Abramova Olga

THE LEADERSHIP STYLES, ORGANIZATIONAL CULTURE AND PERSONAL CHARACTERISTICS AS FACTORS OF EMPLOYEE INNOVATION ORIENTATION

PhD Dissertation Summary for the purpose of obtaining academic degree Doctor of Philosophy in Psychology

Academic supervisor Doctor of Science Alexander Tatarko

Moscow 2022
GENERAL INFORMATION ABOUT THE THESIS RESEARCH

A relevance of the thesis

Technologies have changed the world of business forever and begin to influence the psychological processes on individual and organizational level. Each organization needs to fit a new stage of society’s development. Globalization and virtualization of business processes demand an active intervention at the motivational system and people management. A technological complexity, a speed of communication, a choice variability (Schwartz S., 2004), a need for autonomy (Deci & Ryan, 2000) and a fight for talents provoke changes in perception of organizational leadership. Modern companies must generate and implement original ideas to succeed – the innovations (Christensen, 2003). A high level of innovations is characterized by the ability to continuous changes and survival in the condition of high uncertainty (Christensen, 2003; Yagolkovsky, 2011; Abramova, 2020). The appropriate leadership styles, an organizational context and the personal characteristics of employees which lead to an employee innovation orientation on every level of organizational structure are the key points of the modern organizational psychology.

In Russia, there is still a lack of information about social attitudes and psychological characteristics of leaders of a new format that have emerged from the technological environment. The innovation leaders all over the world make the main contribution to the development of the economies of the prosperous countries. These people purposefully develop their business, surviving in hard competition due to the breakthrough ideas, a narrow specialization and innovation creation. People who are on the verge of change and actively participating in the creation of the new values of the society are admirable and are in a role to follow. Today’s business leaders will manage the resources of Russia tomorrow, therefore, their psychological characteristics, their attitudes and a self-realization experience can become crucial for the future of the country and affect the followers in organizational context. So, Russian leaders’ innovation orientation, culture, created by them in their companies, management style and how it affects the employees are the relevant question for research.
A problem statement

New products, innovations along with a high speed of ideas’ implementation for conquering a competitive market in conditions of uncertainty and high risk turn the companies to the problem of choosing the right leadership style for managing organizations of the future, supporting an innovative culture, a personal initiative and the innovation orientation of employees and managers (Mumford & Licuanan, 2004). It also raises a question of what coping strategies are used by innovation leaders to engage the employees into innovative behavior and increase their creativity.

Organizations working in non-Western cultures use Western management tools and adapt horizontal organizational structures to meet the demands of the international market. However, each culture is characterized by its own historically formed system of values and norms, as well as attitudes towards power and subordination (Hofstede, 2001). According to these characteristics, Russia differs significantly from Western countries, in which most of the modern theories of innovation leadership are born. The experience of carrying out liberal reforms in Russia in the 1990s shows that Russia cannot blindly transfer the approaches and concepts grown in other value systems. Their verification and adaptation in the domestic context are required. Therefore, the study of factors contributing to an employee innovation orientation using modern theoretical background and finding a place for Russian research in studying the attitudes and intentions of employees in innovative companies with a focus on innovation leadership looks as an independent scientific and practical problem.

A state of elaboration of the research problem

The research on leadership, personal and job characteristics as the factors investing in the employee innovation orientation still have gaps in research and understanding in Russia and abroad. Although a leadership style is a recognized predictor of innovation and creativity in the workplace (Mumford et al., 2002), this relationship is often not direct: many previous researchers have chosen mediation models to find out the effects through which leadership styles affect innovation in the organization at the motivational, cognitive, affective levels, as well as at the levels of identification and relationships (Hughes et al., 2018). A complexity is a new norm of leadership. Only complex models
of research can embrace a rapidly changing reality (March, 1991; House, 1996; Yagolkovsky, 2011; Dinh et al., 2014). Flexible, situational management styles fit better different stages of innovative process (e.g., Rosing, Frese, & Bausch, 2011). Nevertheless, the well-known complex models have not been tested yet across cultural contexts and industries to validate their universality (e.g., an ambidextrous leadership of K. Rosing et al. (2011) due to Klonk, Gerpott & Parker (2020)), and an isolated leadership style does not bring about an effective organizational change to gain an innovation excellence (Stollberger, West, & Sacramento, 2019). Even the Full Range Leadership Model of Bass and Avolio doesn’t embrace the organizational complexity of reorienting companies towards innovation (Amabile & Pratt, 2016). In the field there are also emerging leadership styles which are narrowly focused on the company's innovativeness: a dual innovation leadership/ an ambidextrous leadership (Rosing, Frese, & Bausch, 2011). In Russia, despite a lot of research on leadership (R. Krichevsky, T. Bazarov and others), there has been only a few papers about the innovation leaders (e.g., Gryazeva-Dobshinskaya, 2010; Gryazeva-Dobshinskaya & Dmitrieva, 2016).

Also, there is a growing interest in relatively new personal characteristics of innovation leaders: a proactivity (Bateman & Grant, 1993; Grant & Ashford, 2008; Parker, Bindl, & Strauss, 2010) and an innovation self-efficacy (Gerber et al., 2012; Schar et al., 2017). In Russia a proactivity in an organizational context has not yet been actively studied (e.g., a student proactivity in Abramova & Tatarko, 2019; a career proactivity in Starikova & Manichev, 2019; a proactive coping behavior in occupational health psychology in Starchenkova, 2020), though close constructs and its connections with leadership have been proposed by Russian authors (for example, A.V. Petrovsky in the theory of activity mediation (Petrovsky, 1980)). As for an innovation self-efficacy, it is related to the self-efficacy construct of A. Bandura (Bandura, 1977) and expands the creative self-efficacy of Tierney and Farmer (Tierney & Farmer, 2011) to the next stage of self-belief to a novel idea’s implementation (Gerber et al., 2012).

As for an innovation context, the scholars have a better understanding of organizational culture/climate appropriate for employee creativity and organizational innovation, it should be supportive for innovation: promote a psychological safety, a
divergent thinking of employees, create a tolerance to mistakes (Hammond et al., 2011), though there is still a question how to embrace a dynamic nature of innovation process and work environment to structure them toward an organizational performance and progress of employees (Amabile & Pratt, 2016).

