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QUALITY MANAGEMENT SYSTEM OF COMPLEX ECONOMIC ENTITY AS ORGANIZATIONAL INNOVATION

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Abstract: *The topicality of this research is determined by a low innovative activity of complex economic entities. Due to the implementation of a new version of the international standard ISO 9001:2015, it is required to both adjust documentation and make new strategic decisions regarding the changes in internal and external environment. The majority of Russian organizations underestimates the role of organizational innovations in the development of an economic entity. The authors view a quality management system (QMS) of an economic entity not only to form the environment for the effective innovative development of a parent company and its separate business units but also to be an organizational innovation capable of accelerating the diffusion of organizational changes and launching the organizational expansion. The analysis of the interdependence between QMS and organizational innovations proved the lack of the integrative concept for creating the QMS of a complex economic entity as a direction of innovative development.*

Keywords: *ISO 9001:2015, integrated structures, separate business units, organizational innovations, quality management system, complex economic entity*

1. Introduction

Economic turbulence and global geopolitical changes determined the contemporary conditions for economic entities in the Russian Federation, which require to create flexible managing patterns. The requirements of the ISO 9001:2015 (Federal Standard ISO 9001-2015 “Quality management systems. Requirements”, 2015), which preserve the QMS integrity while planning and implementing changes, reflect the significance of *ingressive* development of an organization meaning that “the elements act in

the same direction, are similarly oriented towards the common goals and complement one another” (Bogdanov, 1989, p. 15). Moreover, the synergy effect is achieved not because of creating “new activities” but because “the existent activities unite more effectively than withstanding resistances”. The increasing complexity of business activity types, the required urgency of managerial decisions, and the geographical expansion of most economic branches necessitate the reconsideration of the existent approaches to develop the QMS. The bigger an organization is, the more difficult it is to ensure the unity of goals and manage its knowledge and changes.

According to the Russian Federal Statistics Service (Rosstat) (Russian statistical yearbook, 2016, p. 305), a number of the separate local

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business units has increased by 6,500 over the recent 10 years. The survey of Russian companies, conducted in the spring of 2017 (Kovalin, Moiseev, Lavrienko, 2017), showed that the quarter (24.7%) had its separate business units and the other 7% intended to set new ones. Thus, approximately a third of the Russian economic entities reported to or was going to have separate business units. Besides, according to the Ministry of Economic Development and Trade of the Russian Federation, “there is an annual increase in the integrated structures. The improvement of their management mechanisms remains a priority during the period of years 2016-2018” (The Ministry of Economic Development, 2016). Therefore, the research focuses on the following integrated structures:

- 1) economic entities owning separate business units with a single headquarters;
- 2) economic entities comprising a number of self-managed organizations with steady coordination and cooperation.

The effectiveness of a complex socio-economic system depends on the integrity degree, i.e. the way the cooperation among the elements within a system is organized and whether their potential is used at maximum, which was justified and proved based on the example of higher education institutions with regional branches (Troshkova, Levshina, 2013; Troshkova, 2015). The obtained results allow to substantiate an increase in the effectiveness of the QMS implementation due to the positive synergy based on the integrated cooperation among elements, the requirements of the ISO 9001, the Theory of Constraints, and the rule of the “golden section”. The QMS represents an instrument that allows companies to not only accumulate and transfer knowledge but also improve the innovative activity as well as the economic effectiveness of the entire system. Pakermanov, Shegelman, Odlis (2013, p. 21)

proved that in complex corporate structures there is the high-speed diffusion of organizational innovations, with the international standard ISO 9001 observance certification of the QMS being among the determinative factors. It is in the complex structures for the formation of synergetic effects where it is necessary to assure the integrity and effective cooperation among elements.

According to the National report on the innovations in Russia, “despite having the opportunities for innovative development, the majority of large companies do not use their potential for it and demonstrate slight innovative activity losing its competitiveness” (National report on innovations in Russia, 2016). There are also two internal hurdles, which are, namely, the top management having no motivation and the inability to implement innovations. The authors believe that most Russian organizations underestimate the role of the organizational innovations in the development of an economic entity. This opinion corresponds with the data of the High School of Economics (Russia). It reports that the share of the Russia organizations performing organizational innovations declines. It decreased from 3.5% in 2007 to 2.9% in 2015, while in European countries this share is equal to 36% (Gorodnikova, Gohberg, Ditkovskii et al, 2017, p. 246).

