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Master in International Business

ABSORPTIVE CAPACITY AND ORGANIZATIONAL CULTURE IN RUSSIAN COMPANIES

Master's Thesis by the 2nd year student
Concentration — Master in International Business
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ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

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АННОТАЦИЯ

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Описание цели, задач и основных результатов	Цель исследования состоит в анализе связи абсобционной способности и организационной культуры в Российских компаниях. Для достижения поставленной цели, на основе теоретического исследования была разработана теоретическая модель взаимосвязи между связи абсобционной способностью и организационной культурой. Тестирование теоретической модели было проведено на основе многофакторной регрессионной модели. Эмпирическое исследование было основано на выборке из 107 Российских компаний, имеющих разный размер и отраслевую принадлежность. Регрессионный анализ показал, что имеет место положительная взаимосвязь между доверием, коллоборацией и открытостью в коллективе и абсорбционной способностью компании.
Ключевые слова	Абсорбционная способность, организационная культура

ABSTRACT

Master Student's Name	Alisa Poliakova
Master Thesis Title	"Absorptive Capacity and Organizational Culture in Russian Companies"
Faculty	Graduate school of management
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Academic Advisor's Name	Andrei Panibratov, PhD in Economics, Professor
Description of the goal, task and main results	The goal of the research is to identify relationships between absorptive capacity and organizational culture in Russian companies. To achieve this goal, the theoretical model was constructed on the basis of thorough review of existing studies. The model outlined relationship between the company's absorptive capacity and organizational culture. Theoretical model was tested using multiple linear regression analysis on the sample of 107 Russian companies of different size and industry. The regression analysis identified positive correlation between trust, collaboration, openness and absorptive capacity in Russian companies.
Keywords	Absorptive capacity, organisational culture

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INTRODUCTION

Research Background. Absorptive capacity is important for companies and economies. It is becoming more and more famous in the scientific and management circles as a source of the corporate success and a strong competitive advantage. However, this phenomenon is relevantly young (the first serious researches on absorptive capacity were written by Cohen & Levinthal (1990) and Zahra and George (2002)), and as follows is not deeply investigated yet. In Russian Federation the phenomenon of absorptive capacity became one of the central research interests in Center for the Study of Emerging Market and Russian Multinational Enterprises of Graduate School of Management, Saint-Petersburg State University, headed by Andrei Panibratov, the research advisor of this paper.

Based on the raising interest to the absorptive capacity and lack of understanding of the particular qualities of its nature in Russia I decided to investigate the organisational culture factors' influence on the absorptive capacity level in small and medium enterprises of Russia.

Research Gap. Despite the construct of absorptive capacity has been given significant academic attention over the last years (Flatten et al. 2011), there is still are research area which is underdeveloped, particularly, absorptive capacity in the SME context (Liao et al., 2003). Wong & Aspinwall raise attention on the rarity of empirical studies that have examined factors critical for the absorption of knowledge in the critical business sector of SMEs (Wong & Aspinwall, 2005).

Furthermore, studies on knowledge management and the absorption of knowledge have only attempted to examine the impacts of organizational culture that are provided by selected aspects of various dimensions of organizational culture on absorptive capacity in detail (Spieth, 2009). Only few empirical studies (Harrington 2004, Strese 2016, Chang and Lin 2014) were conducted based on the widely known organizational and national culture models (Hofstede 1980, Hofstede et al 1990, Quinn 1988) and absorptive capacity/knowledge management dimensions, while neglecting one very natural organizational culture concepts that links both organization culture, knowledge management and absorptive capacity – knowledge culture (Sollberger , 2006)

The literature has not investigated how the several dimensions of knowledge organizational culture are related to the acquisition capability, assimilation capability, transformation capability and exploitation capability or how a knowledge-oriented organizational culture should be designed to promote the absorption of external knowledge.

Research questions. To close this gap, the following two research question are investigated:

1. Is there the relationship between knowledge culture and absorptive capacity in Russian SME?

2. What dimensions of knowledge culture (trust, collaboration, autonomy, care, learning receptivity, openness) have an influence on absorptive capacity dimensions (acquisition capability, assimilation capability, transformation capability and exploitation capability) of Russian SME.

Research problem. This central research question implies a research problem that includes unresolved questions with respect to the parameters of a model of SMEs' external knowledge absorption. It is unclear which dimensions of the knowledge culture influence the several capabilities of SMEs' absorptive capacity;

Research Goal is to identify whether knowledge-oriented organizational culture dimensions have a positive impact on the level of organizational absorptive capacity, namely acquisition, assimilation, transformation and exploitation capabilities

Research Objective. The presented problems regarding SMEs' external knowledge absorption represent issues that have been insufficiently studied. The overall objective of this thesis is to develop and validate a model that allows an analysis of the relationship between organizational culture and the capabilities of absorptive capacity at the organizational level of Russian SMEs.

Research Strategy and Organisation of the Study. The first chapter represents the literature review on both absorptive capacity and organisational culture, that helps to understand the different approaches on their composition. Chapter 2. determines the hypotheses about the relationship among the dimensions of organization culture and the capabilities of absorptive capacity that are further used in order to construct a research model of the empirical study, which is also explained in Methodology chapter. The hypothesis represented in the model are tested via the quantitative research method of a survey, which allows to make a systematic capture of the Russian companies' organizational culture. The model of the external knowledge absorption of SMEs is a hypothetical construct and is not directly measurable, however, it is possible to operationalise several components of the model (Chapter 2) and to apply them in the questionnaire. The data collected by the survey is than analysed with regard to its reliability and explained by factor analysis and regression analysis. Finally, the result is summarized in the last section - summary of the results of the empirical analysis of the research models.

1 THEORETICAL RESEARCH ON KNOWLEDGE ABSORBTION AND ORGANIZATIONAL CULTURE

The term ‘absorptive capacity’ was firstly mentioned by Kedia & Bhagat (1988) in the research “Cultural Constraints on Transfer of Technology Across Nations: Implications for Research in International and Comparative Management” as one of the five adoption barriers of transferring technology. Although Kedia & Bhagat have shaded the light on the term of absorptive capacity, the founding paper on absorptive capacity was written by Cohen & Levinthal (1990). In the study “Absorptive Capacity: A New Perspective on Learning and Innovation”, the scholars declare the company's “capability of a company to recognize the power of new, external information, assimilate it, and apply it to commercial ends is crucial to its innovative capabilities” and give it a name of absorptive capacity. This definition highlights the three essential steps of the absorptive capacity, which are knowledge recognition, knowledge assimilation and knowledge exploitation with commercialisation purpose. They argue that prior related knowledge, diversity background and individual cognitive abilities play a significant role in the absorptive capacity. They also discuss the factors that influence the organizational level absorptive capacity, such as cumulative absorptive capacities of its employees, transfers of knowledge across and within departments and subunits (communication systems), the background knowledge as a whole, critical knowledge (substantive, technical knowledge, understanding of where to search the complementary expertise within and outside the firm), etc. They also argue that the firm’s absorptive capacity and innovation development are history- or path-dependent, and the lack of past R&D in the area of expertise could influence future development of a technical capability in that area. Discussion is focused on the implications of absorptive capacity for innovative activities, and became a fertile ground for a numerous researches that approved the high interdependence of firm’s innovations and absorptive capacity, while missing some deep analysis of the phenomenon of the absorptive capacity itself.

The Cohen & Levinthal (1990) concept was later developed by numerous scholars including Mowery & Oxley (1995) in paper ‘Strategic alliances and interfirm knowledge transfer’ who proposed a new interpretation of the absorptive capacity which “includes a broad array of skills, reflecting the need to deal with the tacit components of the transferred technology, as well as the frequent need to modify a foreign-sourced technology for domestic applications”.

This conceptual gap was later fulfilled by a Zahra and George (2002) in the paper "Absorptive Capacity: A Review, Reconceptualization, and Extension”, who proposed a new definition of the absorptive capacity “a multidimensional construct involving the ability to value,

assimilate, and apply knowledge […] or is a aggregate of effort and knowledge bases" and were the pioneers who linked the absorptive capacity with the dynamic capability of "pertaining to knowledge production and utilization that improves a firm's capability to gain and maintain competitive advantage" (Zahra & George 2002, p. 186). They reconceptualized the existing "knowledge recognition, assimilation and knowledge exploitation" model of The Cohen & Levinthal (1990) and suggested a new step - knowledge transformation, and developed the modern absorptive capacity model.

The model consists of the incoming external knowledge, that is characterized by knowledge source, complementarity, and experience, then it goes through the potential absorptive capacity which is defined by two stages: acquisition and assimilation capability, and the realized absorptive capacity which was defined through transformation and exploitation capabilities. The outcome appears in the form of firm competitive advantage, characterized by strategic flexibility, innovation and performance.

1.1 Absorptive Capacity Model

The model of external knowledge absorption developed by Zahra and George(2002) is based on four basic dimensions: knowledge acquisition, assimilation, transformation and exploitation capability.

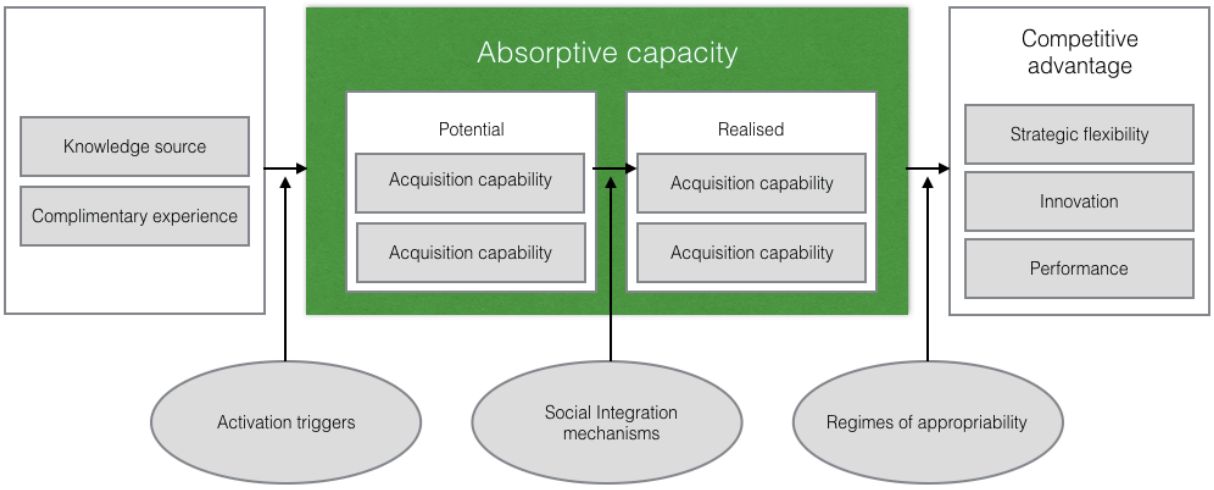

Figure 1. Absorptive Capacity Model (Zahra & George (2002))

1.1.1 The Acquisition Capability

According to Zahra and George (2002) acquisition capability is "a firm's capability to identify and acquire externally generated knowledge that is critical to its operations". Other scholars highlight the significant role of external sources, identifying absorptive capacity as "a firm's ability to identify and obtain knowledge from external sources" (Flatten et al. 2011, p.100). Thus, we face a dilemma: from one point of view, acquisition capability is one of the primary sources for generation of the necessary skills, insights and relationships (DiBella & Nevis 1998, p.87), but from another point of view, in order to acquire any new skills, the firm need to to have an existing knowledge base or so-called "prior related knowledge" (Cohen & Levinthal 1990, p. 129). Another important and often underestimated factor of knowledge acquisition - it the recognition of the necessity of this knowledge and understanding its high value (Shane 2000, p. 451).

In Reconceptualization of components and corresponding roles of ACAP, Zahra and George name the components of the acquisition capability, which are prior investments (influence the scope of search), prior knowledge (determine the perceptual schema), intensity (determine the quality and number of new connections), speed and direction of learning that altogether determine the quality and scale of company knowledge absorption capability (Zahra & George 2002, p. 189).

Components	Role and Importance	Key characteristics
Prior investments, Perceptual schema, Prior knowledge, Motivation for knowledge Collection, Intensity, Speed, Direction.	Scope of search, Perceptual schema, New connections, Speed of learning, Quality of Learning.	Recognition and understanding of the new external knowledge, Appreciation of knowledge value; Learning from partners, Acquiring knowledge relevant to a company's operations, Prior knowledge as a prerequisite
Indicators	**Associated Variables**	**Citations & Related Researches**
Risk tolerance; Senior management support; Training; Investment in R&D; Knowledge repertory; Intensity of knowledge; Experience within the R&D; department;	External sources background; Nature of external knowledge; Type of new knowledge; Prior investments; Prior experience; Acquisition of licenses; Contractual agreements; Alliances and other	Cohen & Levinthal (1990), DiBella & Nevis (1998), Shane 2000, Zahra and George (2002), Flatten et al. (2011).

Highest academic degree held by employees; Levels of motivation; Observation Speed of learning; Circulation of knowledge	interrelationships or joint ventures; Actors' motivations; Organizational culture; Common and shared language ;R&D intensity; Familiarity with organizational problems; Personnel turnover; Participation in decision-making; Ability to detect opportunities in the environment (expectation formation); Position of the firm in the network;	

Table 1. Dimensions of the acquisition capability (based on Zahra & George (2002) & Jean-Pierre Noblet et al(2014))

1.1.2 The Assimilation Capability

"Assimilation refers to routines and processes that allow it to analyze, process, interpret, and understand the information obtained from external sources" (Zahra & George 2002, p. 189). After acquiring knowledge from external sources, a company need to process it and develop the existing information into the useful skills and new forms of company-specific knowledge. This processing is highly influenced by prior knowledge, cognitive styles and capabilities when it goes to individuals, and the existing investments organization memory and memory infrastructure (for example ICT-support, R&D investments etc.) In this case, organisational memory refers to the means by which past knowledge could be brought and used in present activities (Stein & Zwass 1995, Wijnhoven 2000). Such organisational memory systems include customer relations and negotiations databases, the history of interactions with the environment and others. It is critically important for any company to constantly develop their organisational memory system in order to enhance the assimilation capability by bringing existing knowledge base while processing the externally acquired information

According to Zahra and George, the main component of the assimilation capability is understanding, which influence the interpretation, comprehension and learning abilities of the acquired knowledge. Thus, another research proves that the ideas that lie beyond the search zone are mostly overlooked because the company cannot easily comprehend them (Cyert & March, 1963; Rosenkopf & Nerkar, 2001) and if the quality of acquired knowledge significantly differs from the

existing one, it could also the delay and obstruct the comprehension process (Leonard-Barton, 1995).

Components	Role and Importance	Key characteristics
Understanding, Absorption.	Interpretation, Comprehension, Learning.	Assimilation of the external knowledge and its intrinsic value; Integration of the external knowledge; Developing routines and processes; Analyzing, processing, interpreting and understanding new knowledge.
Indicators	**Associated Variables**	**Citations & Related Researches**
Interpretation, Understanding, Formalization.	Routinization; Coordination capacity; Personnel turnover; Number of patents pending; Number of research and/or practice communities; Management support	Cyert & March (1963), Stein & Zwass (1995), Leonard-Barton, (1995), Wijnhoven (2000), Rosenkopf & Nerkar (2001), Zahra & George (2002).

