinearity which is expected and doesn't affect the model and other variables (Ho, 2006).

2.3. Analysis of Results

In Table 6 and Table 7 the descriptive statistics of the sample and correlation matrix are presented. Correlation is primarily concerned with finding out whether a relationship exists and with determining its magnitude and direction (Ho, 2006). There are several significant correlations between predictor variables.

Table 6. **Descriptive statistics**

Variables	Min	Max	Mean	Std. Deviation
GrowthSalesPercent	-99,86	1108,00	96,45	204,38
Performance	1	361,4	17,99	26,20
Age	,00	17,00	7,85	4,52
Size	,69	6,91	3,73	1,34
HoReCa	0	1	,17	,38
ICT	0	1	,13	,34
HoReCa*Size	,00	5,99	,68	1,55
ICT*Size	,00	6,91	,46	1,28
EO	1,22	6,00	3,31	0,91
Values	1	5	3,53	1,03
Investments	,00	97,00	16,88	20,98
KnResources	5,00	25,00	19,57	4,12
Organizational Learning	1,00	5,00	3,36	,91
Developmental Changes	,00	10,00	4,06	3,05
Transitional Changes	,00	3,85	,56	,79
SE	2,4	25	10,14	4,58

The industry variable “HoReCa” is positively correlated with variable “Age” which means that the companies in the sample from HoReCa industry are on average more old than companies from basic Trade industry.

Table 7. Correlation matrix

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. GrowthSalesPercent	1															
2. Performance	,037	1														
3. Age	-,212**	-,042	1													
4. Size	-,009	-,056	,051	1												
5. HoReCa	-,102	-,062	,206**	,052	1											
6. ICT	,032	,102	-,073	-,053	-,179**	1										
7. HoReCa*Size	-,108*	-,060	,209**	,161**	,951**	-,170**	1									
8. ICT*Size	,012	,075	-,058	-,072	-,167	,934**	-,159**	1								
9. EO	-,041	-,128*	,021	,129*	-,213**	-,024	-,215**	,019	1							
10. Values	,123*	,007	-,014	,026	-,088	,068	-,085	,055	,102	1						
11. Investments	,140**	,114*	-,083	,118*	-,005	,237**	-,022	,256**	-,004	,228**	1					
12. KnResources	,035	,126*	-,012	,120*	-,047	,137*	-,030	,142**	,209**	,198**	,268**	1				
13. Organizational Learning	,092	,080	,049	,126*	-,163**	,126*	-,123*	,115*	,219**	,175**	,091	,519**	1			
14. Developmental Changes	,064	,006	,077	,097	,104	,327**	,113*	,319**	,073	,109*	,161**	,261**	,286**	1		
15. Transitional Changes	-,118*	-,026	,067	,070	,093	,371**	,124*	,391**	,072	,087	,108*	,131*	,200**	,534**	1	
16. SE	,070	,135*	,003	,199*	-,137*	,269**	-,121*	,300*	,602**	,551**	,404**	,559**	,551**	,509**	,419**	1

** Correlation is significant at the 0,01 level (2-tailed); * Correlation is significant at the 0,05 level (2-tailed)

Logarithm of number of employees (“Size”) is positively correlated with the level of Entrepreneurial orientation in the company, investments in internal resources, importance assigned to knowledge-related resources and organizational learning. This means that bigger companies tend to act more entrepreneurial, and at the same time invest more in internal resources, have higher level of organizational learning, which can be regarded as tendency of bigger companies to engage more in exploration and exploitation activities at the same time.

Variables “HoReCa*Size” and “ICT*Size” are highly correlated with variables “Size” and “HoReCa” and “ICT” respectfully, which is expected as they represent multiplication of those variables. However, as it was mentioned, it doesn’t constitute any problem for the model (Ho, 2006), it can influence only the specific coefficients for these predictor variables.

The variable “Entrepreneurial orientation” has significant negative correlation with industry “HoReCa” and positive correlation with organizational learning and knowledge-related resources in the company. The negative correlation can be explained by the specifics of the industry in which companies tend to be less risk-taking and aggressive with their competitors.