And finally, an employee innovation orientation as a generalized term is considered as a competitive advantage and was mostly investigated through the classical concepts of individual work innovation since a technology became an essential focus of business development (Hammond et al., 2011). In Russia, modern research on the psychology of creative and innovative behavior within organization is being carried out by S. R. Yagolkovsky, A. L. Zhuravlev, T. A. Nestik and others (Yagolkovsky, 2011; Zhuravlev & Nestik, 2011).

Summarizing the topic, in Russia, there are very few independent scientific studies of modern innovative companies. Like everywhere, Russian IT companies are more focused on innovation than other industries. To achieve success in the market, the organizations build business processes for innovative work behavior: the role of leaders is to boost an innovation orientation of employees, set clear goals and create a supportive environment, encouraging personal initiative and self-efficacy. Therefore, Russian technological companies and their leaders are a relevant choice for studying successful innovative behavior’ factors.

The aim of the thesis is to investigate the relationships among the leadership styles, organizational culture, personal characteristics (such as proactivity and self-efficacy), and an employee innovation orientation in organizational context. It involves finding the best solutions for modern innovation leadership. The focus is on employees, managers, and founders of IT companies in Russia.

The thesis objectives

Theoretical objectives:

- Conduct an analysis of current theoretical approaches and empirical research investigating creativity and innovation models, leadership and innovation intentions of employees in relation to innovation process.

Methodological objectives:
- Prepare measurement tools for studying in Russian context: an innovation orientation of employees and organization itself; leadership styles (servant and innovation leadership styles); creative and innovation self-efficacies; proactivity and organizational culture.

**Empirical objectives:**

- Consider an innovation orientation of employees and of the organization as a whole thing, and measure employees' perception of their organization's innovativeness.
- To identify a number of socio-psychological and personal characteristics of a modern innovative leader in an IT organization in Russia.
- Consider leadership styles "Transformational" and "Servant" as factors of organizational innovation in Russian companies.
- Consider a proactivity, creative and innovation self-efficacies of employees as factors contributing to their innovation orientation.

**Practical objectives**

- Provide practical recommendations to IT companies in Russia on management styles and innovation strategy based on psychological organizational processes.

**An object and a subject of the research**

The object of the research are the factors (the leadership styles, the organizational culture, the personal characteristics) of an employee innovation orientation of IT organizations.

An employee innovation orientation is an attitude and a readiness to actions toward innovation of all employees in organization including top-managers and regular employees. The employee innovation orientation is considered as a general term including the perceived innovation leadership (an innovation orientation of leaders) and perceived organizational innovation (organizational innovation orientation evaluated by employees).

The subject of the research are the relationships among the leadership styles, the organizational culture, the personal characteristics, and the employee innovation orientation.
The research hypotheses

Building on previous research and theoretical background, the thesis tests five hypotheses:

H1. The personal characteristics of an innovation leader assume a proactivity, a high self-efficacy, an autonomy and the value orientations toward independence from external influences, an intrinsic motivation, an internality in decision-making and a responsibility, as well as a preference of democratic management styles.

H2. An innovative organizational culture is positively related to proactivity of organizational members via innovation self-efficacy.

H3. A personal proactivity and an innovation self-efficacy of a leader is positively associated with her/his innovation leadership style at both stages of the innovation creation process: an idea generation (exploration) and an idea implementation (exploitation).

H4. A personal proactivity of an innovation leader is positively associated with the coping strategies in the innovation creation: problem-focused and emotion-focused.

H5. People-oriented leadership styles (transformational leadership and servant leadership) are positively related to an employee organizational innovation orientation via their creative self-efficacy, self-identification of employees with a leader, and innovation supportive organizational culture.

A theoretical and methodological basis of the research

The main theoretical foundation of the thesis is built on the following theories:

- March's Organizational Learning Theory (March, 1991);
- A Componential model of creativity and innovation in organization (Amabile, 1988);
- A Dynamic componential model of creativity and innovation in organization (Amabile & Pratt, 2016);
- Avolio and Bass’s Full Range Leadership Model (FRLM) in terms of transformational and transactional leadership styles (Avolio & Bass, 1991);
- Servant leadership theory of Greenleaf (Greenleaf, 1977);
- Theory of ambidextrous leadership (Rosing, Frese, & Bausch, 2011);
- Proactivity in the organization (Bateman & Crant, 1993);
- Self-efficacy theory (Bandura, 1977, 1982), including special self-efficacy: creative self-efficacy (Tierney & Farmer, 2002), and Gerber's innovation self-efficacy (Gerber et al., 2012);
- Deci and Ryan's theory of self-determination (1987) with an emphasis on autonomy and intrinsic motivation (Deci & Ryan, 1987);
- Russian and international approaches to innovation leadership research in organizational psychology and management (V. Gryazeva-Dobshinskaya, S. Yagolkovsky, K. Rosing, S. Janssen, J. March etc.).

A model of the research

Relying on the theoretical approaches to creativity and innovation in organizational context, the main factors of an innovation orientation often comprise personal characteristics, contextual characteristics, job-characteristics, and leadership (West, 2002; Hammond et al., 2011; Stollberger, West, & Sacramento, 2019).

Also, a dynamism of modern innovative organization requires a flexibility in the uncertain nature of innovative process. Therefore, an innovation leadership is repeatedly considered by scholars as a combination of two stages (dually): an exploration (idea generation) and an exploitation (innovation implementation), where flexibility and control in management alternate with each other (West, 2002, Dorenbosch, Van Engen & Verhagen, 2005).

The thesis suggests an operational research model based on the insights from existing creativity and innovation theories, discussed in detail in Chapter 1. As a result, a thesis model embraces the factors of employee innovation orientation: the personal characteristics of employees, connected with an innovation leadership (mostly a proactivity and a self-efficacy), the leadership styles (servant, transformational, transactional, and dual-innovation leadership) and an organizational culture, supportive for innovation. Schematically the thesis model is demonstrated at the Figure 1 with a conditional consequence of empirical studies.
An empirical foundation of the thesis

Within the framework of the thesis, 723 respondents were surveyed (52.7% male, 47.3% female). Of these, 532 people are employees of IT companies in Russia, including 328 top and middle managers. In one of the studies, the respondents were students of the National Research University Higher School of Economics - 191 respondents. The surveys were conducted in Russian language offline and online.

As an empirical part of the dissertation, four studies were conducted.