Table 2. Dimensions of the assimilation capability (based on Zahra & George (2002) & Jean-Pierre Noblet et al(2014))

1.1.3 The Transformation Capability

Transformation refers to a "firm's capability to develop and refine the routines that facilitate combining existing knowledge and the newly acquired and assimilated knowledge" (Zahra & George 2002, p. 190). This transformation capability was firstly suggested by Zahra & George in their work "Absorptive capacity: review, reconceptualization, and extension", thus broadened the original absorptive capacity concept that was developed by Cohen & Levinthal in 1990, and that was based on three capabilities: identification, assimilation and exploitation of the external knowledge.

The transformation capability means that the firm could add, delete, merge, synthesize and transform acquired knowledge in a new manner in order to produce higher-value products and services (Spender, 1996). A company needs to recognize the new knowledge and transform it into a new form, adapting to the existing knowledge base. This process also means recognition of two

separate informational sets and their further combination into a new schema (Zahra & George 2002, p.190).

According to Zahra and George, the transformation capability components include internalization and conversion that influence the synergy, recodification and bisociation processes. Bisociation is "the perceiving of a situation or idea […] in two self-consistent but habitually incompatible frames of reference" (Koestler 1964, p.35). Bisociation not only helps a company to develop new perceptual schemas, but also facilitates the entrepreneurial mindset and actions that lead to changes in the ordinary practices, and as follows the new, sometimes even unexpected results, which in their order become a soil for recognition of new opportunities. Among other main aspects of the transformation capability we could name developing and refining routines and processes and combining existing knowledge with acquired and assimilated one.

Components	Role and Importance	Key characteristics
Internalization, Conversion.	Synergy, Recodification, Bisociation.	Transformation of the knowledge through developing and refining routines and processes; Combining existing knowledge with acquired and assimilated knowledge for future use; Addition or removal of knowledge to allow new interpretations; Internalization and conversion of information
Indicators	**Associated Variables**	**Citations & Related Researches**
Recodification, Challenging established, thinking or practices, Adaptability.	Development of new products, Diversification, Routines for knowledge creation, Number of new ideas.	Koestler (1964), Cohen & Levinthal (1990), Spender (1996). Zahra & George (2002).

Table 3. Dimensions of the transformation capability (based on Zahra & George (2002) & Jean-Pierre Noblet et al(2014))

1.1.4 The Exploitation Capability

According to Tiemson, Lane Crossan & Schwenk (1992) exploitation "reflects the firm ability to harvest and incorporate knowledge into its operations" The dimension includes refining, extending and leveraging of the existing routines, skills, competences and technologies with aim of creation of the new schemas used for internal operations. Cohen & Levinthal (1990) proposed another definition, which declares that exploitation is "the capacity of a company to recognize the power of new, external information, assimilate it, and apply it to commercial ends". The outcomes of the systematic exploitation routines could be presented as a constant process of creation of the new goods, systems, processes, knowledge, or new organizational forms (Zahra&George 2002,p.190).

Minbaeva highlights that the factor of critical importance in the firm's exploitation capability is not the underlying or original knowledge but the extent to which the recipient could acquire the potentially useful knowledge and utilize it in the firm's operations. (Minbaeva et al. 2003, p. 387). Therefore, the routines, competencies and technologies of the company are the factors of primary importance of the firm's exploitation capability, as they provide providing structural, systemic and procedural mechanisms which allow firms to specifically exploit knowledge over a firm lifetime (Zahra & George 2002, p. 190).

According Zahra & George (2002) the main components of the exploitation capability are use that influences the core capacities, and implementation that helps to harvest the acquired knowledge. Dorothee Zerwas highlights other aspects of the exploitation capability that include: firstly, development of routines, processes; and secondly, analysis, processing interpretation and understanding of the new knowledge.

Components	Role and Importance	Key characteristics
Use, Implementation.	Core competencies, Harvesting resources.	Developing routines and processes; Analyzing, processing, interpreting and understanding new knowledge; Application of the assimilated external knowledge; Achievement of organizational goals; Creation of new knowledge by integrating acquired and converted knowledge.

Indicators	Associated Variables	Citations & Related Researches
Mobilization of resources, Core competencies.	Number of patents filed, Number of new products, Protection systems.	Cohen & Levinthal (1990),Tiemson, Lane Crossan & Schwenk (1992), Zahra & George (2002), Minbaeva et al. (2003), Zerwas (2014).

Table 4. Dimensions of the exploitation capability (based on Zahra & George (2002) & Jean-Pierre Noblet et al(2014))

1.2 Organizational Culture

Organizational culture is a set of basic assumptions that an organization follows. Schein provides more elaborate definition of organizational culture. He defines organizational culture as "the pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaption and internal integration and that have worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein 1984, p. 3). Simply put, organizational culture provides a way how the employees should address problems. This way worked well in the past, so it is considered efficient for the future. This way is communicated to the new employees as a right way of doing things in the company.

Organizational culture is a complex phenomenon, so it is challenge to find a unique or even common approach to this phenomenon and its dimensions. Before Among the most important concepts of organizational culture Gordon & Cummins (1979), Hofstede (1980), Schein (1984), Reynolds (1986), O'Reilly et al. (1991), and others should be distinguished. Gordon & Cummins (1979) has define several dimensions of organizational culture, which are Organizational clarity; decision making structure; organizational integration; management style and performance orientation. While Hofstede (1980) has defined a measurement of national cultures by means of working environment, values and work objectives that could be defined through Power distance; uncertainty avoidance; individualism; masculinity, later supplemented by long-term vs short-term normative orientation and indulgence vs restraint index Hofstede (2000). Schein (1984) has defined organizational culture as a complex set of basic assumptions (such as relationship to environment; nature of reality, time and space, nature of human activity and human relations) that are invisible, preconscious and taken for granted, values that have a greater level of awareness and artifacts & creations (such as technologies, art, visible and audible behaviour patterns) that are visible but not

decipherable. Reynolds (1986) has defined culture as sociostructural system that consists of structures, strategies, management processes etc. and cultural system that consists of values and beliefs. Reynolds put an emphasis on the difference of such indexes as external vs. internal, task vs. social focus, safety vs. risk, conformity vs. individuality, individual vs. group rewards, individual vs. collective and others. O'Reilly et al. (1991) considered culture as a set of organizational values that lay across innovation; outcome orientation; aggressiveness; detail orientation; stability and respect for people dimensions. The most popular culture model was developed by Cameron and Quinn (2011) based on Competing Values Framework, which is founded in the work of Quinn and Rohrbaugh (1983). Cameron and Quinn (2011) instrument called "Organizational Culture Assessment Instrument" is famous for placing organizations in continuum of four core values such as Flexibility, Stability, Differentiation, and Integration. According to them organizational cultures create a matrix of cultural types, consisting of hierarchy (control), market(compete), clan(collaborate) and adhocracy (create). Other organizational concepts were developed by Allen & Dyer (1980), Cooke & Laferty (1989), Kern (1991), Chatterjee et al. (1992), Fletcher & Jones (1992), Gordon & DiTomaso (1992), Denison & Mishra (1995), Weber (1996), Xenikou & Furnham (1996), Hofstede (1998), Poech (2003), Unterreitmeier (2004), Sollberger (2006) and others.

1.2.2. Organizational culture and knowledge management

Several scholars highlight the organizational culture effect on absorptive capacity through effective knowledge management. Thus, Myers (1996) affirms that knowledge can only be managed only to the extent that it has been earlier captured in organizational process, systems, products, rules, and organizational culture. According to a positive relations among organizational culture and knowledge creation process, shaping a corporate culture is one of the key factors that can influence on a firm's cability to manage knowledge in effective way (Lee and Choi, 2003). Nevertheless, knowledge management requires organizational culture's critical shift and the strongest commitment of all levels of management to make it work (Ajmal and Koskinen, 2008). Furthermore, Ajmal and Koskinen (2008) believed that KMcould be successfully realized only by building a supportive environment implementing these knowledge management systems. Accordingly, organizational culture seems to be an essential element of a firms capability to create value through forcing knowledge assets (Wei, 2005). Taking these considerations into account, organizational culture and knowledge management need to be implemented accurately coherently (Ajmal and Koskinen, 2008).

Consequently, the supreme importance in cultivating learning environments is the ability to develop and change organizational culture (Wei, 2005). Knowledge-intensive organizations maintain an ecosystem in which acquisition of skills and knowledge is viewed as a fundamental competency of each employee and even sustained by the interaction and support of organizational members (Norman, 2004). Many researches endorse this idea and believe that the determined purpose of knowledge storage is to embed employees' knowledge into the set of processes and culture of the organization, through enhancing organizational performance (Ranasinghe and Dharmadasa, 2013). Knowledge-sharing is another important aspect of transfer: individual's attitude of ownership of knowledge and following tendencies to share knowledge with colleagues are influenced by shared organizational values (Dalkir, 2010). Moreover, knowledge sharing requires organizational members to have a desire to contribute the obtained knowledge to the collective (Ajmal and Koskinen, 2008).

Eventually, a culture affects the motive of individuals to pursue knowledge application practices in their everyday work (Bock et al., 2005). It is important to organization not only to promote knowledge application through rewards and other incentives but rather develop underlying cultural environment that encourages rewards, celebrations, and values of knowledge application (Markus et al., 2002). Accordingly, organizational culture can be build in a manner that prevents employees from sharing and distributing their own powerbase and viability (Gupta et al., 2000). Therefore, it is apparent that corporate culture will influence the KM process of a company by affecting employee behavior. Further, organizational culture is vital in facilitating not only knowledge creation, but also storage, transfer, and application (Ajmal and Koskinen, 2008).

1.2.3. Organizational culture and absorptive capacity empirical studies

Although a lot of authors confirm the the importance of organizational culture in knowledge creation, storage, transfer and application and absorptive capacity, only few of them made an empirical analysis, that confirmed this dependence (Harrington 2004, Strese 2016). Strese (2016) has analyzed the effect of corporate culture as well as how national culture on potential and realized absorptive capacity. The model was developed based on Cameron & Freeman (1991); Deshpandé et al. (1993); Quinn (1988). corporate culture types, and Hofstede (1980) dimensions of national culture. The first part of the model based on famous framework consider four types of corporate culture: adhocracy, market, clan and hierarchy, that are described through dominant attributes, leadership styles and bonding and strategic leadership and analyzed dimensions effect on absorptive capacity and have been discussed in 2.2.1. The second part of the model was based on

Hofstede (1980) dimensions of national culture, such as power distance, individualism and uncertainty avoidance and has analysed how the national dimension's moderate relationships in a fit-as-moderation model. Based on data obtained from 592 CEOs and managers of firms in Austria, Brazil, Germany, India, Singapore, and the United States, Harrington has analyzed how corporate culture affects potential as well as realized ACAP and how national culture dimensions moderate these relationships in a fit-as-moderation model. The result of the research has showed that adhocracy culture is positively related to both potential and realized absorptive capacity, while the market and hierarchy cultures hinder both potential and realized absorptive capacity. The findings support that relationship between corporate culture and potential is stable stable across national culture dimensions, whereas selected national and corporate cultures are more effective in fostering realized ACAP. Thus, we can assume that it is more critical to investigate the corporate, not national culture in the research, trying to find out what specific

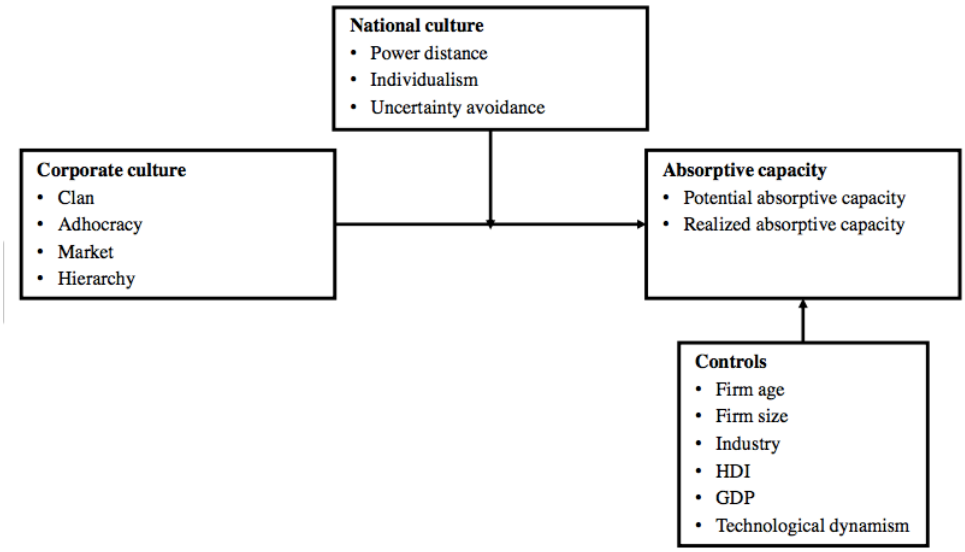

Figure 2. Strese (2016) research model.

Another research that investigated the relationships between organizational culture and absorptive capacity was conducted by Harrington (2004), who investigated the absorptive capacity's role in success of IT implementation. Harrington (2004) research model was based on Quinn's (1988) competing values typology of corporate culture is based upon two dimensions of implicit beliefs: (1) spontaneity and flexibility (towards decentralization and differentiation) vs. predictability and order (towards centralization and integration), and (2) external vs. internal. The taxonomy results in four culture types: developmental, rational, hierarchical and group vary along these dimensions (Quinn & Rohrbaugh, 1983). The results of the regression model based on the

questionnaire respondents of 83 USA IS managers showed that organizations with stronger levels of the corporate culture dimensions of group, developmental, and rational, while maintaining a lower level of the hierarchical dimension, will have a higher level of absorptive capacity that it presented in the research through 1) managerial IT knowledge and 2) greater level of communication channels than other organizations.

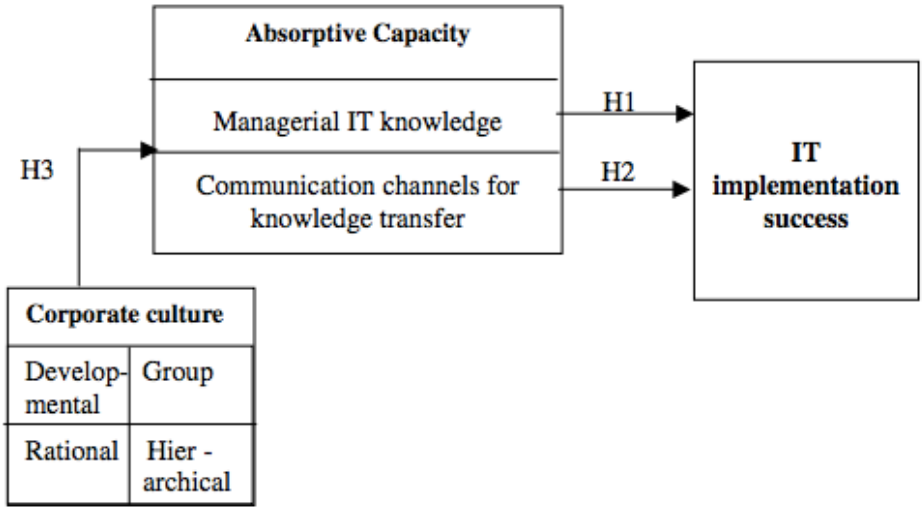

Figure 3. Harrington (2004) research model.