Entrepreneurial values (“Values”) have significant positive correlation with investments, importance given to knowledge-related resources, organizational learning and developmental changes. These results show that entrepreneurial actions are positively related to strategic management actions of a company.

Investments in internal resources are positively related to ICT industry, knowledge-related resources and all kinds of changes. This shows that companies from ICT industry tend to invest higher percentage of profit for development of internal resources. Investments also form basis for conducting changes and developing innovations so the positive relation can be expected.

Significance of knowledge-related resources (“KnResources”) is positively correlated with ICT industry, organizational learning and both types of changes. The firms which focus on continuous learning and innovation understand the importance of knowledge-related resources for such activities.

Organizational learning is negatively correlated with HoReCa industry and positively correlated with ICT industry. It is also positively correlated with changes. The negative correlation can be explained by lower level of entrepreneurial orientation in the industry and higher age of the companies from this industry in the sample.

Both types of changes have positive correlation with ICT industry, they also positively correlate with each other. This means that companies which tend to make smaller developmental changes also tend to make more significant transitional or transformational changes and innovations. These results show that ICT industry tends to have high levels of exploitation activities.

Variable SE is highly correlated with all variables constituting its scale. It is also related to the industry variables and size of the company.

Dependent variable: Growth of Sales

The results of regression analysis of the first model with exploration factor on the growth of sales are presented in Table 8.

Table 8. Results of regression analysis: exploration

Dependent variable: Growth of Sales

Variables	Model 1	Model 2		
	Coefficients	Coefficients	Std.Dev.	Standardized coefficients
Constant	154,042***	113,071*	(63,908)	
Age	-9,057***	-8,750***	(2,451)	-,193
Size	5,234	6,485	(9,404)	,042
HoReCa	28,269	34,529	(98,226)	,064
ICT	96,246	79,777	(96,532)	,132
HoReCa*Size	-16,010	-18,366	(24,465)	-,139
ICT*Size	-25,978	-22,772	(25,413)	-,143

EO		-14,584	(12,430)	-,065
Values		23,413**	(10,580)	,118
R Square	0,053	0,071		
Adjusted R ²	0,036	0,049		
F	3,143***	3,171***		
R ² Change		0,018*		
F Change		3,134*		
Total number of observations	341			
*p < 0.1; ** p < 0.05; *** p < 0.01				

As it can be seen, the model is significant at the level of 0.002. R Square is the ratio of the explained variation compared to the total variation, and thus it is interpreted as the fraction of the sample variation in y that is explained by x (Wooldridge, 2003). The R Square 0,069 which means that the model explains 6,9% of variance in growth of sales. The R Square change is also significant on the 10% level which means that the impact of exploration predictor variables is significant.

The constant is significant on 10% level. The age of the company has significant negative relation to growth of sales. It means that younger companies generate higher percentage of increase in sales volume and develop faster than older companies. At the same time, the size of the company represented by logarithm of number of employees doesn't have significant influence on the growth of sales.

ICT and HoReCa industries as well as their combination with logarithm of number of employees didn't receive significant estimations of coefficients. It means that the growth in sales wasn't related to the fact that companies were from ICT or HoReCa industries. The firm performance is also not related to the combined effect of industry and size of the company, so that bigger companies

from ICT or HoReCa don't have higher growth of sales than companies from Trade industry of same or smaller size.

Entrepreneurial orientation also is not significant in the model, which means that its effect on firm performance can't be determined.

Entrepreneurial values have positive significant estimations of coefficients on the 10% level of significance. Entrepreneurial values shared in the company have positive relation to the firm performance represented by the growth of sales. While one of the variables is not significant and the other has positive relation we can conclude that hypothesis 1 is somewhat supported.

In the Table 9 the results of regression analysis of the second model testing exploitation influence on firm performance is presented.