The organizations do not consider the “functioning” QMS as a “key” to competitiveness due to poor formalizability of the QMS implementation results in the Russian Federation and the lack of a modern technique to measure long-term economic effects. There is sufficient data that prove the QMS implementation to be advantageous for the organizations independent of their size, specialization and origin. The book “**Economic benefits of standardization**” (2014), published by the International Organization for Standardization, comprises the experiences of 11 organizations with various specialization and size from 10 countries around the world, namely, Indonesia, Singapore, Thailand, Vietnam, Brazil, Colombia, Peru, Botswana, South Africa and Germany. The benefits of

implementing the standards to the management system are estimated between 0.15 % and 5 % of annual sales revenue in regards to the contribution or profit (before deducting interests and taxes). The quantitative benefits include the optimization of internal business processes, the reduction in internal expenditures, *the increase in the effectiveness of Research & Development and innovative capacity of business processes*, the risk minimization, the development of new products and markets. Implementing standards to the organizational activity can be compared to the driver for generating essential opportunities ensuring a competitive advantage and play the key role in gaining the trust of potential clients (Gorodnikova, Gokhberg, Ditkovsky et al., 2017). According to Emanuel, Boshkovich, Ivanov, Cherednichuk (2015), the main reasons for ineffective implementation of the standards to the management systems are inflated expectations triggered by misunderstanding the appropriation of these standards as well as poor qualification of the top management responsible for managing innovations.

The hypothesis of the research is to substantiate the authors' concept that creating the QMS of a complex economic entity not only form the environment for the effective innovative development of a parent company and its separate business units but also represents an organizational innovation itself able to accelerate the diffusion of organizational changes and launch an innovative expansion. This article lays the foundation for the research and attempts to *define the research area and substantiate the formation of the QMS of a complex economic entity as a direction for innovative development (an organizational innovations)*, which is **a goal of this research**, based on analyzing the fundamental and empirical works publications by Russian and foreign scholars.

The choice of the research topic and goal should be clarified. Firstly, the topic indicates the integration of two terms, namely, "quality management system" and

"organizational innovations". Therefore, one of the objectives covers the analysis of the mentioned terms in the context of integration. Secondly, a new version of the international standard ISO 9001:2015 requires new strategic and organizational decisions in internal and external environment of a complex economic entity. Thus, another objective is the analysis of organizational innovations through the lens of theoretical concepts and existent experience of implementation in both Russian and foreign companies. Finally, the analysis of designing and implementing the QMS of a complex economic entity will prevent duplication and allow to act in a new scientific dimension. Scott (2013) noted that the interrelation between quality and innovation had been studied since 1996, with most literature being published over the recent ten years, which also demonstrates a scientific interest in and topicality of the chosen research focus.

The novelty of the research is defined by the substantiation of forming a quality management system for a complex economic entity based on the application of the international standard ISO 9001:2015 to direct innovative development (organizational innovation).

The relevance of the research is related to the formation of the scientific community's innovative thinking based on the authors' concept. The authors' concept implies that the formation of a complex economic entity not only creates an environment for the effective innovative development of a parent organization but also represents an independent organizational innovation capable of accelerating the diffusion of organizational changes and launching the innovative expansion.

Materials and methods

The informational and empirical basis for the research embraces official data of the Russian Federal State Statistics Service, statistical research held by the National Research University Higher School of

Economics, Cornell University, INSEAD business school and World Intellectual Property Organization (WIPO – a specialized agency of the United Nations, published scientific and analytical materials, online sources, information retrieved from elibrary.ru database and Russian State Library, authors’ own calculations performed during the research conduct.

The research had three stages. During the first stage, the authors analyzed a notion of “organizational innovations” in terms of terminology and etymology.

During the second stage, based on Borgest’s (2017) experience, the authors

- analyzed the frequency of using “quality management system as innovation” as a keyword in the network and scientometrical sources with the help of Yandex.ru and Google.com search engines and further content consideration;
- studied the information array of scientific online library – elibrary.ru over the recent 10-year-term taking titles, abstracts and keywords into account;
- conducted a content analysis and systematization of texts and empirical results by scholars around the world in the integrated context of “quality management system - innovations”;
- held a correlation analysis of a country’s global innovation index and a number of issued ISO 9001 certificates.