Chang and Lin (2014) have examined and the relation among organizational culture and knowledge management process motives of individuals based on the Hofstede et al (1990) culture model (results-orianted, tightly controlled, job-oriented, closed system and professional-orienteed cultures). Findings of survey research based on 315 Taiwan senior managers respondents has showed that results- and job-oriented cultures have positive effects on employee intention in knowledge management processes (need to be noted that authors have used four knowledge management dimensions: creation, storage, transfer and application, that are very similar to absorptive capacity dimensions), while a tightly controlled culture has negative effects.

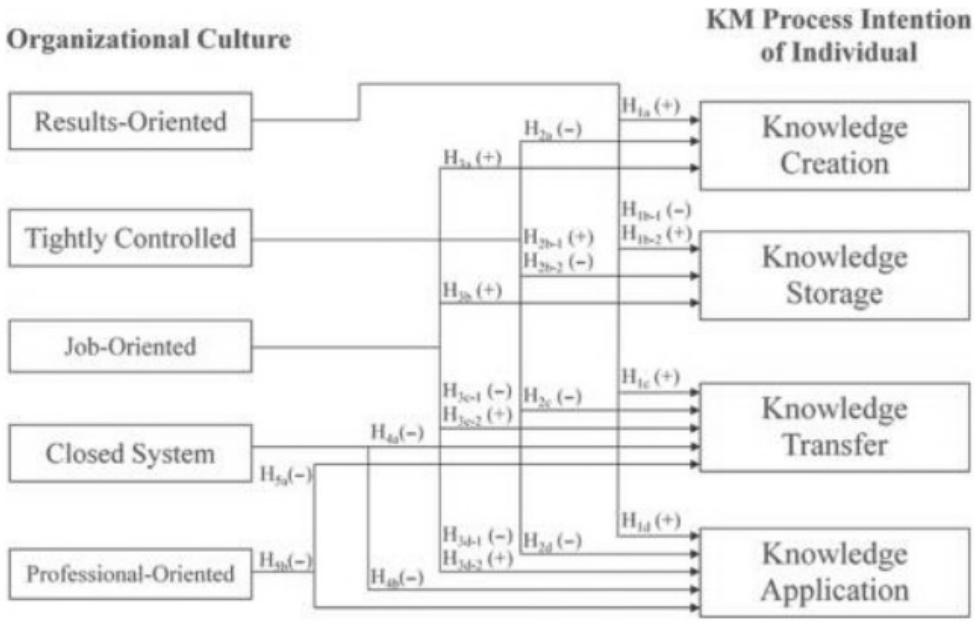

Figure 4. Chang and Lin (2014) research model

All three researches were designed as a model of one of the widely used organizational culture concepts (Hofstede 1980, Hofstede et al 1990, Quinn 1988) and absorptive capacity/knowledge management dimensions. And all of three works confirm the dependence of absorptive capacity on the organizational culture, positive effect of adhocracy culture and negative effect of hierarchy culture/ tightly controlled culture on absorptive capacity dimensions (Harrington 2004, Strese 2016, Chang and Lin 2014).

1.3 Absorptive capacity and Knowledge culture

Although there are few researches that have investigated the effect of the organizational culture on absorptive capacity (Harrington 2004, Strese 2016, Chang and Lin 2014), their models were developed based on the widely used organizational culture concepts (Hofstede 1980, Hofstede et al 1990, Quinn 1988), and neglected the important concept of the knowledge-friendly culture. In this research we decided to investigate the relationships of organizational culture on absorptive capacity from this very new perspective, that unites both of our models in the most natural way: knowledge culture.

According to Davenport, De Long & Beer (1997) organizational culture plays important role in the company's ability to absorb external knowledge. However, it might be challenging for the company to build knowledge-friendly culture, since such culture requires bright people and leaders,

positive employees' attitude towards the company and knowledge sharing, as well as fit between the knowledge management project type and the existing culture.

The knowledge culture concept was introduced by Sollberger (2006) who think of organizational culture as values and basic assumptions. According to Sollberger knowledge culture is comprised of six elements: trust, cooperation, openness, autonomy, willingness to learn, and care. Sollberger is the only author who was focused on those dimensions of organizational culture that are closely connected with knowledge absorption. Therefore, the current research uses Sollberger's model to conduct empirical research.

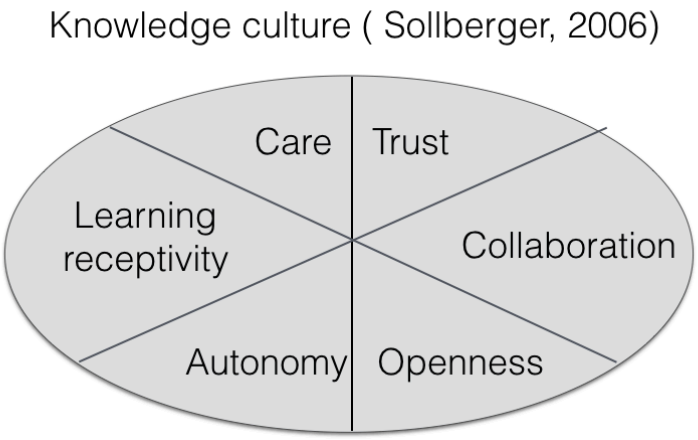

Figure 5. Knowledge culture (Sollberger, 2006)

Different studies emphasized that Sollberger's elements are important to make the organizational culture knowledge-friendly. Allee (1997) pointed out that trust and openness are crucial for knowledge-friendly culture in environments that require constant learning. Robbins (2003) stressed the importance of learning and ongoing improvement in the organization. Ahmed, Kok & Loh (2002) showed that trust, openness and collaboration are essential for proper knowledge management. The following sections of the thesis explain Sollberger's dimensions of knowledge-friendly culture in details.

1.3.1 Trust

Trust is "the willingness to accept vulnerability based on positive expectations about another's intentions or behaviours" (McEvily et al. 2003, p. 92). In the other words, trust is a feeling of confidence among employees, their confidence that they will not be harmed or put at risk by their colleagues' actions (Jones & George, 1998). Trust positively influences corporate culture: it enables cooperative behaviour, promotes network relations, reduces conflicts, decreases transaction costs,

fosters rapid work group formation and helps to deal with crises. O'Reilly & Roberts (1974) studied effects of trust in situations, in which the sender trusts the receiver more than the receiver trusts the sender. The researchers concluded that the sender is unlikely to pass unfavourable information unless he confides in the receiver. This conclusion supports McEvily et al. (2003) study that considers trust a readiness to be vulnerable.

Several theoretical works confirm the importance of trust for potential absorptive capacity. Thus, trust is important for the company that strives to acquire knowledge, since trust between a sender and receiver facilitates knowledge transfer. Trustworthiness influences knowledge-sharing decisions: if people are confident in each other, they are more willing to share knowledge (Andrews & Delahaye, 2000). If the sender thinks that sharing knowledge may negatively affect him, he is not likely to share knowledge. If he is unlikely to share knowledge, the receiver is unlikely to receive it. The same logic works on corporate level: if enterprises do not trust each other, they are not likely to acquire knowledge from each other (Lenox & King, 2004). Abrams, Cross, Lesser & Levin (2003) argued that trust could be helpful for assimilation capability as it enhances knowledge assimilation, since if trust is high, the likelihood of knowledge assimilation is also high. The receiver should believe that transferred knowledge is accurate and useful. The receiver should also believe that the sender does not try to deceive him. Therefore, trust plays important role in knowledge assimilation.

In terms of realized absorptive capacity, several authors also confirm trust significance for external knowledge transformation and exploitation. Van den Bosch et al. (1999) argues that trust is important for transformation capability. The organizational routines and processes affect transformation capability, especially in companies that work with complex knowledge. Trust allows companies to reengineer business processes, so they can combine new and old knowledge. Besides transformation capability, trust is very important for the exploitation of external knowledge because increased knowledge transfer caused by trust results in knowledge creation (Choi, 2002). Furthermore, trust guides progress by suggesting routines and processes that are most viable under the hypothesis that the beneficiary will not utilize the sender's vulnerability, or vice versa (McEvily et al., 2003). Therefore, trust fosters a climate that is helpful to the exploitation of knowledge because it mitigates the fear of risk and ambiguity (Choi, 2002). Without trust, the exploitation of external knowledge will fail regardless of how roughly it is supported by technology and discourse (Davenport & Prusak, 1998), because in an ecosystem that lacks trust, knowledge either will not be produced or it will be produced in a restrictive manner (Choi, 2002).

Management should tackle the employees' concerns regarding knowledge sharing to create a trust-friendly environment. For instance, employees might be afraid of sharing knowledge because they think that when their knowledge is shared they will not be as useful for the company as they were when they possessed unique knowledge (Davenport et al., 1997). The management should address such fears in order to increase trust.

1.3.2 Collaboration

Collaboration is the action of common work of several entities. Since technologies have become more complex now than before (cf. Newell, Robertson, Scarbrough & Swan, 2009), it has become more difficult for an individual to possess alone all required knowledge that is necessary to achieve good results in his work. However, strong collaboration among employees with diverse knowledge and skills can address that issue. The strong collaboration is important not only on intracompany level, but also on intercompany level. Increased attention to the topics, such as "open innovation", is an evidence of this fact.

Open innovation is "the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively" (Chesbrough, 2003). Simply put, open innovation is a process, in which a company buys patents, working prototypes and other knowledge from external companies and sells its own knowledge to external companies. Chesbrough states that companies should harness external knowledge to be more innovative and productive. For example, Suzlon and Goldwin, wind turbine producer, acquired licenses for wind turbine production technology (Lewis, 2007). If the company acquires external knowledge, the company's productivity is increased, since this acquired knowledge gives a new perspective to the company, making business more effective. Moreover, it also positively affects company's market and technological trends understanding (Yli-Renko, Autio and Sapienza, 2001).

In terms of absorptive capacity, collaboration facilitates knowledge acquisition, since if entities works on any particular project together, they can learn from each other (cf. Molina & Lloréns-Montes, 2006). The researchers stated that group work legitimates and elicits knowledge transfers. Reagans & McEvily (2003) underscored that if people maintain good relationships during work for the common goal, knowledge transfers more easily between them. The researchers found out that if relationships exhibit connections to third parties, knowledge smoothly flows between parties, since these connections increase the willingness of entities to help others. Rigby & Zook

(2002) argued that companies that follow the open innovation model may benefit from employing people who want to spend time heling others.

Sollberger (2006) argued that collaboration is necessary to understand knowledge. Without knowledge understanding, assimilation is not possible. Zahra & George (2002) explained that during assimilation, external knowledge should be understood, analysed and interpreted. O'Dell & Grayson (1999) educed that if organizations welcome collaboration, they share knowledge more frequently. Chesbrough (2006) believed that companies should use both external and internal knowledge to be technologically advanced.

Considering collaboration influence on realized absorptive capacity, we need to mention Miles, Miles, Perrone & Edvinsson (1998) who considered collaboration fundamental element for knowledge transformation. They argued that knowledge-based approaches are unable to be successful without effective collaboration. Collaboration decreases fear and increases openness, thus encouraging people to develop new ideas and take risk. Crossan, Lane & White (1999) studied approaches that groups used when they dealt with new knowledge. The researchers found out that groups transformed knowledge through collaboration. Moreover, according to knowledge-based view, the creation of new knowledge during collaboration to develop and increase a firm's knowledge base is an essential part of exploitation operations (Zahra & George, 2002). In order to generate new knowledge as a result of exploitation routines, it is necessary for employees to cooperate because the exchange of knowledge among different employees is a prerequisite for knowledge creation (Lee & Choi, 2003). Malhotra, Gosain & El Sawy (2005) have also emphasized the significance of collaboration for the exploitation of knowledge. Their judgments have suggested that the exchange of data between partners can lead to new knowledge production (Malhotra et al., 2005).

1.3.3 Openness

Openness is a desire not to hide facts, agendas and motives, thereby fostering trust and candour relations between people (Stata, 1994). Openness is also a desire to share information and interaction among parties (Wathne et al., 1999). Openness stimulate innovativeness, risk-taking, and cross-functional support. Employees feel important and valued, and this feeling encourages them to bring value to their employer (Hurley & Hult, 1998).

Bettinger (1989) studied correlation between the company's openness and strength of internal communication. He found out that high-performing companies exhibit open, non-

hierarchical communication, whereas low-performing companies exhibit formalized, downward communication. The researches also mentioned that if management has a positive attitude towards change, it stimulates employees to find innovative solutions for problems. The problems are perceived as opportunities for improvement, not as bad events. This kind of attitude positively affects the company's performance, since it helps the company to advance and remain competitive.

Considering openness importance on potential absorptive capacity, Pemberton & Stonehouse (2002) argues that openness helps the company to acquire external knowledge, since knowledge transfer is easier when there no borders across the company that hinder knowledge transfer. Knudsen et al. (2001) considers openness precondition of knowledge access, which increases absorptive capacity as well as crafts new knowledge. Moreover, Sollberger (2002) considered openness essential for knowledge assimilation, since people avoid knowledge concealment if they are open. Openness facilitates knowledge flows among different business units and employees of different hierarchical levels. Davenport & Prusak (1998) explained that open environment helps employees to realize what is going on in their company. This understanding allows smooth business processed flows, including knowledge assimilation.

In terms of realized absorptive capacity, Katz & Allen (1982) considered openness an important factor that influence transformation capacity. They explained "Not Invented Here" (NIH) syndrome that occurs when group refuses to use externally-generated knowledge in its work. This syndrome hinders knowledge transformation. Openness, on contrary, helps to transform knowledge. Furthermore, the exploitation of knowledge requires sharing appropriate knowledge amongst members of a company to promote understanding of each other (Zahra & George, 2002). For sharing knowledge it is essential to have openness that allows members to orient themselves at a company and to access external areas of knowledge. Moreover, from a coevolutionary perspective, openness is a critical factor in industrial competitiveness and enables companies both to exploit external knowledge and to prognosticate more accurately the nature of expected technological advances (Cohen & Levinthal, 1994).

1.3.4 Learning receptivity

Learning receptivity could be defined as the ability to learn. Allee (2001) stressed the importance of studying the ways people work together or study together in order to thoroughly discuss topic of knowledge. He argues that companies should set the environment that support employees' learning, so that the company can increase its intellectual potential. One of the ways to

increase learning receptivity for companies is to use instructors that have training and background that are similar to students' ones. People learn new ideas through association between new ideas and knowledge they have already possess. It is easier for people to deepen knowledge in the domain they are familiar with rather than in the domain that is totally new for them. Therefore, people are better trained when the instructor and the students share common grounds. Moreover, similar people tend to communicate with each other more, so the probability of knowledge transfer among them is higher than among diverse people (Reagans & Mcevily, 2003). When we talk about learning, we should also mention "unlearning". Assimilation of knowledge involves not only knowledge acquisition, but also knowledge removal (Autio et al., 2000). If the company want to adopt a new way of doing things, it should "unlearn" the old ways.