Table 9. Results of regression analysis: exploitation

Dependent variable: Growth of Sales

Variables	Model 1	Model 2		
	Coefficients	Coefficients	Std.Dev.	Standardized coefficients
Constant	154,042***	133,219**	(64,860)	
Age	-9,057***	-9,004***	(2,438)	-,198
Size	5,234	-1,586	(9,397)	-,010
HoReCa	28,269	-15,167	(98,501)	-,028
ICT	96,246	48,976	(95,667)	,081
HoReCa*Size	-16,010	-2,124	(24,354)	-,016
ICT*Size	-25,978	-14,266	(25,302)	-,089
Investments		1,337**	(0,551)	,137
KnResources		-4,242	(3,157)	-,085
Organizational Learning		27,262*	(14,360)	,121

Developmental Changes		10,943**	(4,382)	,163
Transitional Changes		-54,709***	(16,825)	-,212
R Square	0,053	0,112		
Adjusted R ²	0,036	0,082		
F	3,143***	3,772***		
R ² Change		0,059**		
F Change		4,339		
Total number of observations	341			
*p < 0.1; ** p < 0.05; *** p < 0.01				

The model is significant at the level of 0.001. R Square is 0,112 which means that the model explains 11,2% of the variation in dependent variable. R Square change is significant at 5% level, so the exploitation predictor variables have significant impact to the model.

Constant is significant on 5% level. This means that other important factors can be added to the model. All control variables have approximately the same estimations as in the previous model.

The variable “Investments” received positive estimation of coefficient on the 5% level of significance. This result means that investments in internal resources of the company have positive relation to growth of sales.

The variable “KnResources” didn’t receive significant estimations of the coefficient, so its effect on growth of sales can’t be determined.

Organizational learning received positive significant estimations of coefficients on the 10% level of significance. Thus, it can be concluded that the higher level of organizational learning in the company leads to higher level of growth of sales.

Developmental changes have positive coefficient on the 5% level of significance. This confirms the idea that companies which carry out incremental changes improving their products or some processes tend to have higher growth of sales than companies which don't.

However, transitional and transformational changes, on the other hand, have received negative estimations of coefficient on the 1% level of significance. It means that firms conducting these kinds of changes have lower growth of sales.

As the result, three variable of exploitation have significant positive influence on firm performance, one variable has negative influence, and one is insignificant.

Standardized coefficients show coefficients independent of specific measures of the variables. They are estimated in standard deviations which represent standard comparable measures and show the relative importance of each variable in the model (Field, 2009). As it can be noticed, in the exploitation part of the model, transitional changes have negative coefficient of “-0,212”. However, the developmental changes, organizational learning and investments have accordingly “0,163”, “0,121” and “0,137” which shows that their combined impact in the model is higher than the negative impact of transitional changes. This implies that hypothesis 2 saying that exploitation has positive relation to firm performance can be accepted.

In the Table 10 the results of regression analysis of the general model are presented.

Table 10. Results of regression analysis: strategic entrepreneurship

Dependent variable: Growth of Sales

Variables	Model 1	Model 2	Model 3	
	Coef.	Coef.	Coef.	Standardized coefficients
Constant	154,042***	114,753	90,119	
Age	-9,057***	-8,962***	-8,990***	-,198

Size	5,234	-0,550	-0,342	-,002
HoReCa	28,269	-9,284	-8,898	-,017
IT	96,246	32,462	31,515	,052
HoReCa*Size	-16,010	-4,549	-4,604	-,035
IT*Size	-25,978	-10,094	-9,500	-,060
EO		-14,006	-9,455	-,042
Values		19,157 [*]	22,196	,112
Investments		1,112 ^{**}	1,196 [*]	,122
KnResources		-4,239	-3,900	-,078
Organizational Learning		26,689 [*]	28,596 [*]	,127
Developmental Changes		10,855 ^{**}	11,502 ^{**}	,171
Transitional Changes		-54,75 ^{***}	-53,186 ^{***}	-,206
SE			-1,963	-,044
R Square	0,053	0,123	0,123	
Adjusted R ²	0,036	0,088	0,086	
F	3,143 ^{***}	3,533 ^{***}	3,274 ^{***}	
R ² Change		0,070 ^{***}	0,000	
F Change		3,713	0,047	
Total number of observations	341			
*p < 0.1; ** p < 0.05; *** p < 0.01				

In the Model 2 all exploration and exploitation characteristics were added, in Model 3 the variable SE representing combined effect of exploration and exploitation was added. The quality of the models is high as the model is statistically significant at 0.001 level. R Square is 0,123 which means that the predictor variables explain 12,3% of variance of growth of sales. In Model 2 Adjusted R Square is 0,088 and change in R Square caused by addition to control

variables the main predictor variables of the model is statistically significant at 0.01 level and is 0,07 which means that unique contribution of main predictor variables is 7%. The addition of SE variable didn't increase the explanatory power of the model. There is zero R Square change and the variable SE doesn't have significant influence on the growth of sales.