1 study. Through a qualitative study of the founders of IT startups, the main personal characteristics of the leaders of high-tech companies in Russia were identified and a theoretical comparison with the results of foreign authors was made.

2 study. After that, the context in which leadership manifests itself was studied - an organizational culture inherent in an innovative company. For example, an importance of the innovative culture for a proactive behavior of members of the organization was established (on the example of HSE students).
3 study. Proactivity and innovation self-efficacy were selected as the main personal characteristics of a modern innovation leader, and the hypotheses are confirmed regarding the positive links between personal proactivity and innovation self-efficacy of a leader with a dual innovation leadership: at the stages of a new idea generation and an innovation production.

A personal proactivity is also considered in the context of the IT managers’ choice of the preferred coping strategies for overcoming problem situations during the innovative process.

4 study. After that, through a survey of IT companies' employees, three leadership styles were tested as antecedents of an organization's orientation toward innovation through a culture that supports innovation, an employee self-identification with a leader, and an employee creative self-efficacy.

A research method

To test the hypotheses of the thesis, qualitative and quantitative methods of psychosocial research are used.

For a qualitative study, the method of semi-structured in-depth interview is chosen according to the Belanovsky approach (Belanovsky, 2001).

For quantitative studies, a set of ten scales are selected and adapted for the thesis. The scales, which were originally presented in English, were translated by the method of forward and backward translation into Russian and underwent an additional analysis by 1-2 experts in the field of translation to adapt the scales in Russian language and pretest on the moderate sample. A confirmatory factor analysis was also conducted.

To ensure the reliability and validity of the research results, statistical methods of data processing were used, along with theoretical and methodological validity.

Methods of statistical data processing used in the thesis: for quantitative research - descriptive statistics, confirmatory factor analysis, correlation analysis, hierarchical regression analysis, SEM; for qualitative analysis - a thematic analysis of a theoretical type according to the method of V. Braun and V. Clarke (Braun & Clarke, 2006)

A software used in the research: statistical packages SPSS 23.0, Amos 21, R and CATMA 6.
A novelty of the research

The novelty of the thesis is a comprehensive examination of the comparative contribution of different leadership styles to innovation with an attention to personal characteristics of employees and managers such as a proactivity and a self-efficacy in creativity and innovation. The paper provides an integrative input, showing what invests in an employee innovation orientation in the modern organization on a sample of IT companies in Russia.

A theoretical and a practical significance of the research

The theoretical and practical significance of the study is determined by:

- one of the first independent studies of modern high-tech companies in Russia in the framework of the Western school of organizational psychology;
- comparing the three concepts of leadership in the Russian context in connection with an organization's focus on innovation and identifying mutual and different characteristics of innovative technological leaders in Russia in comparison with foreign authors;
- the study of proactivity and innovation self-efficacy in Russia in the first wave of research simultaneously with Western authors;
- studying a novel concept of a dual or ambidextrous leadership style for a creation and an implementation of innovation in the Russian context;
- Russian adaptation of short scales of proactivity, dual-innovation leadership and innovation self-efficacy, and a number of others;
- providing practical recommendations for top-managers and HR managers of IT organizations to boost innovative behavior of employees in the Russian context.

The research considers people-oriented leadership styles for boosting innovation and examines the main components of personal characteristics of employees: proactivity and self-efficacy in relationship with innovation and organizational culture paying attention to employees’ self-identification with leader and coping strategies of managers.

The thesis provisions

1. The personal characteristics of an innovation leader in Russia include proactivity, high self-efficacy, autonomy, internality in decision making and a dominance
of internal motivation along with the problem-focused coping strategies in innovation creation.

2. The innovation leader of Russia is characterized by special personal characteristics (such as proactivity and innovation self-efficacy) which positively determine her/his innovation leadership style at both stages of the innovation creation process: the idea generation (exploration) and the idea implementation (exploitation).

3. A personal proactivity is a key factor in innovation leadership that fosters an innovation orientation of employees and organization, allowing to overcome the difficulties of the innovation process with a help of problem-focused coping strategies.

4. People-oriented leadership styles (such as transformational leadership and servant leadership) indirectly increase the orientation of employees and organizations towards innovation via self-efficacy and via innovation supportive culture in the organization. Meanwhile, a culture of innovation and its support is more important for regular employees, but less important for innovation leaders in top positions due to their personal characteristics (personal proactivity and innovation self-efficacy).

An approbation of the research


The studies are presented in publications in Russian journals recommended by HSE: Organizational psychology, Information Society, Social psychology and Society (2018-2021).

The thesis structure

The thesis consists of introduction, three chapters, conclusion, references (260 sources) and 8 appendixes. The paper includes 16 figures and 11 tables. The total volume of the text is 185 pages in English.
The first chapter describes the theoretical models and theories of creativity and innovation within organization; presents the term of employee innovation orientation and clarifies an operational model of the thesis.

The second chapter analyses the current theoretical approaches to the factors of innovation and an employee innovation orientation in modern organizational psychology with an emphasis on leadership styles and organizational culture associated with innovation and personal characteristics of an innovation leader. The chapter ends with a description of author’s approach to the factors of employee innovation orientation in organization finalizing with a conclusion.

The third chapter includes the empirical part about the factors of employee innovation orientation in modern organization in Russia, putting it in the national context and continues with a design and the method of the research. Then the four studies’ results and discussions are followed ending with the general discussion of the studies about the factors of employee innovation in organization and a conclusion to the chapter 3.

The dissertation’s content, the studies’ projects, the studies’ implementation are made by the author personally.
The first chapter of the thesis focuses on the theoretical background of employee innovative behavior. It is an introductive part describing the relevant creativity and innovation models. A paragraph 1.1. also defines creativity and innovation. Creativity is responsible for the creation of new ideas while innovation is a direct implementation of novel ideas into inventions (Amabile, 1988; Mumford & Gustafson, 1988). The creativity and innovation models and theories see a creative process from different perspectives (Sternberg, 2016), however, many of them include individual factors, contextual factors and job-characteristics as the antecedents of organizational innovation and employees’ innovativeness (e.g., West, 2002; Hammond et al., 2011; Stollberger, West, & Sacramento, 2019). The common trends of studying creativity and innovation in organizational psychology are to point out a) a dynamic nature of innovation process; b) a complexity of broaden contextual effects (there are many influential factors at every level outside and inside organization; c) a focus of psychological characteristics and individual bias of employees and d) a raising role of leaders as a transmitters of values, norms, role-model behavior (Amabile & Pratt, 2016; Sternberg, 2016).