The third stage involved the analysis of Ph. D. dissertations content based on key colocation – “quality system management as an innovation” – conducted on the website of Russian State Library (www.rsl.ru) including some in-detail study of scientific novelty and conclusions related to complex economic entities stated by their authors.

2. Literature review

According to the clause 3.4.3 ISO 9000:2015 (Federal Standard ISO 9001-2015 “Quality management systems and vocabulary, 2015, p. 12), *the creation of quality management system* is a process that includes its development, record, implementation, maintenance and constant improvement. The term “*quality management system*” (QMS) should be comprehended as a part of management activity ensuring quality.

The notion of “innovations” include both radical and gradual changes in products, processes and strategies of an organization. The changes can be connected with the improvement of separate elements of an organization and its environment, the implementation of known elements combined in a new way to organize the activity, the development of brand-new elements. Thus, innovations presuppose not only the development and implementation of brand-new elements (products, technologies, business processes, etc.) but also the adoption of the existent ones. The innovative development should be understood as a process of qualitative change in an economic entity through implementing innovations. The term “organizational innovations” first appeared in Schumpeter's works (2007, p. 55). He defined “new ways of business organization” as a kind of innovation. Organizational innovations were officially acknowledged in 2005 upon publishing the third edition of the Oslo Manual (2010). The Organization for Economic Co-operation and Development (OECD) views organizational innovations as “strategic decisions related to the implementation of new forms and methods of both business organizations and that of workplaces and external links”.

A closer look should be taken at the etymology of the words “organizational” and “innovations”. The definition and derivation dictionary by Efremova (2000) explains the term of “organizational” in the connection

with a noun “organization”, i.e. as being peculiar of an organization or belonging to it. The term “organization” has three definitions. Firstly, the emphasis is laid on internal order of components of the whole. Secondly, it is viewed as an aggregate of processes and actions setting the interrelation among the components of the whole. Thirdly, it is interpreted as a community of people jointly following a programme or achieving a goal, or acting restricted by certain rules and procedures.

As for the etymology of “innovations”, it was thoroughly studied by Konopkin (2011). He highlights the polysemy of this term and its applicability in various fields. Konopkin also stressed the existent difficulty of defining criteria for innovations and comprehending the role of new knowledge as a source for innovation. The term “innovation” derives from Latin “*innovatio*” which means “renewal, novelty”. The term itself appeared in XIX century and was bound to cultural and linguistic borrowings. The publications of the Lisbon Summit on innovations in 2010 prove the ambivalence of modern definitions. In these publications, the term of innovation was defined as “production of something new” (Shurmans), “new processes and products” (Vukov), “*the production of a value for users including new ways of making the habitual things more effective*” (Liebenberg), “the convert of scientific research to market products” (Queen), etc.

In one of his works on organizational innovations, Armbruster H. (Armbruster, Bikfalvi, Kinkel, Lay, 2008, p. 2051) define the following directions of scientific research, namely, a theory of structural changes (Burns T., Stalker G., 1961; Mintzberg H., 1979), a theory of organizational changes and ways to deal with companies’ inertness in order to accommodate to changing conditions and technologies (Hannan, Freeman, 1977, Lewin, 1958, Lawrence, 1954), a theory of organizational training and education (Argyris, SchÖn, 1978; Duncan, Weiss,

1979); a theory of organizational creativity (Amabile,1988), a concept of “lean production” (Womack, Daniel, 1990), “business re-engineering” (Hammer, Champy, 1993), “total quality management” (Ishikawa, 1985), “intelligent organizations” (Pinchot, 1993), “flexible organizations” (Goldman, 1995), etc. The author stresses that the existent approaches consider organizational innovations as a necessary condition for the implementation of technology and product innovations and there is no focus on the state of both an organization upon implementing innovations and new elements of management and production. Thus, it is not possible to measure and compare the results brought by organizational innovation. Armbruster et al. (2008, p. 2052) suggests a definition for organizational innovations, which is “implementation of new managerial and working theory and practice” underling that “adherence to this definition allows to measure qualitative features of organizational innovations during certain time, analyze coefficients of recognizing certain organizational definitions in various companies and the frequency of their usage in a particular company, branch or region”. However, he does not provide any measurement techniques and estimation approaches.