The constant in these models is insignificant which means that it doesn't require addition of other variables. All the variables have the same estimations of direction and significance of their relation to the dependent variable as in the separate models.

In the Model 2 testing the relationship between strategic entrepreneurship factors and growth of sales, four out of seven variables have significant positive relation, two of the variables didn't receive significant estimates and only one variable has a negative effect on growth of sales. The Model 3, however, showed that the combined effect of exploration and exploitation factors doesn't have significant impact on the growth of sales.

As the result, and the hypothesis 3 about positive influence of strategic entrepreneurship on firm performance should be declined.

Dependent variable: Weighted Performance Index

In order to test the hypotheses on other performance indicators, the weighted performance index was taken as additional dependent variable. The results of the regression analysis are shown in Table 11.

Table 11. Results of regression analysis: dependent variable Performance

Variables	Model 1	Model 2	Model 3	
	Coef.	Coef.	Coef.	Standardized coefficients
Constant	21,887***	3,006	24,424	
Age	-,160	-,130	-,112	-,019

Size	-,811	-1,674	-1,854	-,094
HoReCa	-5,668	-8,777	-8,956	-,130
IT	15,767	17,800	18,603	,240
HoReCa*Size	,765	2,429	2,443	,145
IT*Size	-2,479	-2,787	-3,293	-,161
EO		4,104 ^{**}	,483	,017
Values		-1,170	-3,529	-,138
Investments		,134 [*]	,063	,050
KnResources		,478	,206	,032
Organizational Learning		,752	-1,287	-,045
Developmental Changes		-,268	-,763	-,088
Transitional Changes		-2,421	-3,739	-,113
SE			1,584	,284
R Square	0,018	0,062	0,068	
Adjusted R ²	0,000	0,025	0,028	
F	1,009	1,658 [*]	1,691 [*]	
R ² Change		0,044 ^{**}	0,006	
F Change		2,193	2,046	
Total number of observations	341			
*p < 0.1; ** p < 0.05; *** p < 0.01				

Two models are significant on the level $p < 0.1$. Model 2 explains 6,2% of all variation of dependent variable (R Square = 0,062). Model 3 explains 6,8% of the variation (R Square = 0,068). In Model 2 including all variables of exploration and exploitation, two variables have received significant estimation: EO and Investments. Both variables have positive relation to firm performance.

In the Model 3 which includes the combined effect of exploration and exploitation factors on firm performance the variable SE didn't receive significant estimations although explanatory power of the model has increased on 0,2%.

2.4. Discussion

The aim of the regression analysis was to find the factors which would constitute strategic entrepreneurship and positively influence firm performance. With growth of sales as the dependent variable all three models suggested for analysis received high level of significance ($p < .002$) and satisfying level of determination ($R \text{ Square} > 0.05$) which shows the good quality of the models. Although predictor variables in the general model account only for 12,3% of the total variance in growth of sales, according to the literature, in the social sciences low R-squares in regression equations are rather common (Wooldridge, 2003).

The constant in the first two models is significant, however, in the model for strategic entrepreneurship it is insignificant which means that there is no urgent need to add any other variables in the model. This also underlines the necessity to combine exploration and exploitation characteristics in one model.

As the result of the analysis the variable of entrepreneurial orientation didn't receive significant estimations. This fact can have different explanations. EO can have indirect influence on the growth of sales through innovations and changes conducted in a company. At the same time, the statement of company top managers or owners that innovative, proactive and risk-taking behavior is supported in the company may not always result in actual innovativeness and proactiveness. Though the orientation on exploration of new opportunities is very important, it can't bring actual result without exploitation of those opportunities.

The influence of EO on firm performance has been studied in numerous researches, and the results varied from high positive relation of EO to firm performance, to lower relation and no significant relation between them (Rauch et al., 2009). Covin, Slevin, Schultz (1994) have found the relationship of EO to firm

performance insignificant and suggested that only a good match of EO with strategic mission and organizational structure would have an effect.