A theoretical background for studying innovation within organization inclines to a subsequent nature of innovation process mainly with two stages: an exploration (idea generation) and an exploitation (innovation implementation) (West, 2002, Dorenbosch, Van Engen & Verhagen, 2005) This approach is taken from an organizational learning concept and assumes an organizational ambidexterity of organization – an ability to manage a creative flexible work period and a controlling, productive one (Gupta, Smith & Shalley, 2006; Simsek, 2009; O’Reilly & Tushman, 2008, 2013). The right balance of ambidextrous management systems is a goal of a modern innovative organization (March, 1991).

The paragraph 1.2. brings a term of an employee innovation orientation as a generalized term and as a desirable outcome of innovative organization. In the thesis with an author approach the framework includes 1) an employee innovation work orientation (a motivation to innovate) (Pratt et al., 2013), 2) an organizational innovation orientation (Siguaw, Simpson, Enz & 2006), and 3) the leaders’ innovation orientation (innovation
leadership). Hence, an employee innovation orientation implies a dynamic system of beliefs about the culture, strategy, competences, processes, plans and expected results of the company’s innovative activity reinforced by the cognitive abilities of employees in the field of innovation (a readiness to make efforts toward innovation).

The paragraph 1.3. introduces an operational model of the thesis research based on the Dynamic componential model of innovation (Amabile, 1998; Amabile & Pratt, 2016), West’s Input-process-output model of work group innovation (Stollberger, West & Sacramento, 2019) and a Model of the antecedents of individual innovation (from Hammond et al., 2011, based on Farr, Sin & Tesluk, 2003), moreover, most insights resonate with other models and theories, discussed in the chapter.

The operational thesis model considers a specific for creativity and innovation personal characteristics of employees with a focus on leaders’ characteristics (a proactivity and a self-efficacy), the leadership styles (servant, transformational, transactional and dual-innovation leadership) and an organizational culture with focus on innovation support. A dynamic nature of the innovation process reflected in two subsequent stages: an exploration (idea generation) and an exploitation (innovation implementation) (March, 1991; West, 2002) (Figure 2).

The second chapter goes deeper into connection of the factors discussed in the first chapter with an employee innovation orientation. The groundwork is based on the idea of essential role of a leader in innovation process within organization, therefore, several assumptions for the focus of the thesis research are suggested:

- during a transformational innovation process, characterized by uncertainty and complexity, the role of the managers/leaders in organization is a key to successful innovation creation;
- an innovative activity requires from a leader a flexible manual management style based on the trustful relationship with employees;
- an innovative activity is an unstable process with often unpredictable results; therefore, it leads to a high stress level of employees, to mitigate which a motivating and supportive environment along with an individualized attention to employees are demanded;
Figure 2. The operational model of the thesis research

I-IV – a serial number of studies
the leader as an agent of change is a role-model for other employees and her/his personal tendencies and behavior affect the followers.

Therefore, a paragraph 2.1. describes leadership styles, contributing to employee innovation orientation in organization. According to the leadership review there are more than 60 distinguished theories of leadership (Dinh et al., 2014) on different levels (DeChurch et al., 2010). Due to a wide discussion at organizational psychology during the last 10-15 years leadership styles switched from vertical, hierarchical orientation to horizontal and more flexible one (Friedrich et al., 2009; 2016). Though this trend is not new, a stronger interest to an intrinsic motivation of employees (Deci & Ryan, 1985, 2000) and a flexible schedule with high autonomy (Nicholson, 1984; Broekstra, 2014) provoked an advantage of people-oriented leadership styles as a foreseeable consequence of a global fight for talents. Leaders generate an organizational culture, defining limits and rules for creative behavior of subordinates (Sarros et al., 2008). Multiple leadership scholars uncover what types of leadership is a better trigger for creativity and innovation in organization (Mumford & Licuanan, 2004). Though there are still some contradictory results in different cultural contexts, a tendency of resemble findings regarding positive influence of transformational leadership (Jung, Chow, & Wu, 2003; Gumusluoglu & Ilsev, 2009a, 2009b), servant leadership (Liden et al., 2008), ethical leadership (Brown & Trevino, 2006) and shared leadership (Hoch, 2013) on innovation in western and non-western cultures is noticed. When choosing a suitable leadership style, the cultural and the situational differences can lead to complexity and paradoxes in organization (Cunha et al., 2019; Klonek, Gerpott & Parker, 2020). In this part a discussion about the relationships of the chosen leadership styles with an employee innovation orientation including organizational innovation orientation is presented. The four leadership styles are selected for testing in the Russian context: transactional/transformational styles, servant leadership and dual-innovation leadership. A transformational leadership (Bass, 1985, 1999) focuses on the organization’s goals and a servant leadership focuses on supporting employees’ goals and their personal development within the company (Liden et al., 2008). Transactional leadership is seen as less appropriate for innovation. However, the thesis pays attention to innovation leadership style which moves management to a
A situational approach with a possibility of switching management styles by a leader from an open behavior that gives autonomy to employees and allows them to generate new ideas to a close type of leader behavior associated with control over the innovative ideas’ implementation (March, 1991, Rosing, Frese, & Bausch, 2011). The concept of a dual-innovation leadership gains more contextual features, recent research shows an importance of social and cultural context in choosing an innovation management style (Lukoschek et al., 2018). For example, the flexible management style in some organizational studies allows to achieve the same results as the mixed style (Klonek, Gerpott & Parker, 2020). The cultural characteristics of a particular country also play a role.

The paragraph 2.2. analyses an organizational culture of innovative company. A support for innovation must be combined with the declared values, company objectives and leadership styles in order to achieve an employee innovative orientation and stabilize the innovation production (Wallach, 1983; Amabile & Pratt, 2016).

The best example of an innovative company for research purposes in the Russian context is an IT company. The IT leaders play a raising role as a role-model for employees and through their personal characteristics and attitudes they affect organizational process including innovation process (the focus of the paragraph 2.3.) Innovation leaders have a certain set of personality traits regardless of the country of origin, for example, an extraversion, an openness to new experience prevail among the modern IT entrepreneurs. Also among international studies there is a growing interest in more specific characteristics associated with innovation, such as: a proactivity (a self-initiated organizational behavior focused on future changes) (Bindl & Parker, 2011; Grant & Ashford, 2008) and an innovation self-efficacy (a belief in own ability to innovate) (Gerber et al., 2012), as well as the coping strategies of the leaders in the innovation process (with a focus on rational problem solving or with a focus on emotional coping).