Learning receptivity positively affects the enterprises' absorptive capacity, since without learning knowledge transfer is impossible. Choi (2002) argues that organizational learning is the acquisition of knowledge performed by individuals who can and want to apply this knowledge in practice. Therefore, if individuals are unable to learn, organizational learning is not feasible. Minbaeva et al. (2003) thought that absorptive capacity is augmented if individuals are able to reduce knowledge complexity. They can do so through presenting their experience in mind maps. Teece et al. (1997) explained that entities are required to have learning receptivity to collect, transform and document knowledge. Moreover, Hult (1998) mentioned that learning receptivity is connected to assimilation capacity. He noted that organizational learning increases capacity to understand new ideas, improves creativity and ability to spot opportunities. Cohen & Levinthal (1989) argued that recognition of R&D function, which is sort of responsible for learning in organization, increase the organization's ability to assimilate knowledge.

Besides its effect on acquisition and assimilation capabilities, Cohen & Levinthal (1990) considered learning receptivity very important for knowledge transformation. If organizational culture values knowledge over hierarchy, this fact may stimulate knowledge transformation. Hurley & Hult (1998) explained that learning improves the firm's ability to understand new ideas and be creative. Additionally, learning receptivity is necessary for the exploitation of external knowledge because within exploitation the primary importance is on the routines, competencies, and technologies that enable firms to exploit knowledge: the appearance of such routines, competencies and technologies permits companies to specifically exploit knowledge over long periods of time by presenting structural, systemic and procedural mechanisms (Zahra & George, 2002).

1.3.5 Autonomy

Autonomy is the extent of the employee's freedom to structure, plan and execute his work. Janz & Prasarnphanich (2003) provides the list of synonyms for autonomy: self-direction, empowerment, or self-management. He explains that freedom is the degree to which a party can solely determine "what actions are required and how best to execute them".

Autonomy is connected to a culture that fosters creation, communication, and sharing of new knowledge (Pemberton & Stonehouse, 2002). Hewlett-Packard is a good illustration of this phenomenon. Knowledge management projects are frequently initiated in different departments of the company. The projects are highly decentralized, since top-down project initiation at the corporate level is not possible due to autonomous business unit culture. If some projects do not fit Hewlett-Packard culture, they will not be successful. This fact serves as a filter instead of top-management approval. Consulting companies is another example of connection between autonomy and knowledge-friendly culture. For example, McKinsey consultant are expected to work independently without much support from their supervisors. This autonomy allows them to approach each project in a unique way, crafting more tailored and innovative recommendations for clients. If the approached is exceptionally good, it can be documented for further use by other consultant, if they want to use it, since they also have autonomy.

Nonaka (1994) argues that autonomy augments acquisition capacity, since autonomy motivates individuals to create novel knowledge. A sense of purpose positively affects employees' creativity, while autonomy allows the creativity to thrive. Walsh (1995) noted that the most severe challenge for managers is the complexity of modern information world that changes as quick as never before. It is impossible for managers to control the whole information flow, so they should delegate some work to their employees through autonomy. If they do so, organizations will be able to absorb more knowledge. Furthermore, autonomy fosters knowledge transformation. Molina & Lloréns-Montes (2006) explained that to make a decision, individuals have to process large amount of data from multiple sources. The author also claims that leaders has to help teams with access to relevant knowledge. To do so, they need autonomy.

Autonomy increase transformational capability, since if the employee has the authority to work autonomously, knowledge can be transformed faster. Sollberger (2006) pointed out that if employees are afraid of being punished because of their errors, they are reluctant to experiment. Therefore, companies should give employees some freedom, if they want employees to transform knowledge. As a further matter, the relationship between autonomy and exploitation must also be

investigated because it can be assumed that autonomy is positively related to the exploitation capability: “By all owing people to act autonomously, the organization may raise the chance of introducing unexpected opportunities” (Nonaka, 1994). The exploitation of these opportunities is critical for the exploitation capability because it indicates a company’s ability to create something new. Zahra & George (2002) have highlighted that these new things could inlude new products, processes, knowledge or organizational forms (Zahra & George, 2002). Accordingly, autonomy can increase the exploitation of knowledge and have a positive impact on the exploitation capability since the possibility of introducing unexpected opportunities has an influence on the result of exploitation.

1.3.6 Care

Care is the provision of what is necessary for the person. In context of knowledge management and organizational culture, care for the employee implies help with his tasks, provision of knowledge, and positive attitude towards him. Care stimulates knowledge-sharing, since employees feel safe to share their opinions and feedback in friendly environment (Sollberger, 2006).

Krogh (1998) argues that care facilitates acquisition capacity, since care enhance awareness about important knowledge and increase insights sharing. Care augments empathy among people, so people become more interested in each other’s needs, including need for knowledge. Furthermore, from a knowledge-based view, care that complements a firm’s existing knowledge base has a positive effect on the acquisition of external knowledge (Lichtenthaler, 2009). Care gives rise to active empathy so that people can assess and understand what others need (von Krogh, 1998). According to managerial cognition, this assessment and understanding is very important for utilizing external knowledge and adapting the organizational knowledge structure, which is built out of a social process (Lyles & Schwenk, 1992). Besides acquisition capability, Von Krogh (1998) thinks of care as a process of helping somebody to learn and increase awareness of important events and their outcomes. According to knowledge-based view, care is inextricably connected to interpreting and understanding of new knowledge.

Zahra & George (2002) implied that care stimulates knowledge transformation. In friendly environment, people try to help each other by alleviating others’ pains. If they found out an easy way to achieve some business result, they will explain this way to others. Thus, it is assumed that learning care is positively related to the transformation capability. Moreover, Care is visible in the courage that people present towards each other (von Krogh, 1998). This courage is very critical to

managerial cognition in that it enables employees to give an opinion, propose an idea or encourages the feedback (Sollberger, 2006). According to knowledge-based view, this is in turn treasured for both improving, extending and leveraging existing routines, competencies and technologies and creating new ones by consolidating acquired and transformed knowledge into a company's operations to create competitive advantage.

1.4 Research Gap and Research Questions

Research Gap. Despite the construct of absorptive capacity has been given significant academic attention over the last years (Flatten et al. 2011), there is still are research area which is underdeveloped, particularly, absorptive capacity in the SME context (Liao et al., 2003). Wong & Aspinwall raise attention on the rarity of empirical studies that have examined factors critical for the absorption of knowledge in the critical business sector of SMEs (Wong & Aspinwall, 2005).

Furthermore, studies on knowledge management and the absorption of knowledge have only attempted to examine the impacts of organizational culture that are provided by selected aspects of various dimensions of organizational culture on absorptive capacity in detail (Spieth, 2009). Only few empirical studies (Harrington 2004, Strese 2016, Chang and Lin 2014) were conducted based on the widely known organizational and national culture models (Hofstede 1980, Hofstede et al 1990, Quinn 1988) and absorptive capacity/knowledge management dimensions, while neglecting one very natural organizational culture concepts that links both organization culture, knowledge management and absorptive capacity – knowledge culture (Sollberger , 2006)

The literature has not investigated how the several dimensions of knowledge organizational culture are related to the acquisition capability, assimilation capability, transformation capability and exploitation capability or how a knowledge-oriented organizational culture should be designed to promote the absorption of external knowledge.

Research questions. To close this gap, the following two research question are investigated:

3. Is there the relationship between knowledge culture and absorptive capacity in Russian SME?
4. What dimensions of knowledge culture (trust, collaboration, autonomy, care, learning receptivity, openness) have an influence on absorptive capacity dimensions (acquisition capability, assimilation capability, transformation capability and exploitation capability) of Russian SME.

Research problem. This central research question implies a research problem that includes unresolved questions with respect to the parameters of a model of SMEs' external knowledge

absorption. It is unclear which dimensions of the knowledge culture influence the several capabilities of SMEs' absorptive capacity;

Research Goal is to identify whether knowledge-oriented organizational culture dimensions have a positive impact on the level of organizational absorptive capacity, namely acquisition, assimilation, transformation and exploitation capabilities

Research Objective. The presented problems regarding SMEs' external knowledge absorption represent issues that have been insufficiently studied. The overall objective of this thesis is to develop and validate a model that allows an analysis of the relationship between organizational culture and the capabilities of absorptive capacity at the organizational level of russian SMEs and

2 METHODOLOGY

In these chapter the research model would be created and analyzed through explanatory approach that establish causal relationships between variables and deductive approach would be used for developing a conceptual framework, testing it empirically, making particular inferences from the general ones. Method of the thesis is quantitative (survey) and would be collected through web questionnaire instrument. The data analysis methods are reliability analysis, confirmatory factor analysis, Pearson correlation and four regression models for each of the absorptive capacity dimensions. The following paragraphs include the research model, operationalization of absorptive capacity and knowledge culture models, questionnaire, description analysis, reliability analysis, confirmatory factor analysis, Pearson correlation and four regression analyses.

2.1 Research model

The parameters of the model are based mainly on two theories. First one is a construct of of absorptive capacity based on Zahra & George (2002), while the second one is the construct of knowledge-friendly organizational culture based on Sollberger (2006). Thus, we have a matrix of the six knowledge-friendly features, which are trust, collaboration, openness, learning receptivity, autonomy, care and four absorptive capabilities constructs which are acquisition capability, assimilation capability, transformation capability and exploitation capability. Based on the literature's theoretical statements we can answer our two research questions analysing the relationship between absorptive capacity and knowledge culture through assumption that the six

variables of organisational culture are positively related to each of the six dimensions of absorptive capacity in the following way.

The conceptual model of relationship between absorptive capacity and the determinants of the knowledge culture is presented in the following equations:

Acquisition capability = f (trust, collaboration, openness, learning receptivity autonomy, care),

Assimilation capability = f (trust, collaboration, openness, learning receptivity autonomy, care),

Transformation capability f (trust, collaboration, openness, learning receptivity autonomy, care),

Exploitation capability f (trust, collaboration, openness, learning receptivity autonomy, care).

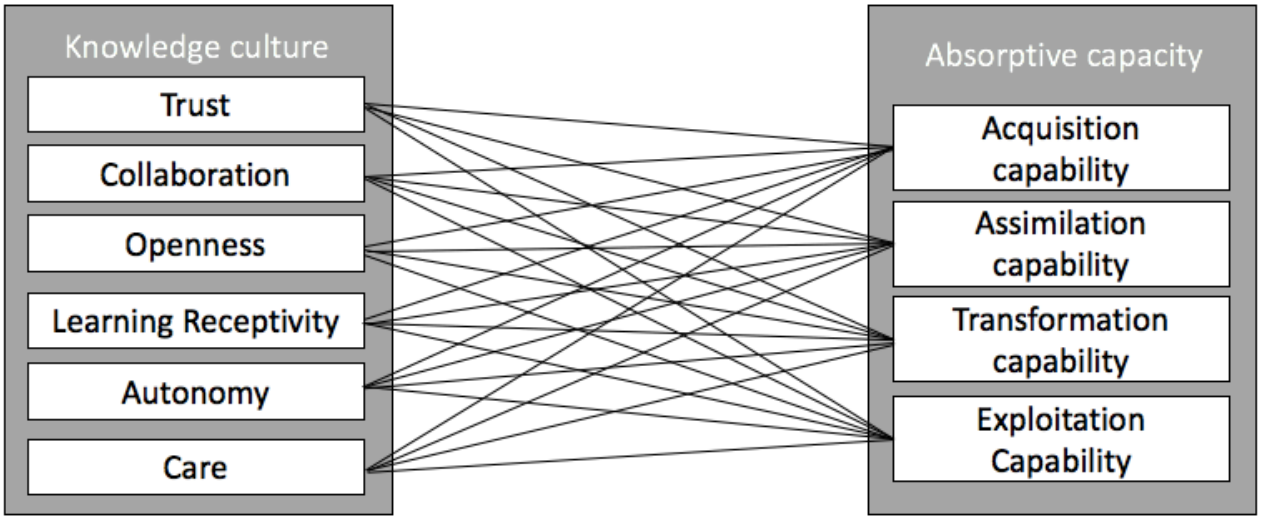

Figure 6. The conceptual model of relationship between absorptive capacity and the determinants of the knowledge culture

2.2 Operationalization of the model

The insights from the literature on absorptive capacity and organisational culture were helpful in creation of the conceptual model. However, the conceptual variables should be operationalized to be used further in the regression analysis. All the conceptual variables and operational proxies of the absorptive capacity are depicted in the Table 7. Two types of companies' absorptive capacity were measured in this research – potential (acquisition capability and assimilation capabilities) and realized (transformation and exploitation capabilities). Their measurement and its justification is provided below.

The operationalization of the conceptual variables was made based on the Flatten et al. (2011), who has developed and validated a multidimensional measure of absorptive capacity. Before Flatten article researchers have measured ACAP as a unidimensional construct, often using a firms R&D spending as a proxy for their construct. In his research "A measure of absorptive capacity: Scale development and validation" Flatten has developed and validated a multidimensional measure of ACAP, building on relevant prior literature, a series of pre-tests, and two large survey-based studies of German companies based on the twenty-eight research streams such as knowledge management, team knowledge, collective mind, environmental scanning, information search, interorganizational learning, innovation search and others.

In our research we had used the Final ACAP scale (cf. Flatten et al. 2011, p. 110), consisted of three questions on acquisition capability specifying to what extent the company uses external resources to obtain information (e.g., personal networks, consultants, seminars, internet etc.); four questions on assimilation capability, determining to what extent the statements fit the communication structure in the company; four questions on transformation capability specifying to what extent the statements fit the knowledge processing in the respondent's company; and three questions on exploitation capability that identify to what extent the statements fit the commercial exploitation of new knowledge in the respondent's company divisions such as R&D, production, marketing, and accounting etc. All the operationalization questions are stated in the "Table 777. Operationalization of the Absorptive Capacity" and were measured in the questionnaire by Likert scale where 1 – is absolutely disagree with a statement and 7 is absolutely agree with a statement.

Construct	Question
Acquisition	The search for relevant information concerning our industry is every-day business in our company.
	Our management motivates the employees to use information sources within our industry.
	Our management expects that the employees deal with information beyond our industry.
Assimilation	In our company ideas and concepts are communicated cross-departmental.
	Our management emphasizes cross-departmental support to solve problems.

	In our company there is a quick information flow, e.g., if a business unit obtains important information it communicates this information promptly to all other business units or departments.
	Our management demands periodical cross-departmental meetings to interchange new developments, problems, and achievements
Transformation	Our employees have the ability to structure and to use collected knowledge.
	Our employees are used to absorb new knowledge as well as to prepare it for further purposes and to make it available.
	Our employees successfully link existing knowledge with new insights.
	Our employees are able to apply new knowledge in their practical work.
Exploitation	Our management supports the development of new products and services.
	Our company regularly reconsiders technologies for the production of products and services and adapts them accordant to new knowledge.
	Our company has the ability to work more effective by adopting new technologies for the production of products and services

Table 5. Operationalization of the Absorptive Capacity

The construct of "absorptive capacity" is composed of four levels as shown in Figure 3. The absorptive capacity is divided into two brunches: potential (1) and realized (2), that are divided into acquisition capability, assimilation capability and transformation, exploitation capability respectively that are determined with Flatten statements measured by Likert scale.