Some empirical studies showed that relation of EO and firm performance differs depending on the type of industry and characteristics of environment. Rauch et al. (2009) found that EO has higher significant relation to performance in high-tech than in traditional industries. As the biggest part of the sample refers to the industry “Trade” which is a traditional industry the low significance of EO in the model is natural.

The entrepreneurial values have positive influence on firm performance on the level of significance of 5%. Entrepreneurial values shared by the employees of the company represent entrepreneurial culture which supports explorative activities in the company. Innovativeness, personal proactiveness, creativity and freedom, readiness to take risks and determination to have leadership on the market have positive influence on firm performance as the employees of the company are devoted to entrepreneurial behavior in everyday work of the company and are constantly looking for internal and external opportunities.

Entrepreneurial culture has been regarded as an important factor influencing firm performance not only in theoretical studies, but also in some empirical research. For example, in the research of Kyriakopoulos, Meulenbergh, Nilsson (2004) it was found that entrepreneurial culture including values mentioned above had more significant relation to firm performance than specific structure.

The model for exploration is significant and although the influence of entrepreneurial orientation can't be estimated, entrepreneurial values have significant positive influence on growth of sales so the hypothesis 1 can be accepted.

Investments in internal resources have the positive influence on firm performance with significance level of 5%. As it was suggested, investments in brand development, equipment, personnel training, management of intangible assets and R&D imply constant development of the company and increase in its exploitation abilities. Development of resources of the company through acquisition and

accumulation enables it to create value and increases chances to achieve sustainable competitive advantage.

The importance assigned to knowledge-related resources of the company didn't receive significant estimates. The influence of this factor can't be determined. This can happen due to several reasons. The evaluation by firm managers of significance of specific resources doesn't necessarily implies that they are developing these resources or have significant amount of them in their company but can also be indicated by respondents as those which they are "in need of". The impact of this factor is tightly connected with the consistency of managerial decisions in the company, meaning that giving importance to a resource will lead to its development in the company.

The lack of knowledge-related resources can be expected in developing companies which didn't have time and means to increase this kind of resources. Also the fact that biggest part of the sample is represented by companies operating in wholesale and retail trade can have its impact.

The level of organizational learning in the company has significant positive relation to growth of sales. The companies which analyze the results and experience they received in the end of each project, put their experience and knowledge in documents, use the experience of successful companies from the same and other industries and conduct changes the ideas of which come from partners are able to learn faster, accumulate their knowledge and have lower risks in losing this knowledge.

Organizational learning adds to the ability of the company to manage resources strategically as well as to exploit opportunities and conduct changes. The fact that it has significant positive relation to firm performance is supported by different empirical studies (e.g. Tanriverdi, 2005; Daud, Yusoff, 2010).

The analysis of the influence of changes on firm performance received controversial results. Developmental changes have significant positive coefficient on the level of significance of 1%. Companies conducting small improvements are

likely to increase their performance. However, transitional changes have received negative coefficient of the level of significance of 1%.

Innovation is linked to successful performance not depending on the industry, and is found to be positive in both the industrial and service sectors (Kluge, Meffert, Stein, 2000). Nevertheless, as it was mentioned earlier, different types of changes differ in their effect on organization. While developmental changes improve internal processes of organization they can be reflected in the growth of sales in a short period of time. Transitional changes, on the other hand, require a long time for their full implementation and for the positive results to arise.

Lewin (1964) identified three stages in the process of transitional change which include “unfreezing of existing equilibrium”, moving to new position and “refreezing” in a new equilibrium position. The three stages were further divided in several processes by Schein (1987) and included breaking of expectations, creation of anxiety and its conversion to motivation to change, finding the new model, gathering external information and incorporating it in the new state.

Significant changes in organization such as changes of structure, culture or strategy need time and careful planning to be carried out. It comes as a shock to employees and managers of the company and requires time for adaptation. Transitional changes imply elimination of some contacts with external environment and development of new ones and have effect in long-term period (Широкова, Березинец, Шаталов, 2010). Wheatley and Kellner-Roders (1998) mention that CEOs report up to 75% of their organizational change efforts having no expected positive results. Instead, only the negative effect of change arises. This can happen due to poor support of managers the transfer and adaptation of employees to change.