The paragraph 2.4. frames the author’s approach and formulates the thesis hypotheses. In this part the list of novel approaches to the theoretical research is presented. Within the frameworks of the explored variables, there are suggested: 1) a generalized term: “an employee innovation orientation”; 2) a gradation of chosen leadership styles
due to the leader’s orientation or the focus of interests and 3) a consideration of a personal proactivity as a situational individual characteristic of employee in the organizations’ innovation context.

The author’s approach allows to see an employee innovation orientation as an attitude and a readiness to actions towards innovation of all employees in organization including top-managers (their perceived innovation leadership efforts at two stages of innovation process) and the regular employees (their perception of opportunities to provide innovativeness of organization). A transformation of the employee innovation orientation into variables includes a perceived dual innovation leadership (an innovation orientation by leaders) and a perceived innovativeness of the company (organizational innovation orientation evaluated by employees). This approach allows to use a human-centered approach with a focus on people’s role in the innovation creation, preserving a dynamic and flexible nature of organizational innovation orientation (Siguaw, Simpson, & Enz, 2006) and incorporating a new type of individual work orientation – an innovation work orientation (based on the idea about “a creative work orientation” of Fetzer & Pratt, 2019).

Also, the author stimulates an ambition to differentiate the leaders’ behavior due to their attitudes to employees and due to their main goals in organization. Though there is no guarantee that such a gradation reflects personal tendencies of leaders, however, relying in previous research the comparison of the given leaderships styles seems logical and scientifically profound. A transactional leadership style is characterized by directive management, such simple mechanism of management demonstrates a leader’s indifference to the organizational long-term goals, organizational culture, and employees’ well-being. Minimal efforts at the management in the organizational context without creating intrinsic motivational triggers imply a selfish nature of transactional leadership and its focus on personal interests rather than on the contribution to the organizational success. A transformational leadership style embraces the organizational complexity much better. A transformational leader though still has personal interests, nevertheless, she/he is ready to apply a multilevel management system considering employees as an essential part of the organizational success (Barbuto & Wheeler, 2006). Her/his focus on
the organizational goals can positively stimulate an innovation orientation and provide a care about individual employee treatment with an attention to the organizational culture, work conditions and long-term results. However, the most people-oriented leadership style is a servant one. A servant leader demonstrates an other-centered behavior putting the employees first. Her/his priority are the high ethical norms and being a moral role-model for the followers with an open, fair and honest management aimed at employees’ personal growth and work satisfaction (Sun & Shang, 2019). A servant leadership is distinguished from the transformational leadership by the main focus of a leader: while a servant leader shifts his/her focus from organizational goals to the employees’ goals, a transformational leader follows the organizational interests (Graham, 1991; Stone et al., 2004; Van Dierendonck et al., 2014).

The third author’s idea for the thesis to switch from a concept of proactive personality to the concept of personal proactivity. Proactivity as a form of healthy and effective human behavior is understood and presented by foreign authors as an ideal behavioral strategy of a modern person and an employee’s personal characteristic necessary for success in an innovative company (Crant, 2000; Parker, Williams, & Turner, 2006). Proactivity gives an individual a self-starting, change oriented, and future focused intention towards personal goals (Parker, Bindl, & Strauss, 2010). A concept of proactive personality is suggested by scholars as a stable personal characteristic with a strong focus on future and change in decision making (Bateman & Crant, 1993; Grant & Ashford, 2008). But in the field of organizational psychology a personal proactivity can be seen as a form of organizational behavior that can be developed in employees. However, there is still no clear theoretical separation of these approaches (Tornau & Frese, 2013). A personal proactivity requires a specific context and cultural support inside the organization (Abramova & Tatarko, 2019). If a proactivity is seen as a dispositional trait, independent of the context and, as a result, difficult to change, a social environment has a little opportunity to raise proactivity in the teams and in at organizational level. A proactivity cannot be presented as only a personality trait, it is a set of behavioral patterns due to Starchenkova (Starchenkova, 2020). An additional confirmation of the gradual proactivity development can be a successful experience of using trainings in this area
(Batistic et al., 2016) and the change in behavior patterns towards proactivity in patients with mental diseases (Erzin, 2014).

The third chapter goes into details of the empirical research of the factors contributing to employee innovation orientation in modern organization in Russia. The paragraph 3.1. depicts the situation with an innovation creation and innovation leadership in Russia. Starting with a global trend of leadership evolution - from a survival and the creation of a product “from nothing”, a centralized system — to a continuous product improvement, a multi-level service, a perfectionism and a horizontal network business development with an increasing complexity and technology use, a new type of leader is being formed during the transitional periods of the economy (Abramova, 2020). A “leader of conscious influence” possesses ethical standards, technical knowledge, emotional intelligence and is able to withstand the challenges of the time; her/his social identity is an important condition for the followers to be recognized: “one of us,” “makes for us,” “makes us significant” (Haslam, Reicher, & Platow, 2010). Modern society prefers leaders who put social interests above their own, consciously perceiving goals and their influence, possessing flexibility, capable of teamwork (Britchenko, Smerichevskyi, & Kryvoyzyuk, 2018). Nevertheless, there are still not many studies of innovation leadership in Russia (for example, Gryazeva-Dobshinskaya, 2010; Gryazeva-Dobshinskaya & Dmitrieva, 2016). Russian organizational culture retains the characteristics of a strong power distance, hierarchy, and a high degree of uncertainty avoidance (Hofstede, 2001). Though Russian organizations operating in non-Western cultures use Western management tools and horizontal organizational structures in the IT sector to meet the demands of the international marketplace (e.g., agile management).