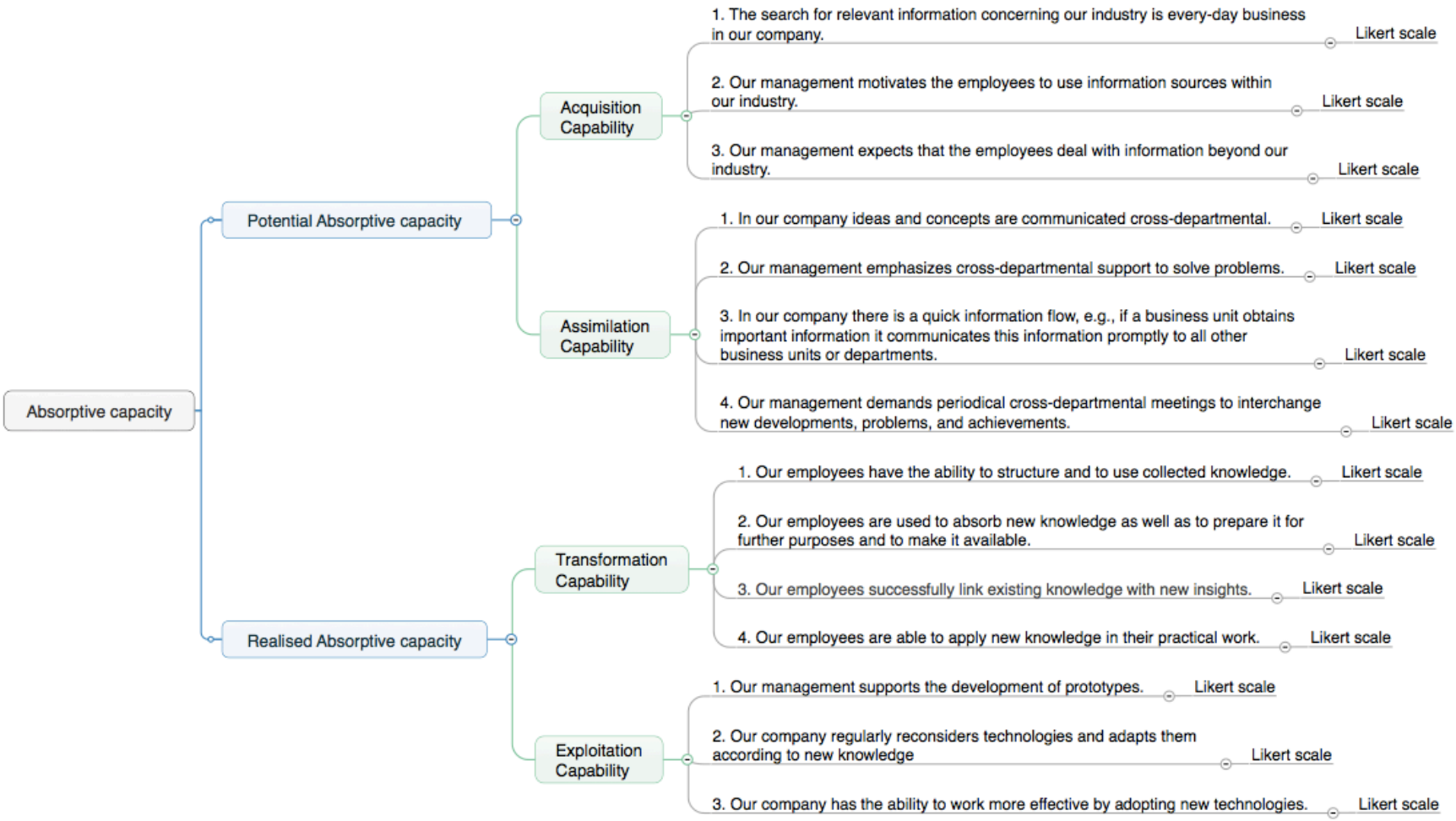

Figure 7. Operational model of absorptive capacity

Establishing a knowledge-friendly organizational culture, Sollberger (2006) has worked out the dimensions of organizational culture, which play critical role in the composition and synthesis of holistic knowledge management and therefore, knowledge absorption, with the help of a comprehensive literature review (Sollberger, 2006). The results of Sollberger's (2006) literature review show that trust, collaboration, openness, autonomy, learning receptivity and care are the primary dimensions of a knowledge-friendly organizational culture. In this thesis, the six dimensions of organizational culture are operationalized based on Sollberger.

In terms of the factor analysis, Sollberger has eliminated those items that could not be attributed to a factor or where no sufficiently clear assignment was possible. This thesis uses all of Sollberger's (2006) items for operationalization, because the eliminated items could present relevant values within this survey: three items are used to determine the degree to which organizational culture is characterized by trust. Four items characterize openness, collaboration, learning receptivity, three items characterize trust, two characterize autonomy and two item characterise care.

Construct	Questions
Trust	In our company, the superiors lead by example.
	In our daily working environment, the objectives of the company are accepted by all of us.
	In our daily working environment, the skills of the personnel are appreciated as being an important source of competitive advantages.
Collaboration	In our daily working environment, it is even possible to find common ground on how to approach difficult topics and problems.
	In our company, different teams often work together to achieve joint improvements.
	In our company, we actively support cooperation between different teams (e.g., production and distribution, EDP/IT, finances and personnel etc.).
	In the daily work of our company, we put more emphasis on teamwork than on hierarchies.
Openness	In our company, problems are addressed openly.
	In our company, there are clear objectives, which determine our daily work and lead the way.
	In our company, we have a comprehensible strategy for the future of our company.

	Internal company information about important changes and decisions are communicated in a comprehensible way.
Learning Receptivity	In our daily working environment, information hints and recommendations provided by our clients have a direct influence on our decisions.
	In our daily working environment, mistakes are considered to be opportunities to learn and improve.
	In our daily working environment, problems are taken up and processed.
	In our daily working environment, working procedures are reviewed and improved.
Autonomy	I know what I am responsible for.
	In our company, problems rarely arise because we have the skills that are required for our jobs.
Care	In our company, we help each other.
	My immediate superior supports and encourages me.

Table 6. Operationalization of the Organizational Culture

The construct of "organizational culture" is composed of three levels as shown in Figure 4. The organizational culture is divided into six factors: trust, collaboration, openness, learning receptivity autonomy and care that are determined with Sollberger's statements measured by Likert scale

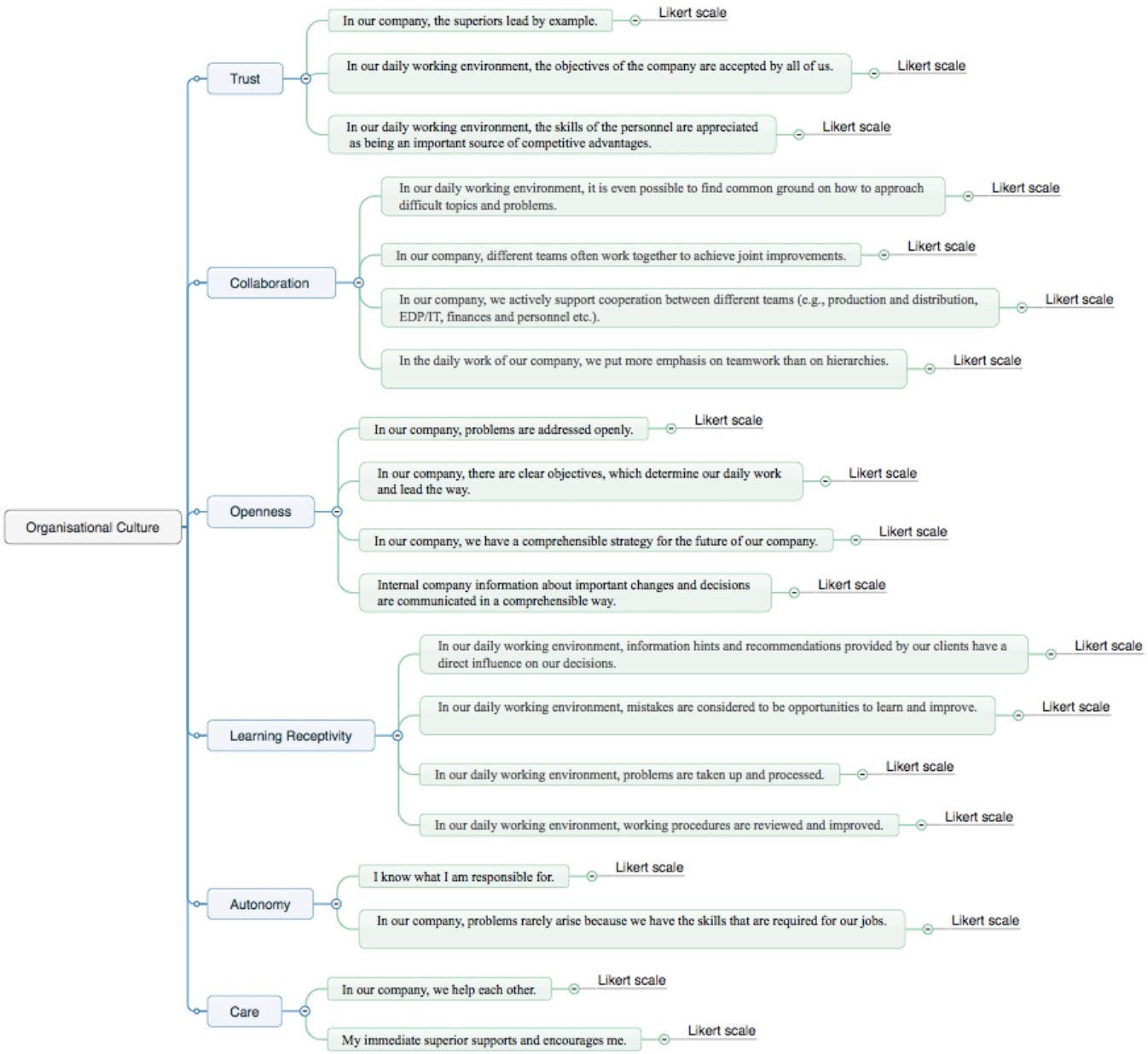

Figure 8. Operational model of organizational culture

Company's background and respondent's related section of questionnaire is consisted of 5 questions, including the name of the company, industry sector of the company, size of the company, respondent's department and job position.

Industry section segmentation (Advanced industries, Cars and assembly programs, Capital projects and infrastructure, Consumer goods and retail, Energy, resources and materials, Financial and insurance services, High technologies, telecommunications and the Internet, Pharmaceutical and medical products, Private Equity and Investments, Travel, transport and logistics, Other) is based on Russian Federation Federal State Statistics Service.

Construct	Question
Company	Please write the name of your company
Industry	In which industry does your company operate? • Advanced industries • Cars and assembly programs • Capital projects and infrastructure • Consumer goods and retail • Energy, resources and materials • Financial and insurance services • High technologies, telecommunications and the Internet • Pharmaceutical and medical products • Private Equity and Investments • Travel, transport and logistics • Other
Size	How many people work in your company? • 1 - 100 • 101 - 250 • 251 - 500 • More than 500
Department	In which department do you work?
Job Position	Please indicate your position

Table 9. Operationalization of the company background

2.3 Questionnaire

The questionnaire consists of the three sections. The first one contains four blocks of the questions with which we could determine the level of the absorptive capacity constructs such as acquisition capability, assimilation. capability, transformation capability and exploitation capability of the respondents' company, that would further be used for estimation of the common common potential and realised absorptive capacity levels.

The second section contains four blocks of the question that measures the independent dimensions of the organisational culture. And the third sector contains general characteristics about the respondent and his or her company, such as company name, industry, size, department and job position.

The third section includes five block, covering company's background and respondent's related questions, including the name of the company, industry sector of the company, size of the company, respondent's department and job position.

The questionnaire was created based on the Google Forms platform. Totally, the questionnaire consists of thirty-eight questions (fourteen questions for the first block, nineteen questions for the second and five questions for the third block) and took approximately seven minutes to answer.

The data was collected due to firstly, personal invitations to respondents encouraging to take part in a research, secondly, the questionnaire was published in the GSOM alumni Facebook group and in business related groups in social media. IN order to make the questionnaire maximum respond-friendly, it was initially tested with a group of 7 people, who shared their feedback, which was analyzed and used to make final adjustments

Section 1: Absorptive Capacity	Section 2: Organizational Culture	Section 3: Characteristics
Acquisition Capability	Trust	Company
Assimilation Capability	Collaboration	Industry
Transformation Capability	Openness	Size
Exploitation Capability	Learning Receptivity	Department

	Autonomy	Job position
	Care	

Table 8. Questionnaire structure

2.4 Description of the the Sample

Overall, the empirical study got 367 responses, out of which 96% have fulfilled all of the questions, without missing any of them. This sample was further eliminated, because of not fitting to the frame of the research due to following reasons:

- Industry fit. Some of the respondents belonged to not-business sectors of economy (such as government, municipal organizations, schools, theaters etc.) Those respondents were excluded as they had not had a necessary overview of absorptive capacity and organizational culture in their organisation.
- Company fit – some of the respondents were excluded as they work either in foreign that doesn't have Russian registration or work abroad.
- Size of the company. Some of the companies were not actually the Small and medium enterprises, as they had a number of employees greater than 500. This criterion has actually influenced the size of the sample the most as it was necessary to eliminate approximately one third of the all answers.
- Department and Job position fit. The respondents who has described themselves as students, interns or unemployed were also removed from the sample.

Target audience and sample. Thus, our target respondents could be described as senior and middle managers in Russian commercial SME companies (or foreign companies that have Russian registration). After elimination a total of 107 responses (61%) were capable to be analyzed.

Industry

With regard to the analysed data, the following tables represent the sample's characteristics descripting the distribution of respondents' industry.

The distribution of the sample is heterogeneous, with an asymmetry towards "Other" with 25% of responses, "Consumer goods and retail" with 12%, "Travel, transport and logistics" and "Energy, resources and materials" with 11% responses. Altogether "Other", "Consumer goods and

retail", "Travel, transport and logistics" and "Energy, resources and materials" represent 59% that is practically two thirds of the sample. All the other industries are distributed with a percentage share from 9 to 3% and together represent 41% of the analysed sample.

Industrial Sector	Frequency	Percent
Advanced industries	6	6
Cars and assembly programs	3	3
Capital projects and infrastructure	4	4
Consumer goods and retail	13	12
Energy, resources and materials	12	11
Financial and insurance services	7	7
High technologies, telecommunications and the Internet	10	9
Pharmaceutical and medical products	5	5
Private Equity and Investments	8	7
Travel, transport and logistics	12	11
Other	27	25
Total	107	100

Table 9. Industry analysis

Company

The primary goal of respondent's company analysis was a confirmation that the considerable company had a Russian registration. According to "On registration of foreign companies in Russia", published by Ministry of Foreign Affairs of the Russian Federation, there are three options of practices for the organization of foreign business in Russian Federation:

- a wholly owned subsidiary – (LLC, JSC, CJSC), is an independent legal entity,

- representation- is not an independent legal entity,

- subsidiary - is not an independent legal entity.

According to research purpose, the elimination of the representations, subsidiaries and foreign companies without any form of Russian registration was made with a Spark-Interfax. After the elimination two groups of the companies have left: Russian companies and a and a group of foreign companies that work under LLC, JSC, CJSC registration.

Size of the company

The analyzed data was distributed between three categories of the small and medium sized enterprises as follows, the majority of the companies represent medium enterprises, that have from 251 to 500 employees, (48%), then enterprises with 101-250 employees (32%), and small enterprises with 1-100 employees (20%).