Until organization fully adapts to the change its performance decreases. Only after longer period of time the transitional or transformational change will have a positive influence on firm performance. Due to the specifics of the data collection such effect can't be estimated in this study but can be a subject to further attention of researchers.

Exploitation represented by investments in internal resources, importance assigned to knowledge-related resources, organizational learning, developmental and transitional changes has positive relation to firm performance. Although there is a negative effect of transitional changes in the short-term, it is overlapped by the positive effect of three other variables.

The hypothesis 3 stating the positive influence of strategic entrepreneurship on firm performance can't be tested as the combined effect of exploration and exploitation variables didn't receive significant estimate. However, the model explained 12,3% of the variation in growth of sales and separate exploration and exploitation variables have received significant estimates.

The fact that the combined effect of strategic entrepreneurship was insignificant in the model can be explained by multidimensional nature of exploitation and exploration in the company in the short-term period. Transitional changes have negative impact on the growth of sales, although in the long-term they can provide a company with faster development and competitive advantage. It contradicts with positive influence of developmental changes in short-term period. EO and significance assigned to knowledge-related resources are also the factors having their impact on the company in a long term period. While some of the companies might have implemented these practices rather long time ago and have achieved positive results, others might have just adopted them and as significant, transitional type changes they had little positive or even negative effect on their growth of sales. This dispersion leads to lower correlation between combined exploration and exploitation variables and dependent variable and insignificance of SE variable.

Testing the model on weighted performance index showed that two factors have significant positive relation to perceived firm performance: EO and investments. The subjective nature of the dependent variable can relate to these results as the company managers implementing entrepreneurial orientation in the company are more likely to be satisfied with the performance. Even if some of their current indicators such as growth of sales or profit are not very high, being entrepreneurially oriented they are ready to take risks and implement innovations.

This result is supported by the study of Covin and Slevin (1989) mentioned above. As they were investigating the influence of entrepreneurial orientation on firm performance, they were using the same scale for EO and the same measure of firm performance in their study. As the result, EO was positively related to firm performance in hostile environment.

The perceived index of firm performance is also closely related to investments of the company, it can both refer to actual better performance of the company due to investments in internal resources, however it can also refer to the fact that managers satisfied with their firm performance are more likely to make investments.

The combined effect of exploration and exploitation was found insignificant, which means that strategic entrepreneurship in general doesn't have a significant influence on perceived firm performance.

Table 12 presents the results of hypotheses testing. Two of the hypotheses are accepted. Entrepreneurial values, investments in internal resources, organizational learning and developmental changes were found to be significantly important factors positively influencing growth of sales. Transitional changes have significant negative influence in the short run.

With weighted performance index as a dependent variable EO from exploration side and Investments from exploitation side of the model were found to have significant positive influence.

Table 12. Results of hypotheses testing

Hypothesis	Result
H1: Exploration is positively related to firm performance	+
H2: Exploitation is are positively related to firm performance	+
H3: Strategic entrepreneurship is positively related to firm performance	?

The fact that transitional have negative relation to growth of sales has already attracted attention of researchers. The long-term effect of the factor should be tested on the longitude data providing information over longer period of time.

The results of empirical analysis showed that the proposed model of strategic entrepreneurship has significant positive influence on the firm performance. Insignificance of two factors and negative coefficient of one factor need to be investigated in detail.

Conclusions

In this study the emerging concept of strategic entrepreneurship is analyzed and the factors constituting strategic entrepreneurship and influencing positively firm performance are identified. The results of the study can be presented in the following conclusions:

The literature review showed that there are several views on strategic entrepreneurship. It is considered to embrace opportunity-seeking and advantage-seeking behavior of the company by integration of entrepreneurship and strategic management theories. At the same time, some researchers view it as a balance of exploration and exploitation in an organization. Exploration and exploitation were found to be the two main components of strategic entrepreneurship which represent the company's ability to explore opportunities within and outside of the organization and enable it to continuously create wealth.