The design of empirical research is presented in the paragraph 3.2. (see Figure 2). The thesis includes the four empirical studies, and it is limited to the search for connections between perceived psychological variables, which seems to be especially important when testing new psychological constructs and when assessing emotional connections in an organizational environment, where personal attitudes and perceived attitudes often determine the behavior of leaders to a greater extent.
First, through a qualitative study of the innovation leaders (on example of 14 Russian male IT entrepreneurs), their main personal characteristics are revealed (H1). From the list of characteristics there an innovation self-efficacy and a proactivity are chosen for further investigation. Then the second study investigates an organizational culture, - an appropriate context for the proactivity of organizational members on example of HSE students (191 students, 67% were women and 33% were men). The Higher School of Economics (HSE) is one of the most innovative educational organization in Russia with a strong project and practice orientation. The university is seen as a prototype for the organization of the future, ready for a change, constant development and organizational learning (Friedman et al., 2005; Bui & Baruch, 2010). All these allows to accept the university as an environment for innovative and proactive behavior of organizational members and to test the concept at the early behavioral stage considering the students as the organizational members. The respondents belong to 10 areas of study: economics, mathematics, IT, art history, management, law, history, oriental studies, media, psychology, etc. The second study is designed to compare a desirable innovative organizational culture and a bureaucratic organizational culture in their effect on personal proactivity and proactivity at organizational level. This relationship is mediated by innovation self-efficacy and possibly job-autonomy (H2).

The third study examines a personal proactivity and an innovation self-efficacy of the innovation leaders (IT managers, 314 respondents) as the positive antecedents of dual-innovation leadership at the exploration stage and at the exploitation stage (H3). Also, in this study the coping strategies of innovation leaders connected to their proactivity are tested (problem-focused versus emotion-focused coping strategies) (H4).

And a final, fourth study suggests a mediation model exploring the indirect effects of three leadership styles (transactional, transformation and servant) on the perceived innovation orientation through a supportive innovation culture, a creative self-efficacy of employees and a relational identification with a leader. The people-oriented leadership styles are expected to have a positive effect on innovation orientation and transactional leadership – a negative effect (H5). The sample is 204 employees of IT companies.
The main five main hypotheses continue with sub-hypotheses based on the design of the research and the suggested concepts in the theoretical part. The full list of the main hypotheses and operational sub-hypotheses are shown at the Table 1.

The paragraph 3.3. embraces *the method and the procedure*, starting with a sample description, then a measurement with CFA analysis of scales and follows with a statistical analysis.

The qualitative study of personal characteristics of an innovation leader in Russia (I) is conducted using semi-structured in-depth interviews. A thematic data analysis method is based on the recommendations of V. Braun and V. Clarke. For a thematic analysis of a theoretical type (analytical) a six-stage algorithm for working with data is used. The identified themes were interpreted as latent (Braun & Clarke, 2006). The software using for a qualitative analysis is CATMA 6.

The quantitative studies (II, III, IV) use the statistical packages SPSS 23.0, Amos 21 and R. Power analysis, descriptive statistics, correlation analysis, confirmatory factor analysis and internal consistency analysis of the scales and also a hierarchical regression analysis were made for quantitative studies. To test the mediation models (studies II and IV) AMOS software is explored to find indirect, direct and total effects between variables. The significance of indirect effects is tested by fulfillment of the three mediation conditions proposed by Baron and Kenny (1986) and bootstrapping method (n=2000, CI=90%) (Baron & Kenny, 1986). Hartman analysis is conducted to check common method bias for the IV study: one factor has 33,12% of shared variance that is much less than 50%, accordingly, there is no common bias in the data (Podsakoff et al., 2003).

The paragraph 3.4. covers the qualitative study of personal characteristics of an innovation leader in Russia (I study).

After the six steps’ algorithm suggested by V. Braun and V. Clarke for a thematic data analysis method (Braun & Clarke, 2006) the study revealed personal and psychosocial characteristics of IT leaders. IT leaders have an intrinsic, intangible motivation for proactive and innovative behavior, they are independent from external influence and prefer an internality in decision-making as well as a strong focus on their business goals despite cultural and traditional value orientations (H1). The main chosen
themes that define the characteristics of all respondents: *passion for business, personal characteristics* and *value orientations*. A passion for business means an internal desire of respondents to achieve their goals and bring their ideas to life. The subthemes are leadership style, independence, attitude towards money, creativity and a desire to experiment, education. The second theme: personal characteristics are features demonstrated by respondents during interviews: an openness to change, personal proactivity, independence, self-actualization and self-efficacy, the need to belong, and an attitude towards good / bad. And the last theme is about the value orientations - most of the subthemes overlap with the two previous topics: creativity, attitude to money, attitude to good / bad, education, independence, the need to belong to one's social group, but also includes culture and family, which are in relatively less important value orientations of the respondents.

Thus, Russian IT leader has an openness to changes and a new experience, an inclination to take risks, high self-efficacy and self-confidence, a desire to experiment and innovate, a strong involvement and commitment to work, a personal proactivity, a self-actualization through his business, projecting himself onto others invoking high expectations, and servant or transformational leadership styles (Abramova, 2021).

Value orientations of the IT entrepreneur in Russia show a low importance of money and of a material status, flexible attitude to family values, low interest in cultural symbols and events, irreligion, building trusting horizontal relations with partners and employees, internality in decision-making and taking responsibility.

Identifying characteristics of Russian IT entrepreneurs, the difference shows up at the level of trust to social institutions and social norms: in Russia IT leaders have a low trust to social institutions, they are not a subject of social influence and are more independent in their decisions from public opinion (Abramova, 2021).

The Russian IT leaders have an internal, independent from external influence commitment to active, purposeful activities to implement their ideas, and this feature affects their attitudes to values. The main motivation in business is self-realization and the desire to “make a mark”. Traits identified among respondents: personal proactivity (an innate need for vigorous activity), high self-efficacy, purposefulness, unquenchable
optimism, a living in the present, a perseverance, a nonconformity, a constant need for new tasks and desire to innovate and experiment, a flexibility in good/bad assessment (Abramova, 2021).

The qualitative study draws the main directions for the choice of personal characteristics and leadership styles of IT leaders and followers in the following research models and puts an importance of context for IT leaders and the employees in the field of new ideas implementations. Research hypotheses of the study are confirmed.

The paragraph 3.5. presents the results and discussion part of the study of innovative organizational culture for the employee proactivity (II study), investigating the indirect and direct effects of the organizational culture (innovative and bureaucratic ones) on proactive behavior of organizational members on example of HSE students. The results (p. 3.5.1) are shown on the Figure 3.