All the respondents representing widely famous Russian (Bashneft, Evraz, Mail.ru, Biocad, Alfa-bank, Megafon, Sberbank, Gazprom, Norilsk Nickel and others) and international companies (Google, McKinsey&Company, Gett, IBM, Uber, L'OREAL, EY, A.T. Kearney, Colliers International, IKEA, Heineken, Phillip Morris, Siemens, MARS and others) were eliminated as the work in the companies with more than 500 employees, that do not fit to criteria of small and medium sized enterprises.

Size of the company	Frequency	Percent	Cumulative Percent
1 - 100	21	20%	20%
101 - 250	35	32%	52%
251 - 500	51	48%	100%
More than 500	eliminated	eliminated	eliminated
Total	107	100%	100%

Table 10. Size of the company

Department

The respondents' responses could be divided into few categories: Purchase, EDP and IT, Finances and controlling, R&D, Customer service, Marketing and sales, Logistics and Other. In the analysing sample, one quarter of the respondents belong to "Other", one fifth work in "Marketing and Sales" department" and the rest respondents are heterogeneously spread between Purchase, EDP and IT, Finances and controlling, R&D, Customer service and Logistics departments with a 54% of the total sample.

Respondents' Department	Frequency	Percent
Purchase	8	8
EDP and IT	11	10
Finances and controlling	13	12
R&D	12	11
Customer service	7	7
Marketing and sales	22	21
Logistics	8	7
Other	26	25
Total	107	100

Table 11. Department analysis

Job Positions

According to the target respondents, we have selected only senior and middle management (including Commercial employee, Managerial employee and Team/Project managers), while eliminating technical employees, support stuff and others. Generalizing the sample, it could be said that 6% of the sample are head of departments, 36% of the sample marked themselves as management, 30% work as commercial employees, 19% work managerial employees, 9% of the respondents have are project managers.

2.5 Data analysis

2.5.1 Descriptive analysis

The collected data was considered separately for two sections: absorptive capacity and organizational culture. These sections were considered separately in terms of the number of responses, mean and standard deviation. For both sections the questions were measure by Likert-type-7-point scale where "1" stand for "I absolutely disagree and "7" – for "I absolutely agree" respectively.

Thus, the descriptive analysis of absorptive capacity dimensions has showed the the number of answered questions has varied from total sample (maximum of 107 respondents) to 106, that is less than 1% range in the number of analyzed responses. What goes to mean, the minimum mean in the sample was received from assimilation capability question "In our company there is a quick information flow, e.g., if a business unit obtains important information it communicates this information promptly to all other business units or departments." that had 4,37 as a mean, and the maximum was received from the transformation capability question "Our employees are able to apply new knowledge in their practical work " with a mean of 5,61. The average mean of the responses in absorptive capacity section is 5,09 that proves a right-steep distribution and skewed to the left that means that responses were biased negatively.

Standard deviation of the distribution varies from 1,34 received on the transformation capability question "Our employees are able to apply new knowledge in their practical work " that has previously showed the highest mean in the section, to 1,74 received two assimilation capability questions "In our company ideas and concepts are communicated cross-departmental." and "Our management emphasizes cross-departmental support to solve problems." that had previously showed the least mean in the sample. The average standard deviation in the sample is 1,59. The result showed that the highest standard deviation was received from the assimilation capability block of questions, as all four questions showed the highest results.

Construct	Question	Number	Mean	St. Dev
Acquisition	The search for relevant information concerning our industry is every-day business in our company.	107	5,29	1,56
	Our management motivates the employees to use information sources within our industry.	107	4,79	1,71

	Our management expects that the employees deal with information beyond our industry.	107	4,93	1,69
Assimilation	In our company ideas and concepts are communicated cross-departmental.	107	5,10	1,74
	Our management emphasizes cross-departmental support to solve problems.	107	4,95	1,74
	In our company there is a quick information flow, e.g., if a business unit obtains important information it communicates this information promptly to all other business units or departments.	106	4,37	1,71
	Our management demands periodical cross-departmental meetings to interchange new developments, problems, and achievements	107	4,68	1,73
Transformation	Our employees have the ability to structure and to use collected knowledge.	107	5,09	1,53
	Our employees are used to absorb new knowledge as well as to prepare it for further purposes and to make it available.	107	5,20	1,49
	Our employees successfully link existing knowledge with new insights.	107	5,29	1,44
	Our employees are able to apply new knowledge in their practical work.	106	5,61	1,34
Exploitation	Our management supports the development of new products and services.	107	5,58	1,50
	Our company regularly reconsiders technologies for the production of products and services and adapts them accordant to new knowledge.	107	4,97	1,70
	Our company has the ability to work more effective by adopting new technologies for the production of products and services	107	5,35	1,37

Table 12. Descriptive analysis of the Absorptive Capacity

Descriptive analysis of the Organizational Culture has showed that the number of answered questions varies from 107 to 105 that is 99% of the analysed sample. In terms of mean, the

maximum value 5,95 was received from autonomy question “In our company, we help each other.” and the least one 4,64 was received from trust question “In our company, we actively support cooperation between different teams (e.g., production and distribution, EDP/IT, finances and personnel etc.).”. The average mean value of the sample is 5,22. The sample has a right-steep distribution and skewed to the left that means that responses were biased negatively, similarly to absorptive capacity distribution.

Standard deviation of the distribution varies from 1,79 received from trust question “In our company, we actively support cooperation between different teams (e.g., production and distribution, EDP/IT, finances and personnel etc.).” that has previously showed the lowest mean value in the section, to 1,23 received from autonomy question “In our company, we help each other.” that has showed the highest mean, respectively. The average standard deviation of the organisational culture section is 1,54.

Construct	Question	Number	Mean	St. Dev
Trust	In our company, the superiors lead by example.	106	4,95	1,62
	In our daily working environment, the objectives of the company are accepted by all of us.	107	4,71	1,58
	In our daily working environment, the skills of the personnel are appreciated as being an important source of competitive advantages	107	5,54	1,65
Collaboration	In our daily working environment, it is even possible to find common ground on how to approach difficult topics and problems.	107	5,27	1,57
	In our company, different teams often work together to achieve joint improvements.	107	5,19	1,54
	In our company, we actively support cooperation between different teams (e.g., production and distribution, EDP/IT, finances and personnel etc.).	106	4,64	1,79
Openness	In the daily work of our company, we put more emphasis on teamwork than on hierarchies.	106	4,80	1,65
	In our company, problems are addressed openly.	107	4,93	1,67

	In our company, there are clear objectives, which determine our daily work and lead the way.	107	5,36	1,59
	In our company, we have a comprehensible strategy for the future of our company.	105	5,13	1,63
	Internal company information about important changes and decisions are communicated in a comprehensible way.	105	5,35	1,54
	In our daily working environment, information hints and recommendations provided by our clients have a direct influence on our decisions.	106	5,43	1,47
Learning Receptivity	In our daily working environment, mistakes are considered to be opportunities to learn and improve.	107	5,81	1,28
	In our daily working environment, problems are taken up and processed.	106	5,07	1,66
	In our daily working environment, working procedures are reviewed and improved.	107	4,86	1,69
Autonomy	I know what I am responsible for.	107	5,90	1,32
	In our company, problems rarely arise because we have the skills that are required for our jobs.	105	4,98	1,32
Care	In our company, we help each other.	107	5,95	1,23
	My immediate superior supports and encourages me.	106	5,85	1,30

Table 13. Descriptive analysis of the Organisational Culture

The results of the descriptive analysis has showed that there is much in common between absorptive capacity and organizational culture distribution, they have a closed number of responses from 107 to 105, the mean of the sample varies from 4,37 to 5,95 with an average of 5,09 and 5,22 for absorptive capacity and organizational culture, respectively. The standard deviation of both distributions is similar too, with a variation from 1,23 to 1,79 and average standard deviation of 1,59 and 1,54 for for absorptive capacity and organizational culture, respectively. Both distributions have a right-steep distribution and skewed to the left that means that responses were biased negatively. There results of the Shapiro-Wilk test has proved that variables are not normally distributed as they are right-steep and skewed to the left, because $p<.001$.

2.5.2 Reliability Analysis

According to Churchill (1992) reliability analysis is a "similarity of results provided by independent but comparable measures of the same object, trait, or construct". For reliability analysis the Cronbach's alpha (Cronbach, 1951) was used by assesses the reliability of a summarized rating (Likert, 1932) scale composed of the variables. The reliability coefficient is for testing test internal consistency reliability which could be defined as index of reliability for multiple item measures.

Cronbach's alpha is measured from 0 (lowest level of reliability) to 1 (highest level of reliability). Thus, the high level of Cronbach's alpha confirms the internal consistency and high reliability of the factor's indicators.

Although there are different views on the acceptable levels of Cronbach's alpha scale reliability coefficient, for this analysis the most popular and widely approach, proposed by Kaplan & Saccuzzo (1982) was used: Kaplan & Saccuzzo an acceptable coefficient of >0.7-0.8 for basic research, and acceptable coefficient >0.95 applied Research.

The Cronbach's alpha of reliability analysis was hold in Stata, and lead to the following results: 0.7143 (Acquisition capability), 0.7885 (Assimilation capability), 0.7254 (Transformation capability) and 0.7862 (Exploitation capability). Although the scale reliability coefficient for acquisition capability got a lowest level of scale reliability coefficient 0.7254 is greater than 0,7 and this could be used for the following research analysis. The rest of the factors have a sufficient scale reliability coefficient >0.8 and strong average interitem covariance, that measures how much, on average, the items vary together.

Construct	Average interitem covariance	Number of items in the scale	Scale reliability coefficient
Acquisition capability	1.242961	3	0.7143
Assimilation capability	1.073285	4	0.7885
Transformation capability	.841165	4	0.7254
Exploitation capability	1.290366	3	0.7862

Table 14. Absorptive capacity reliability analysis (Cronbach's alpha)

Reliability analysis of organizational culture constructs showed to the following results: 0.7841 (Trust), 0.7297 (Collaboration), 0.8463 (Openness), 0.7120 (Learning Receptivity), 0.7921 (Autonomy) and 0.8677 (Care). All of the factors show a significant level of reliability with alpha >0.75 and strong average interitem covariance.

Construct	Average interitem covariance	Number of items in the scale	Scale reliability coefficient
Trust	1.43504	3	0.7841
Collaboration	.1871668	4	0.7297
Openness	1.515403	4	0.8463
Learning Receptivity	.6712989	4	0.7120
Autonomy	1.170588	2	0.7921
Care	1.146886	2	0.8677

Table 15. Organisational culture reliability analysis (Cronbach's alpha)

The reliability analysis showed that alpha >0,7 an acceptable coefficient value for basic reach, and therefore no items variable elimination was needed. All of the used variables and scales valid and possess practical utility for further statistic analysis.

2.5.3 Factor analysis

There are a variation of extraction methods for factor analyses, such as maximum likelihood factor analysis (ML), image factoring, alpha factoring, generalized least squares and unweighted least squares. Two methods are of particular interest: principal axis factoring (PAF) and principal component analysis (PCA).

PCA is applied more often than any other method of exploratory factor analysis. In a survey of a recent two-year period in PsycINFO that yielded more than 1,700 studies that used some form of exploratory factor analysis, Costello & Osborne (2005) have determined that more than fifty percent of the authors listed PCA as the method used for data analysis (Costello & Osborne, 2005). Accordingly, the majority used the Kaiser criterion (Costello & Osborne, 2005). The Kaiser-Meyer-Olkin (KMO) criterion, which is also called the Measure of Sampling Adequacy (MSA) criterion, indicates to which extent the initial analysis seems to make sense or not and provides both an overall assessment of the correlation matrix and of the individual variables.

A value of KMO greater or equal to .8 is desirable (Kaiser, 1970). A minimum value for this quality measure is as controversial in the literature as is the Cronbach's Alpha. The minimum values vary between .6 and lower requirements such as a factor loading of .3 In this thesis, .5 is used as the elimination criterion for factor loading, following Kaiser (1974).

According to KMO criteria, the factor should explain a significant amount of variables or be eliminated. Thus, a widely excepted value for factor analysis should explain >50% of the total variance. Absorptive capacity factor analysis explains 63,767% of acquisition capability, 62,255% of assimilation capability 66,514% of transformation capability and 70,182% exploitation capability, thus all of the factors gain the necessary total variance percent explained. All of dimensions of absorptive capacity has also gained the minimum value of KMO equal .5, and all of them have a significantly higher results: ,661 for acquisition capability, ,572 for assimilation capability, ,701 for transformation capability and ,679 for exploitation capability.

Construct	Question	Component	KMO	Total Variance
Acquisition capability	OURMAN	,799	,661	63,767
	SEARCH	,839		
	OURMANEXP	,755		
Assimilation capability	IDEASCONC	,798	,572	62,255
	CROSSDEP	,831		
	INFFLOW	,679		
	MEETINGS	,550		
Transformation capability	LINK	,799	,701	66,514
	PREP	,867		
	COLLKNOW	,852		
	APPLY	,706		
Exploitation capability	TECHNOL	,855	,679	70,182
	PRODUCTS	,876		
	EFFECT	,779		

Table 16. Absorptive capacity factor analysis

Below, the four factors of absorptive capacity are investigated with respect to their correlation. "A coefficient of + 1 indicates that the two variables are perfectively positively correlated, so as one variable increases, the other increases by a proportionate amount. Conversely, a coefficient of - 1 indicates a perfect negative relationship: if one variable increases, the other decreases by a proportionate amount. A coefficient of zero indicates no linear relationship at all and so if one variable changes, the other stay the same" (Field 2013, p. 267).

		Acquisition capability	Assimilation capability	Transformation capability	Exploitation capability
Acquisition capability	Pearson Correlation	1	,473**	,373**	,298**
	Sig. (2-tailed)		,000	,000	,002
	N	107	106	107	107
Assimilation capability	Pearson Correlation	,473**	1	,465**	,391**
	Sig. (2-tailed)	,000		,000	,000
	N	106	106	105	106
Transformation capability	Pearson Correlation	,373**	,462**	1	,517**
	Sig. (2-tailed)	,000	,000		,000
	N	106	105	106	106
Exploitation capability	Pearson Correlation	,298**	,391**	,517**	1
	Sig. (2-tailed)	,000	,000	,000	
	N	107	106	106	107
**. Correlation is significant at the 0.01 level (2-tailed).					

Table 17. Absorptive capacity Pearson correlation

The transformation and the exploitation capability (.517**) have medium and positive correlation and the transformation capability and the assimilation capability (,465**), the transformation capability and the acquisition capability (.073**) have a middle and positive relationship because all of their Pearson Correlation-coefficients are above .400. The assimilation capability and the exploitation capability and (.391**), demonstrate a low relationship, which is positive. These results show that only the correlation of the acquisition capability with the other capabilities of absorptive capacity is lower than .400. Majority of variables correlate as either middle or small positive with each other, with Pearson correlation coefficients higher than .400, which was expected, because the four capabilities of absorptive capacity are ordered chronologically.

Analyzing organizational culture, the Bartlett's-Test is also significant for all of the factor analyses of organizational culture ($p<.001$). Table XX shows the results for the factor analysis of organizational culture. Here, too, no factor rotations are necessary.

All of the factor loadings of the single indicators of the dimensions of organizational culture are higher than or equal to the generally requested limit of .500 Only autonomy and care have exactly .5, which is borderline, but acceptable. Moreover, Organizational culture factor analysis explains 69,882% of trust, 67,660% of collaboration, 68,719% of openness, 67,267% of learning receptivity, 76,778% of autonomy and 67,154% of care, thus all of the factors gain the necessary total variance percent explained.