Little number of empirical studies showed a lack of research on the topic. The empirical testing of theoretically developed models represents a clear research gap. The tendency of researchers to reduce the strategic management to entrepreneurial orientation in empirical studies shows the lack of developed measuring instruments and the need to identify concrete measurable factors constituting the concept.

The model of strategic entrepreneurship was developed and factors representing exploration and exploitation parts of strategic entrepreneurship were identified and empirical analysis of the influence of these factors on firm performance was conducted. It was suggested that exploration presented by entrepreneurial orientation and entrepreneurial values will have positive influence on firm performance. Exploitation presented by investments in internal resources, importance assigned to knowledge-related resources, organizational learning and changes conducted in the company, has also positive relation to performance. Strategic entrepreneurship represented by combination of exploration and exploitation was supposed to have a positive influence on firm performance.

One of the most important results of the study is proving the positive relation of exploration and exploitation factors on firm performance. Entrepreneurial values, investments in internal resources, organizational learning and developmental changes proved to have significant positive impact on the growth of sales. Transitional changes had significant negative relation to firm performance. This can be explained by the need for adaptation to significant changes in the company which can lead to temporal decrease in performance. However, these results require further conceptual and empirical research.

Testing the hypotheses on two different indicators of firm performance showed differences between these indicators and the influence of different factors on them. It was found that entrepreneurial orientation and investments have significant positive influence on perceived firm performance. While investments in internal resources proved to be positively related to both indicators of firm performance, entrepreneurial orientation didn't have significant impact on growth of sales.

Combined effect of exploration and exploitation doesn't have significant effect on growth of sales or perceived performance indicator. This might be a result of multidimensional nature of exploration and exploitation in short term period, and arises a need to investigate it in long-term period in the future research.

The results and conclusions of this study can be helpful for researchers of strategic entrepreneurship and researchers of entrepreneurship in developing countries and in Russia particularly. The theoretical contribution of this work is that model of strategic entrepreneurship is revised and tested empirically. The regression analysis proved that both exploration and exploitation parts of strategic entrepreneurship have positive relation to firm performance although not all the factors might have been identified in the study.

The quantitative research provides significant estimates of the influence of specific factors which constitute the model on firm performance. The big data collection and objective measures of firm performance indicators increase the quality and importance of the study.

There is a major practical implementation of the study as the factors increasing firm performance are identified. With very limited resources available for the managers of Russian SMEs it is important to identify the major directions for future development and concrete measures which can have positive result in a short term period.

Managers of the companies who are willing to engage in strategic entrepreneurship can focus their attention on the development of entrepreneurial culture, increasing investments in internal resources, improvement of organizational learning in the company and conducting incremental changes to achieve higher performance results.

It is also important, that managers understand that not all changes can have immediate positive result on firm performance. Some significant changes require time and can actually reduce the rate of growth of the company, but the companies actively innovating are more likely to develop competitive advantage and sustain it in the long-term perspective.

The study has several limitations which determine the possible future directions of research on the topic. First limitation is connected to the research sample which includes only the companies from three industries which doesn't allow generalizing the conclusions on the whole population of Russian SMEs.

Secondly, two indicators of firm performance are taken for analysis, one of which is a subjective measure. The impact of strategic entrepreneurship on perceived firm performance should be studied in further research. Some other objective performance indicators can be taken for analysis in the long run.

The specifics of Russian institutional environment characterized by volatility and hostility can have a significant impact on the results of the study. The further research can focus on testing the concept of strategic entrepreneurship on the companies operating in developed countries with stable institutional environment.

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Appendix

Appendix 1. Questions used in the study

Entrepreneurial orientation

Innovativeness

In general, the top managers of my firm favour . . .		
A strong emphasis on the marketing of tried and true products or services	1 to 7	A strong emphasis on R&D, technological leadership and innovations
How many new lines of products and services has your firm marked in the past 5 years?		
No new lines of products or services	1 to 7	Very many new lines of products or services
Changes in products or services have been mostly of a minor nature	1 to 7	Changes in products or services have usually been quite dramatic