In accordance with a forecast of the study, an innovative organizational culture has an indirect positive relationship with personal proactivity and organizational member proactivity through innovation self-efficacy (H2). A bureaucratic organizational culture is not indirectly related to proactivity: the regression effect on innovation self-efficacy is insignificant with both types of studied proactivity. Moreover, the bureaucratic organizational culture has a direct negative effect on job autonomy. And innovative organizational culture has a direct positive relationship with job autonomy.

The study confirmed some of the sub-hypotheses regarding the proactive behavior of students in an innovative organizational culture but did not confirm the sub-hypotheses related to the bureaucratic organizational culture.

Figure 3. Results of estimating the standardized regression parameters of the model (β) (II study)
The discussion part to the study (p. 3.5.2.) summarizes, that an innovation supportive environment in organizations, coupled with an ability to plan and implement new ideas, is a basic condition for survival in the era of digital transformation of society and expansive technology development. Universities are called upon to create a culture close to the business environment for theoretical and practical training of students, connecting their educational programs with the real tasks facing students after graduation. Innovation self-efficacy, as one of the new concepts in organizational psychology, reflects a person's belief in their ability to innovate. An innovative organizational culture encourages employees/students to take action, to be active in the implementation of their ideas, to proactively behave in their professional activities, this requires belief in their ability to create innovations (Abramova & Tatarko, 2019).

The paragraph 3.6. provides the results (p.3.6.1) and discussion for the study of the personal proactivity and the innovation self-efficacy as positive antecedents of dual-innovation leadership (III study). The purpose of this study was to investigate an innovation self-efficacy and a personal proactivity of IT managers as the factors contributing to their dual-innovation leadership (H3); and to reveal the relationship of their personal proactivity with the preferred coping strategies for overcoming difficulties (problem-focused and emotion-focused coping strategies) (H4).

The study of managers of IT companies showed (Figure 4), that these characteristics are positively associated with their innovation leadership style at both stages of the innovation creation process: idea generation (exploration) and idea implementation (exploitation). Thus, H3 of the thesis is confirmed. In addition, a personal proactivity is associated with the problem-oriented coping strategies chosen by innovation leaders, however, the connection with the emotion-oriented coping strategies turned out to be insignificant. Thus, H4 is partially confirmed. The IT leaders lacks emotional focus in the difficult situation, staying rational.
The discussion (p. 3.6.2.) of the study makes an accent on a priority of problem-focused coping strategies for proactive behavior of the leader. The qualities of a proactive person and an initiative in innovation are logically related to rational confidence in the effectiveness of her/his actions (Fresy & Fey, 2001; Grant & Ashford, 2008). A problem-oriented approach helps a leader to regain control, feel effective, and as a result, increases her/his job satisfaction (Pluut & Curşeu, 2013). Avoiding emotional reactions is associated with a high resistance to stress and an ability to reduce the emotional intensity that appears in difficult situations. Russian IT leaders activate this mechanism in their organizational behavior towards innovation. The focus of the IT leader in Russia on problem-focused coping strategies is characterized by choosing pragmatic methods for solving difficult tasks, calculating possible scenarios of the situation development and assessing potential risks without succumbing to affective reactions – which is similar to the preferences of IT managers found by foreign researchers (Richmond & Skitmore, 2006).

At the same time, a low expression of emotion-focused coping strategies and an insignificant relationship between them and personal proactivity indicate a low general emotionality of IT leaders in the problem-solving process. Proactive IT leaders “turn off”
emotions and concentrate exclusively on a constructive approach to the problematics of the situation. Although there are the positive attributes of “emotionlessness” of IT leaders, nevertheless, the lack of an emotional component in employee management can lead to a directive, authoritarian leadership style, low tolerance for employee mistakes, inattention to employee emotions and burnout (Folkman & Moskowitz, 2000), which negatively affect innovation management and does not support the open, democratic leadership style required for innovation creation in organization (Rosing, Frese, & Bauschet, 2011). The positive emotion-focused coping strategies in the innovation process are the growth zone for Russian IT leaders for successful leadership in technological innovation.

Another observation concerns the role of innovative organizational culture, which was a control variable and did not participate in the hypotheses’ formation. Indicators of innovative culture in the proposed model illustrate: if the leader has the necessary proactivity and innovation self-efficacy, in other words, personal characteristics and attitudes that help innovation leadership, then the innovative culture is insignificant in such a model. Thereby, the leaders themselves are in much less need of a special, supportive company environment - an innovative organizational culture.

And the last study of the thesis research is shown in the paragraph 3.7.- the study of the relationship between the leadership styles and the employee organizational innovation orientation (IV study). The results (p.3.7.1.) demonstrates an effect of leadership style on employee organizational innovation orientation through a creative self-efficacy, a self-identification with a leader and an innovation supportive culture (Figure 5).

An innovation supportive culture and a creative self-efficacy mediate the positive relationship between a servant leadership style and an employee organizational innovation orientation (H5.3) and the negative relationship between a transactional leadership style and an employee organizational innovation orientation (H5.1). Nevertheless, a transformational leadership style does not show a significant mediation with an employee organizational innovation orientation through a creative self-efficacy, though a mediation through an innovation supportive culture is confirmed (H5.3). All three sub-hypotheses are partly confirmed, as well as the main hypothesis H5.
n= 204
** the probability level is less than .001
* at the .01 level (two-tailed)

The discussion related to the fourth study (p.3.7.2.) draws an explicit picture of effectiveness of the people-oriented leadership styles (servant and transformational) (even in combination) in providing an employee innovation orientation in organization shown on example of Russian employees of IT companies. This connection is not direct and raised a relevance of an innovation supportive culture and a creative self-efficacy as mediators for the employees of IT companies. The transactional leadership style (taken for comparison) showed a negative indirect effect on employee organizational innovation orientation. The innovation supportive culture plays a core role in organizational innovation regardless leadership style: with transformational and servant leaders it positively connected to an employee organizational innovation orientation.