Capability	Question	Component	KMO	Total Variance %
Trust	OBJECT	,822	,702	69,882
	COMPADV	,852		
	EXAMP	,833		
Collaboration	COMGROUND	,810	,576	67,660
	JOINTIMPR	,843		
	TEAMCOOP	,678		
	TEAMWORK	,793		
Openness	CLEAROBJ	,772	,769	68,719
	CHANGES	,862		
	STRATEGY	,834		
	PROBLEMS	,846		
Learning Receptivity	CLIENTINFO	,723	,648	67,267
	MISTAKES	,742		
	PROBPROCESS	,532		
	WORKPROCED	,732		
Autonomy	HAVETHESKILLS	,754	,500	76,778
	RESPONSIBLE	,754		

Care	ENCOURAGE	,819	,500	67,154
	HELP	,819		

Table 18. Organisational culture factor analysis

Below, the six factors of organizational culture are investigated with respect to their correlation. The values of significance in Table XXX show that all of the factors correlate with each other on the level of p<.001, and the values of the Pearson Correlation show that trust, openness autonomy and care correlate with each other, with Pearson Correlation-coefficients between .745 and .401, and therefore, they are strongly or medium positively related.

		Trust	Collaboration	Openness	Learning R.	Autonomy	Care
Trust	Pearson Cor.	1	,492**	,745**	,616**	,440**	,605**
	Sig. (2-tailed)		,000	,000	,000	,000	,000
	N	106	105	103	102	106	104
Collabora-tion	Pearson Cor.	,492**	1	,561**	,456**	,401**	,329**
	Sig. (2-tailed)	,000		,000	,000	,000	,001
	N	105	106	104	102	106	104
Openness	Pearson Cor.	,745**	,561**	1	,725**	,485**	,625**
	Sig. (2-tailed)	,000	,000		,000	,000	,000
	N	103	104	104	102	104	102
Learning Receptivity	Pearson Cor.	,616**	,456**	,725**	1	,420**	,648**
	Sig. (2-tailed)	,000	,000	,000		,000	,000
	N	102	102	102	103	103	102
Autonomy	Pearson Cor.	,440**	,401**	,485**	,420**	1	,498**
	Sig. (2-tailed)	,000	,000	,000	,000		,000
	N	106	106	104	103	103	102
Care	Pearson Cor.	,605**	,329**	,625**	,648**	,498**	1
	Sig.(2-tailed)	,000	,000	,000	,000	,000	
	N	104	104	102	102	105	105
**. Correlation is significant at the 0.01 level (2-tailed).							

Table 19. Organisational culture Pearson correlation

2.5.4 Regression analysis

Four regression models are calculated, one for each of the capabilities of absorptive capacity on the four dimensions of organizational culture. Within each regression analysis, the coefficient of determination (R^2), the regression coefficient (B), the standard error of the regression coefficient (SE B) and the standardized regression coefficient (β) are explained. Below, the interpretation of the most significant values and their acceptable value is provided: R^2: In a regression analysis, R^2 means 'goodness of fit', which is an index of how well a model fits the empirical data and is based on how well the predicted data correspond to the data that were actually collected.

R^2 can vary between 0 and 1: Zero indicates that the predictors are ineffective at predicting the outcome variable and one shows that the model ideally predicts the outcome variable (Field 2013, p. 765).

B: B is an unstandardized regression coefficient. It is an indicator of "the power of a relationship between a given predictor of many and an outcome in the units of measurement of the predictor. It is the difference in the outcome associated with a unit change in the predictor" (Field 2013, p. 870).

SE B: SE B is defined as "the standard deviation of the sampling distribution of a statistic" (Field 2013, p. 884). It shows whether a statistic from a presented sample is an actual representation of the population from which the sample came (cf. Field 2013, p. 884).

β: β is the standardized regression coefficient and indicates how effective a given predictor of many is related to an outcome in a standardized form. "It is the difference in the outcome (in standard deviations) connected with a one standard deviation change in the predictor" (Field 2013, p. 870).

Acquisition capability. The R^2 of the acquisition capability is .115 and therefore, the predictors do not predict the outcome variable very well. To interpret this result, the coefficient of acquisition is first calculated and the results interpreted. Although acquisition capability regression has a R Square = ,115; the standardized coefficient Beta need to be interpreted:

- The trust construct exceeds a β of .256 and is significant (β = .256, p <.001),
- The collaboration exceeds a β of .075 and is not significant (ß=.075, n.s.),
- The openness construct exceeds a β of .125 and is not significant (ß=.125, n.s.),
- The learning receptivity construct has a β of .220, not significant (ß=.220, n.s.),
- The autonomy construct exceeds a β of .068 and is not significant (ß=.068, n.s.),
- The care construct exceeds a β of .205 and is significant (ß = .205, n.s.).

Acquisition capability (R Square = ,115; Regression Sig. = ,000[b)]					
	Unstandardized Coefficients		Standardized Coefficients		Coefficients
	B	Std. Error	Beta	t	Sig.
Constant	-,002	,097		,021	,890
Trust	,246	,153	,256	3,558	,000
Collaboration	,075	,121	,075	1,008	,150
Openness	,124	,182	,125	1,110	,169
Learning Receptivity	,020	,152	,020	1,189	,349
Autonomy	,071	,122	,068	1,204	,230
Care	,005	,146	,205	1,667	,097

Table 20. Acquisition capability Regression analysis

The finding that the dimensions of organizational culture are not critical for the acquisition capability is unexpected and interesting, because several studies attribute success of the acquisition of external knowledge to the several dimensions of organizational culture, and all of the relationships are theoretically supported by the theories informing absorptive capacity — especially the knowledge-based view and managerial cognition. Nevertheless, the regression analysis of acquisition capability already shows that there is no significant relationship.

Assimilation capability. The R^2 of the acquisition capability is .609 and therefore, indicates that the model predicts the outcome variable satisfactorily. The values of B indicate that the gradient of all of the several dimensions of organizational culture are positive and that the strength of the relationship between a predictor and the outcome variable is between a minimum absolute value of ,050 (care) and a maximum absolute value of ,272 (collaboration).

- The trust construct exceeds a β of .119 and is significant (ß = .119, p <.001),
- The collaboration exceeds a β of ,272 and is significant (ß=,272, p <.01),
- The openness construct is supported by the empirical data (ß =,094, p <.05),
- The learning receptivity construct has a β of ,125, and is significant (ß=125, p <.05),
- The autonomy construct is supported by the empirical data (ß = ,220, p <.05),
- The care construct exceeds a β of ,050 and is not significant (ß = ,050, n.s.).

Assimilation capability (R Square = ,609; Regression Sig. = ,000[b)]					
	Unstandardized Coefficients		Standardized Coefficients		Coefficients
	B	Std. Error	Beta	t	Sig.
Constant	,002	,086		,020	,984
Trust	,119	,136	,119	,137	,000
Collaboration	,269	,107	,272	2,511	,009
Openness	,093	,161	,094	,573	,031
Learning Receptivity	,124	,135	,125	,915	,049
Autonomy	,227	,109	,220	2,086	,034
Care	,050	,130	,050	,389	,698

Table 21. Assimilation capability Regression analysis

Transformation capability. The R^2 of the acquisition capability is .651 and therefore, indicates that the model predicts the outcome variable satisfactorily. The values of B indicate that the gradient of all of the several dimensions of organizational culture are positive and that the strength of the relationship between a predictor and the outcome variable is between a minimum absolute value of ,011 (openness) and a maximum absolute value of ,272 (trust). Only the gradient of autonomy is negative, and the strength of the relationship between a predictor and the outcome variable has an absolute value of -,041

- The trust construct is supported by the empirical data (ß =,272 p <.001),
- The collaboration exceeds a β of ,285 and is significant (ß=,285, p <.05),
- The openness construct is supported by the empirical data (ß =,011 p <.05),
- The learning receptivity construct has a β of ,141, not significant (ß=,141, n.s.),
- The autonomy construct is not supported by the empirical data (ß = -,041, n.s.),
- The care construct is supported by the empirical data (ß =,173, p <.05).

Transformation capability (R Square = ,651; Regression Sig. = ,000[b)]					
	Unstandardized Coefficients		Standardized Coefficients		Coefficients
	B	Std. Error	Beta	t	Sig.
Constant	,007	,079		,086	,932

Trust	,273	,125	,272	2,188	,000
Collaboration	,291	,099	,285	2,948	,038
Openness	,011	,148	,011	,074	,023
Learning Receptivity	,143	,124	,141	1,154	,251
Autonomy	-,044	,100	-,041	-,438	,662
Care	,178	,119	,173	1,490	,019

Table 22. Transformation capability Regression analysis

Exploitation capability. The R^2 of the acquisition capability is .530 and therefore, indicates that the model predicts the outcome variable satisfactorily. The values of B indicate that the gradient of all of the several dimensions of organizational culture are positive and that the strength of the relationship between a predictor and the outcome variable is between a minimum absolute value of ,008 (learning receptivity) and a maximum absolute value of ,423 (collaboration).

- The trust construct is supported by the empirical data (ß = ,182, p <.05),
- The collaboration exceeds a β of ,423 and is significant (ß=,423, p <.01),
- The openness construct is supported by the empirical data (ß = ,231, p <.05),
- The learning receptivity construct has a β of ,008, not significant (ß=,008, n.s.),
- The autonomy construct exceeds a β of ,102and is not significant (ß=,102, n.s.),
- The care construct exceeds a β of ,024 and is not significant (ß = ,024, n.s.).

Exploitation capability (R Square = ,530; Regression Sig. = ,000[b)]					
	Unstandardized Coefficients		Standardized Coefficients		Coefficients
	B	Std. Error	Beta	t	Sig.
Constant	,013	,078		,168	,867
Trust	,178	,123	,182	1,451	,042
Collaboration	,421	,097	,423	4,339	,000
Openness	,228	,146	,231	1,564	,021
Learning Receptivity	,008	,122	,008	,063	,250
Autonomy	,105	,098	,102	1,072	,286
Care	,024	,117	,024	,203	,439

Table 23. Exploitation capability Regression analysis

In detail, the results of the four regression analyses show that all of the capabilities are positively influenced by the dimensions of organizational culture. The assimilation, transformation and exploitation capabilities are influenced by different dimensions of organizational culture, but all of them are influenced by trust and openness.

Trust has the most positive effect on absorptive capacity because it is positively related to three capabilities of absorptive capacity, followed by openness, care and autonomy, which each have positive relationships to capabilities of absorptive capacity. Furthermore, the results of the four regression analyses show that one dimensions of organizational culture is negatively related to one of the four capabilities of absorptive capacity: autonomy is negatively related to the assimilation capability. The table below shows the relationship between absorptive capacity and organizational culture corresponding to the significance level (* p < .05, ** p < .01, *** p < .001).

	Determinants	1.Acquisition capability	2.Assimilation capability	3.Transformation capability	4.Exploitation capability
a	Trust	,256***	,119***	,272***	,182*
b	Collaboration		,272**	,285*	,423**
c	Openness		,094*	,011*	,231*
d	Learning Receptivity		,125*		
e	Autonomy		,220*		
f	Care			,173*	

Table 24. Relationships of absorptive capacity and organizational culture

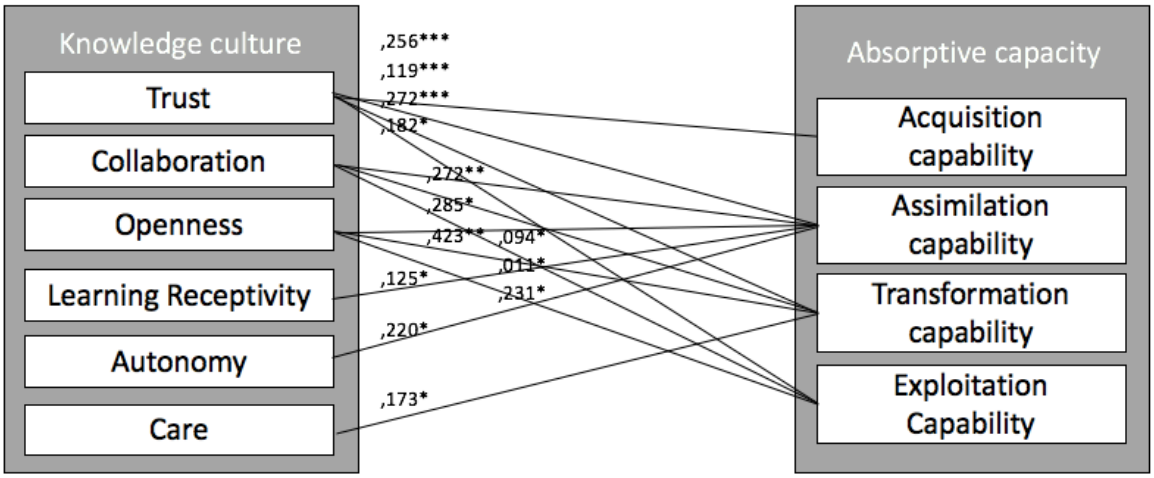

Figure 9. Conceptual model of relationships of absorptive capacity and organizational culture

3 DISCUSSION AND CONTRIBUTION

This chapter aims to discuss the results of the regression analysis and their correspondence to other research papers. The regression results are presented in Table 27. *, **, ** mean significant positive correlation. The discussion of significant results is presented in this chapter. Blank space means that independent variable was not significant. However, this fact only means that the correlation between independent and independent variable was not proved, and does not mean that the correlation does not exist. Therefore, the discussion of insignificant results is not presented in this chapter.

3.1 Discussion of the results

The objective of this thesis is to develop and validate a model that provides an examination of the relationship among organizational culture and the capabilities of absorptive capacity at the organizational level of SMEs and shows how a knowledge-oriented corporate culture should be designed to support the absorption of external knowledge. The origin point of the study is the finding that despite the construct of absorptive capacity has received significant academic recognition in recent years, there is still an undeveloped research field, particularly, absorptive capacity in the Russian SME context. Furthermore, there has been no examination of how the various dimensions of organizational culture are correlated to acquisition capability, assimilation capability, transformation capability and exploitation capability or what programs of action related to organizational culture can be executed by SMEs to promote the absorption of external knowledge. There is a huge research gap related to the relationship among organizational culture and absorptive capacity and a model that takes into account the different dimensions of organizational culture and the several capabilities of absorptive capacity. Moreover, there has been no empirical analysis of the several relationships between the dimensions of knowledge culture and the capabilities of absorptive capacity.

The results of this thesis include an answer to our research questions: Organizational culture is positively related to a company's absorptive capacity. How successfully external knowledge is absorbed depends essentially on the particular dimensions of a company's organizational culture. The results show that all of the capabilities are positively affected by the dimensions of organizational culture. The acquisition, assimilation, transformation and exploitation capabilities are determined by different dimensions of organizational culture, but the major correspondence is

noticed between trust, collaboration and openness. Consequently, organizational culture is important for these three phases.