Proactiveness

In dealing with its competitors my firm . . .		
Typically responds to actions which competitors initiate	1 to 7	Typically initiates actions which competitors then respond to
Is very seldom the first business to introduce new product/services, administrative techniques, operating techniques, etc	1 to 7	Is very often the first business to introduce new product/services, administrative techniques, operating techniques, etc
Typically seeks to avoid competitive preferring 'live and let live' posture	1 to 7	Typically adopts a very competitive 'undoclashes, the-competitors' posture

Risk-taking

In general, the top managers of my firm have . . .		
A strong proclivity for low-risk	1 to 7	A strong proclivity for high-risk

projects (with normal and certain rates of return)		projects (with chance of very high return)
In general, the top managers of my firm believe that . . .		
Owing to the nature of the environment, it is best to explore it gradually via bold, timid, incremental behavior	1 to 7	Owing to the nature of the environment, wide-ranging acts are necessary to achieve the firm's objectives
When confronted with decision-making situations involving uncertainty, my firm...		
Typically adopts a cautious, 'wait-and-see' posture in order to minimize probability of making costly decisions	1 to 7	Typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities

Values

Indicate on the scale from 1 to 5 whether the following working methods are encouraged in your company:

1 – are highly discouraged, 2 – are not encouraged, 3 – neutral, 4 – are encouraged, 5 – are highly encouraged

Innovations, personal initiatives, creativity, ability to risk and orientation towards market leadership	1	2	3	4	5
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Knowledge-related resources

Estimate the resources of your company by their importance (1 – not important, 2 – important to some extent, 3 – neutral, 4 – important, 5 – very important):

1.	Know-how	①	②	③	④	⑤
2.	Technologies	①	②	③	④	⑤
3.	Patents/licenses	①	②	③	④	⑤
4.	Qualified employees	①	②	③	④	⑤
5.	Professional managers	①	②	③	④	⑤

Investments

What percentage of the income your company spends for:

Brand development	
Investments in equipment	
Personnel learning	
Processes of intangible assets' management (know-	

how, technologies, patents, databases etc.)	
R&D	

Organizational learning

Indicate on the scale from 1 to 5, whether the following statement is consistent with your company: 1 – absolutely inconsistent, 2 – partly consistent, 3 – moderately consistent, 4 – substantially consistent, 5 – fully consistent.

1.	In the end of any project we analyze deeply the results and exchange our experience	①	②	③	④	⑤
2.	It is common practice in our company to describe documentary the practical experience and knowledge	①	②	③	④	⑤
3.	We implement in our activities the experience of most successful companies in our industry and from other industries	①	②	③	④	⑤
4.	We implement the ideas, which come from our partners (clients, suppliers, subcontractors, etc.)	①	②	③	④	⑤

Developmental changes

Indicate, whether your company has undertaken any of the following initiatives over the last 2 years. If yes to which extent this change was significant for your company? 1-not significant at all, 2 – not significant, 3 – neutral, 4 – significant, 5 – critical/revolutionary change

Significantly upgraded an existing product line/service	Yes -> 1 2 3 4 5 No
Introduction of new IT-systems	Yes -> 1 2 3 4 5 No

Transitional Changes

Indicate, whether your company has undertaken any of the following initiatives over the last 2 years. If yes to which extent this change was significant for your company? 1-not significant at all, 2 – not significant, 3 – neutral, 4 – significant, 5 – critical/revolutionary change

Agreed to a new joint venture with a foreign partner	Yes -> 1 2 3 4 5 No
Changes in structure	Yes -> 1 2 3 4 5 No

Changes in strategy	Yes -> 1 2 3 4 5 No
Changes in the company business processes	Yes -> 1 2 3 4 5 No
Changes in organizational culture	Yes -> 1 2 3 4 5 No
Introduction of new reward system	Yes -> 1 2 3 4 5 No

Weighted performance index

Are you satisfied with the following performance indicators of your company?

1 – highly dissatisfied, 5 – highly satisfied

1	Company profits	1	2	3	4	5
2	Sales level	1	2	3	4	5
3	Profit to sales ratio	1	2	3	4	5
4	Market share	1	2	3	4	5

What is the level of importance of the following performance indicators for your company?

1	Company profits	1	2	3	4	5
2	Sales level	1	2	3	4	5
3	Profit to sales ratio	1	2	3	4	5
4	Market share	1	2	3	4	5