Finally, a general discussion of the third chapter about the empirical results if the thesis is opened in the paragraph 3.8. It contains the hypotheses’ justification results, a review of studies and findings, and the practical recommendations. In sum, three hypotheses of the thesis are fully confirmed, and two are partly confirmed in all qualitative (I) and quantitative (II-IV) studies (the detailed information is in the Table 1). For the thesis goals in the empirical part, the leadership styles, an organizational culture, and the
personal characteristics as contributors to an employee innovation orientation were investigated. The creativity and innovation models suggested by the scholars support this approach and see an innovation process as underexplored especially with new instruments (Hammond et al., 2011; Amabile & Pratt, 2016). The focus on proactivity and innovation self-efficacy was also a conscious choice. These characteristics are essential for the leaders and for employees in modern innovation-oriented organization. Looking at an employee innovation orientation as “a complex interaction between person and situation” in producing creative outcome (Woodman et al., 1993) and ensuing Ford’s questioning about an individual choice between habitual action and creative action on the way to innovation (Ford et al., 1996), the research opened a new perspective and a possible respond: a trigger of innovative intentions within organizational context for employees lays in an employee-centered culture with a role model leader providing support for employees’ self-efficacy and proactivity and using smartly flexible management “by example”.

The IT leaders can raise their ambidexterity if they continue to develop psychological features. Seeing a culture as “an open system” with external demands adds a complexity to the organizational context for innovation to solve which is possible only with an appropriate attention to the social context (Amabile & Pratt, 2016; West, 2002). Besides other observations, an importance of innovation supportive culture was found only for subordinates, and leaders didn’t show up the perceived need of innovative environment for innovation creation. This difference in employees’ and managers’ perceptions of the innovative culture in the thesis research may explain a lack of leaders’ efforts in creating an innovative, supportive climate in Russian companies. Leaders with the internal drivers, such as a high self-efficacy and a personal proactivity, are less dependent on the context in the organization, while their employees need an additional motivation, an emotional involvement, a management flexibility and a supportive culture. Thus, the role of leaders is not only to lead the organization, but also to shift the focus to employees, namely, to serve, to support their innovative behavior, to set clear goals and to create a safe environment, encouraging the followers’ proactivity and self-efficacy.
<table>
<thead>
<tr>
<th>Study No</th>
<th>Hypotheses</th>
<th>Sub-hypotheses</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>I</strong>  H1. The personal characteristics of an innovation leader assume a proactivity, a high self-efficacy, an autonomy and the value orientations towards independence from external influences, an intrinsic motivation, an internality in decision-making and responsibility as well as a preference of democratic management styles.</td>
<td>Research question: What specific socio-psychological characteristics, in particular, value orientations the IT leaders have (in comparison with entrepreneurs in general)? Sub-hypotheses: H1.1. IT leaders have an intrinsic, independent from external influence, need for vigorous purposeful activity for the realization of their ideas – internality and this quality goes along with their attitude to spiritual and social values. H1.2. The main motivation for the creation and development of their business among IT leaders in Russia is intangible: the desire for enrichment, money for modern IT leaders is not the main goal. H1.3. IT leaders are not conformable to social influence and social norms.</td>
<td><strong>H1 is confirmed</strong> RQ is answered. Operational sub-hypotheses H1.1. is confirmed H1.2. is confirmed H1.3. is confirmed</td>
</tr>
<tr>
<td></td>
<td><strong>II</strong> H2. An innovative organizational culture is positively related to proactivity of organizational members via innovation self-efficacy.</td>
<td>H2.1. The innovative organizational culture has an indirect positive relationship with the personal proactivity and the proactivity of the individual as a member of the organization through an innovation self-efficacy. H2.2. The innovative organizational culture has an indirect positive relationship with the personal proactivity and the proactivity of the individual as a member of the organization through job-autonomy. H2.3. The bureaucratic organizational culture has an indirect negative relationship with the personal proactivity and proactivity of the individual as a member of the organization via innovation self-efficacy. H2.4. The bureaucratic organizational culture has an indirect negative relationship with the personal proactivity and proactivity of the individual as a member of the organization via job-autonomy.</td>
<td><strong>H2 is confirmed</strong> Operational sub-hypotheses H2.1. is confirmed H2.2. is not confirmed H2.3. is not confirmed H2.4. is not confirmed</td>
</tr>
</tbody>
</table>
| III | H3. A personal proactivity and an innovation self-efficacy of a leader is positively associated with her/his innovation leadership style at both stages of the innovation creation process: an idea generation (exploration) and an idea implementation (exploitation).  
H4. A personal proactivity of an innovation leader is positively associated with the coping strategies in the innovation creation: problem-focused and emotion-focused. | H3.1. The leader's innovation self-efficacy is positively associated with her/his dual-innovation leadership at the stages of exploration and exploitation.  
H3.2. The leader's personal proactivity is positively associated with her/his dual-innovation leadership at the stages of exploration and exploitation.  
H4.1. The leader's personal proactivity is positively associated with problem-focused coping strategies.  
H4.2. The leader's personal proactivity is positively associated with emotion-focused coping strategies. | H3 is confirmed  
Operational sub-hypotheses  
H3.1. is confirmed  
H3.2. is confirmed  
H4 is partly confirmed  
Operational sub-hypotheses  
H4.1. is confirmed  
H4.2. is not confirmed |
| IV | H5. People-oriented leadership styles (transformational leadership and servant leadership) are positively related to the employee organizational innovation orientation via their creative self-efficacy, self-identification of employees with a leader, and innovation supportive organizational culture. | H5.1. The negative relationship between transactional leadership style and employee organizational innovation orientation is mediated by a creative self-efficacy, a self-identification with leader and an innovation supportive culture.  
H5.2. The positive relationship between transformational leadership style and employee organizational innovation orientation is mediated by a creative self-efficacy, a self-identification with leader and an innovation supportive culture.  
H5.3. The positive relationship between servant leadership style and employee organizational innovation orientation is mediated by a creative self-efficacy, a self-identification with leader and an innovation supportive culture. | H5 is partly confirmed  
Operational sub-hypotheses  
H5.1. is confirmed  
H5.2. is not confirmed  
H5.3. is partly confirmed |
The coping strategies preferred by proactive IT leaders showed a strong preference of problem-focused coping strategies contributing to proactivity of IT leaders than emotion-focused coping strategies which were insignificant. Thus, an emotional work is suppressed and can become a potential start for growth for innovation leaders in Russia.

The thesis work is finished with a general conclusion, where the four provisions of the thesis are presented and justified.

**THE MAIN CONTENT OF THE WORK IS REFLECTED IN THE FOLLOWING PUBLICATIONS**


The thesis research is done on the basis of the Higher School of Economics Expert Institute International Scientific-Educational Centre for Sociocultural Research (HSE Centre for Sociocultural Research).
REFERENCES