Research Question 1. *Knowledge culture is positively related to a company's absorptive capacity.*

Research Question 2. *Several dimensions of knowledge culture (trust, collaboration, autonomy, care, learning receptivity, openness) have an influence on absorptive capacity dimensions (acquisition capability, assimilation capability, transformation capability and exploitation capability) of Russian SME.*

*-Trust (,256***) is positively related to the acquisition capability;*

*-Trust (,119***), collaboration (,272**), openness (,094*), learning receptivity (,125*) and autonomy (,220*) are positively related to the assimilation capability;*

*-Trust (,272***), collaboration (,285*), openness (,011*) and care (,173*) are positively related to the transformation capability;*

-Trust (,182), collaboration (,423**), openness (,231*) are positively related to the exploitation capability.*

3.1.1 Organizational culture and acquisition capability

The regression analysis identified positive correlation between trust and exploitation capability. This fact corroborates the results of Andrews & Delahaye research (2000), that asserts that trust between a sender and receiver facilitates knowledge transfer and trustworthiness influences knowledge-sharing decisions: if people are confident in each other, they are more willing to share knowledge. Moreover, it confirms Lenox & King (2004) claim for importance of trust for knowledge sharing: if the sender thinks that sharing knowledge may negatively affect him, he is not likely to share knowledge. If he is unlikely to share knowledge, the receiver is unlikely to receive it. The same logic works on corporate level: if enterprises do not trust each other, they are not likely to acquire knowledge from each other. Thus, trust have a significant effect on acquisition capability.

3.1.2 Organizational culture and assimilation capability

The regression analysis identified positive correlation between trust and assimilation capability. This fact corroborates the results of different researchers. Abrams et al. (2003) argued that high trust increases knowledge exchange and assimilation. Kunz (2010) stressed that the sender has to trust the recipient, namely think that the recipient will not abuse transferred knowledge and use it responsibly, in order to give him knowledge. McEvily (2003) though the same way, as he considered trust a way to economize on knowledge processing and safe behaviour.

The regression analysis showed that collaboration is correlated to assimilation capacity. Sollberger (2006) argued that collaboration is required for knowledge development and understanding. O'Dell & Grayson (1999) explained that if a company involves employees in teamwork, the employees tend to assimilate knowledge faster. In order to use this phenomenon, special technique can be applied. The employees can be divided into two groups. Each group should work on the same project. Upon the completion of this project, the groups will have debates in order to discuss whose solution is better. During the argument, the group's ideas will be augmented and the generated knowledge will be better assimilated (cf. Nonaka 2007, p. 168).

The regression analysis confirmed proposed positive correlation between openness and assimilation capacity. Davenport & Prusak (1998) found out that open atmosphere helps employees to understand business routines and processes of the company, and this understanding is essential for knowledge assimilation. Sollberger (2002) pointed out that openness enables entities to share knowledge among different business units and organization levels, and this knowledge sharing facilitates knowledge assimilation.

The regression analysis identified positive correlation between autonomy and assimilation capability. Studies of several researchers, including Pemberton & Stonehouse (2002) and Lloréns-Montes (2006), connected autonomy with knowledge assimilation success. Indeed, autonomy allows more knowledge processing and decision making, which are important for successful assimilation.

The regression analysis proved positive correlation between learning receptivity and assimilation capability. Hurley & Hult (1998) explained that knowledge-receptive employees can understand new ideas well, be creative and able to harness new opportunities. Therefore, the are more likely to assimilate knowledge that not knowledge-receptive employees. Zahra & George (2002) also underpinned the described idea.

3.1.3 Organizational culture and transformation capability

The regression analysis confirmed proposed positive correlation between trust and transformation capacity. Lane et al. (2001) argue that trust helps to understand new knowledge and combine it with old knowledge. Trust also help to reengineer business processed based on new knowledge.

The regression analysis showed that collaboration is correlated to transformation capacity. Indeed, if employees collaborate with one another, knowledge can be transformed during their collaboration. Spender (1996) believed that collaboration increase knowledge utilization, since it helps to merge, synthesize and transform new knowledge. This knowledge can be also used in new

products and service launches. Pemberton & Stonehouse (2002) considered collaboration necessary. They argued that without teamwork, organizations' knowledge management is defected.

The regression analysis identified positive correlation between openness and transformation capability. Badaracco (1991) explained that openness improve working relations by constrains elimination, so employees are more willing and able to transform knowledge. On the contrary, if a company suffers from "Not Invented Here" syndrome, it will be less likely to transform external knowledge into internal knowledge to use it (cf. Katz & Allen 1982).

The regression analysis identified negative correlation between negative and transformation capability. This result is different from the expected result. Sollberger (2006) argued that employees should be independent to successfully transform knowledge. However, empirical results tell otherwise. This fact can be explained by peculiarities of Russian mentality. Employees of Russian companies, which were surveyed, might be less proactive than European or American employees, namely they might do nothing beyond the tasks from managers. Therefore, without proper management direction to transform knowledge, they might not want to perform knowledge transformation. That is a possible explanation why autonomy occurred to be negatively correlated with transformation capability.

The regression analysis identified positive correlation between care and transformation capability. Sollberger (2006) argues that management should create friendly environment for employees, because such environment enhances innovation and knowledge transformation. Indeed, if somebody feels comfortable, he is more likely to try his best to achieve better result for the company, including transforming knowledge to improve the company's performance.

3.1.4 Organizational culture and exploitation capability

The regression analysis identified positive correlation between trust and assimilation capability. Choi (2002) pointed out that trust increased knowledge transfers, and knowledge transfers increase knowledge creation and exploitation. Flatten et al. (2011) argued that the more knowledge is transferred, the more it can be exploited by companies. Knowledge transfers are increased by trust.

The regression analysis identified positive correlation between collaboration and exploitation capability. Choi (2002) explained that knowledge exchange that occurs during teamwork facilitate knowledge exploitation. Zahra & George (2002) consider knowledge exchange, which occurs during collaboration, essential for knowledge improvement and consecutive

exploitation. These ideas are also supported by multiple authors, including Miles et al. (1998), Lee & Choi (2003) and others.

The regression analysis proved positive correlation between openness and exploitation capability. Openness facilitates synergies and cooperation, which are beneficial for implementation of new things cf. Probst et al. (2010). Openness also helps companies to anticipate technological advancement and exploit knowledge (Cohen & Levinthal 1994).

To summarize, the results show that the absorptive capacity of SMEs is influenced by organizational culture. This finding is in accordance with the insights of the literature. Furthermore, it is in accordance with the insights of the literature that the absorptive capacity of SMEs is positively influenced by organizational culture. As the literature identified the generally positive influence of organizational culture on absorptive capacity, with due regard to the theoretical concepts at the beginning of this thesis, a positive relationship between the dimensions of organizational culture and the capabilities of absorptive capacity was assumed and confirmed.

3.2 Theoretical and Practical contribution

3.2.1 Theoretical Contribution

Overall, this thesis favorably approaches the beforehand discussed problem areas in the research: unresolved questions concerning the parameters of a model of SMEs' external knowledge absorption. Earlier, it was unclear what dimensions of the common organizational culture impact the several capabilities of SMEs' absorptive capacity; moreover, it was also unclear what indicators could be applied to estimate these dimensions of a knowledge-friendly organizational culture. It can be ascertained that trust, collaboration, openness, autonomy, learning receptivity, and care, as dimensions of a knowledge-friendly culture, affect all four capabilities of SMEs' absorptive capacity.

Despite there are few studies that have investigated the effect of the organizational culture on absorptive capacity (Harrington 2004, Strese 2016, Chang and Lin 2014), their models were developed based on the widely used organizational culture concepts (Hofstede 1980, Hofstede et al 1990, Quinn 1988), and neglected the important concept of the knowledge-friendly culture. In this thesis, we investigated the relationships of organizational culture on absorptive capacity from this very new perspective, that unites both of our models in the most natural way: knowledge culture that was introduced by Sollberger (2006) who think of organizational culture as values and basic assumptions. According to Sollberger knowledge culture is composed of six elements: trust,

cooperation, openness, autonomy, readiness to learn, and care. Sollberger is the only author who was centered on those dimensions of organizational culture that are closely related to knowledge absorption and accordingly, the current research used Sollberger's model to conduct empirical research on the relations of organizational culture on absorptive capacity.

This thesis presents a design of a model that permits an assessment of the role of organizational culture in ensuring the absorption of external knowledge. It is possible both to prove positive relationships between the determinants of organizational culture and the dimensions of absorptive capacity applying this original model of external knowledge absorption and to distinguish principles for a design concept for an external-absorption-supporting organizational culture and consequently, to close the research gap to some extent.

Conclusively, this research makes a significant contribution to the research area of organizational culture and absorptive capacity, from a theoretical viewpoint. The endeavor to substantially define the phenomenon of organizational culture to allow both an empirical research and a practical utilization of organizational culture as an absorptive-capacity-influencing constituent was satisfied. For the study of a company's organizational culture, it is accordingly crucial to substantively define the organizational culture within a firm to operationalize it. Organizational culture appeared to be not, as expected at the beginning of this thesis, commonly positively correlated to the capabilities of absorptive capacity, but rather is a specific differentiation of the various dimensions of organizational culture required to intelligently use principles of the design concept to promote external knowledge absorption in an appropriate corporate culture. This thesis's main contribution to theory is that the sheath image of organizational culture is differentiated and that the outcomes for how a knowledge-oriented culture should be designed to promote the absorption of external knowledge are described.

3.2.2. Practical contribution

From a business perspective, the conducted research will help managers to increase the company's absorptive capacity. Managers can improve the company's capability to work with knowledge, if they invest in proposed dimensions of organizational culture: trust, collaboration, openness. Sometimes, it might be also beneficial to invest in autonomy, learning receptivity and care.

Trust helps people to feel safe and avoid knowledge retention. If people are not afraid of knowledge sharing, organizations will work with knowledge more productive. Collaboration helps to share, refine and integrate knowledge. If people work in teams, they can learn from one another

and enrich one another's knowledge base. Openness destroy barriers that hinder knowledge sharing. If people are open, they are able to use knowledge from multiple sources, neglecting where this knowledge were produced. Autonomy may facilitate absorptive capacity. However, it depends on from case to case whether autonomy will facilitate of hinder organizational learning. If the company's employees are proactive and responsible, autonomy will help them to thrive. If they are not, autonomy will make it even worse. Learning receptivity may help the company to absorb knowledge, since if people are proficient in learning, the company that they constitute might be proficient as well. Care might enhance the company absorptive capacity, since people in friendly environment tend to work better and learn faster.

The following implications include recommendations for business practices that refer to a knowledge-oriented organizational culture that influences the capabilities of absorptive capacity. The implications of designing a knowledge-oriented organizational culture to support the absorption of external knowledge, described subsequently, are structured along the several important dimensions of organizational culture that have showed a strongest influence on absorbtive capacity of the Russian SMEs: trust, collaboration, openness.

Trust. To create organizational culture that promotes trust, Davenport & Prusak (1998) have developed three ways in which trust must be built for the knowledge market to function in an organization: Trust must be visible and universal, and trustworthiness must begin at the top (Davenport & Prusak, 1998).

Collaboration. In addition to team-building, a firm should establish the probability of informal collaboration by designing an ecosystem that encourages collaboration, which means affording a spatially open and communicative environmet (for example, open-space offices, desks in grouped patterns, etc.) because such ecosystem enables employees to conduct face-to-face transactions while working (Spieth, 2006). Moreover, the establishment of forums, chat rooms, coffee corners, smoking spaces, cafeterias, etc. presents platforms for regular knowledge interchange (Glückstein, 2000). Knowledge exchange is not exclusively centered on firm issues, but the entrenched values of the actors themselves are assigned into business routines and processes

Openness. Apart from making employees feel that everyone can engage, it is essential that the employees feel that the whole company has a community-character and that there are few authorities. In order to gain that feeling, a company should restrict employees from utilizing an 'it's not my job' attitude. The Not-My-Job-ers "display their negativity by rejecting to do any task, no matter how simple, if they conclude it is not part of their job duties. It is often their way of getting

back at their colleagues, their supervisors, or the company itself because of their unsatisfaction with the way they are treated" (Topchick, 2001). This 'it's not my job' approach can be avoided by establishing an organization's community -character. If the Not-My-Jobers find training and developing possibilities and are involved in a firm's entire working process, they will seek growth and progression instead of losing their passion for work and trying to do maximum little job possible.Thus, to develop and design an knowledge-friendly, absorptive-capacity-supporting organizational culture that will help to achieve a higher level of absorptive capacity, management needs to create a trust, openness and collaboration in their companies. It also should be noted that if managers decide to use the insights from this thesis, they should keep in mind that the obtained results are general. They neglect the company's industry, size, development level and other important features. Therefore, the thesis usage should not be blind: managers should adapt the obtained result to their particular situation to achieve good results.

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APPENDIX

Appendix 1. The survey questions.

Construct	Question
Acquisition	The search for relevant information concerning our industry is every-day business in our company.
	Our management motivates the employees to use information sources within our industry.
	Our management expects that the employees deal with information beyond our industry.
Assimilation	In our company ideas and concepts are communicated cross-departmental.
	Our management emphasizes cross-departmental support to solve problems.
	In our company there is a quick information flow, e.g., if a business unit obtains important information it communicates this information promptly to all other business units or departments.
Transformation	Our management demands periodical cross-departmental meetings to interchange new developments, problems, and achievements
	Our employees have the ability to structure and to use collected knowledge.
	Our employees are used to absorb new knowledge as well as to prepare it for further purposes and to make it available.
	Our employees successfully link existing knowledge with new insights.
Exploitation	Our employees are able to apply new knowledge in their practical work.
	Our management supports the development of new products and services.
	Our company regularly reconsiders technologies for the production of products and services and adapts them accordant to new knowledge.
	Our company has the ability to work more effective by adopting new technologies for the production of products and services

Part 1. Absorptive capacity questions

Part 2. Organizational culture questions

Construct	Questions
Trust	In our company, the superiors lead by example.
	In our daily working environment, the objectives of the company are accepted by all.
	In our daily working environment, the skills of the personnel are appreciated as being an important source of competitive advantages.
Collaboration	In our daily working environment, it is even possible to find common ground on how to approach difficult topics and problems.
	In our company, different teams often work together to achieve joint improvements.
	In our company, we actively support cooperation between different teams (e.g., production and distribution, EDP/IT, finances and personnel etc.).
	In the daily work of our company, we put more emphasis on teamwork than on hierarchies.
Openness	In our company, problems are addressed openly.
	In our company, there are clear objectives, which determine our daily work and lead the way.
	In our company, we have a comprehensible strategy for the future of our company.
	Internal company information about important changes and decisions are communicated in a comprehensible way.
Learning Receptivity	In our daily working environment, information hints and recommendations provided by our clients have a direct influence on our decisions.
	In our daily working environment, mistakes are considered to be opportunities to learn and improve.
	In our daily working environment, problems are taken up and processed.
	In our daily working environment, working procedures are reviewed and improved.
Autonomy	I know what I am responsible for.
	In our company, problems rarely arise because we have the skills that are required for our jobs.
Care	In our company, we help each other.
	My immediate superior supports and encourages me.

Part 3. Company and general questions

Construct	Question
Company	Please write the name of your company
Industry	In which industry does your company operate? • Advanced industries • Cars and assembly programs • Capital projects and infrastructure • Consumer goods and retail • Energy, resources and materials • Financial and insurance services • High technologies, telecommunications and the Internet • Pharmaceutical and medical products • Private Equity and Investments • Travel, transport and logistics • Other
Size	How many people work in your company? • 1 - 100 • 101 - 250 • 251 - 500 • More than 500
Department	In which department do you work?
Job Position	Please indicate your position