According to the Russian Federal Statistic bodies, over the recent three years “organizational innovations” are mostly connected with human resource development (19%). Other 17% are related to the implementation of modern management methods based on information technologies. The share of 13% is bound to the implementation of new and significant modification of organizational structures. The organizational innovations applying contemporary quality control systems and the certification of goods/works/services account for 11%. The rest of 6 % deals with the development of a corporate system of knowledge management, etc. (Russian statistical yearbook, 2016, p. 236). “The use

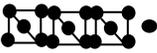
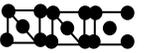
modern systems of quality control, goods/works/services certification including the Russian and foreign quality standard (e.g. ISO 1900)” occupies the fourth position in the structure of the introduced innovation in 2015.

3. Results

The frequency analysis of search queries (in Russian) via wordstat.yandex.ru revealed that the collocation “quality management system” appeared 14,000 times, while there were 319,000 requests for “organizational

innovations”. There was no mention of the collocation “quality system management as organizational innovation”. The search query of “quality management system as innovation” was twice more frequent in Yandex.ru (113,000,000) than in Google.com (475,000). Despite significant difference, the content analysis showed the thematic similarity of the first 100 repeated search requests. With the sequent 100 reference repetitions were 70% identical taken into account, the thematic selections were formed and an average repetition share of each was calculated (Table 1).

Table 1. Content Analysis Results of search request “quality management system as innovation”, July 19, 2017

No.	Subject	Number of repetitions on Google. com	Number of repetitions on Yandex.ru	Average percentage
1	Integrated corporate structures			30
2	Management of innovations			22.5
3	Implementation of organizational innovations			13.5
4	Integrated QMS as an innovative project			8
5	Managing QMS in terms of an innovative organization			5
6	Quality management system of a design organization			4.5
7	Problems of QMS implementation			4
8	Standardization of innovations			3.5
9	Innovative decisions in terms of QMS			0.5
10	Other (directions, subjects, suggestions of certification, forum, seminars, lectures)			8.5
	Total	100	100	100

Most references are connected with the design of integrated organization (30%), the theory of innovation management (22.5%) and the implementation of certain organizational innovations such as knowledge management, risk management, information technology implementation, lean production implementation and particular management subsystems design (13.5%).

The results of the analysis of the information array of scientific online library elibrary.ru over the recent 10 years based on titles, abstracts and keywords demonstrated that the number of publications related to organizational innovations has become 7 times higher. It is increased from 50 publications in 2007 to 334 in 2016, which confirms the growth in scientific interest. The concept of QMS as organizational

innovation occupies 9% of information request (Figure 1). The organizational innovations are understood as the implementation of system and process approach (Bulochnikov, 2015), consumer-oriented strategy design (Andreev, Andreeva, 2015), the need for the research of QMS and standards integration (Anisimova, Balan, 2013), constant improvement of processes (Evmenov, 2016), generation of synergy effects when implementing system approach (Drogobitskii, 2011). The authors of this article defined a generalized concept concerning the role of QMS in terms of maintaining the competitiveness of institutions from various specialization fields based on organizational innovations implementation.

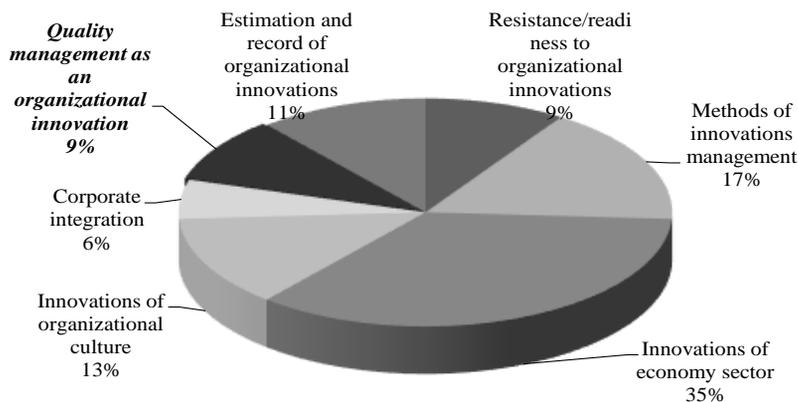


Figure 1. Structure of «organizational innovations» search request on elibrary.ru from 2007 to 2016

The content analysis results of empirical works published around the world showed that both

positive and negative connection between QMS and innovations is proved (Table 2).

Table 2. Analysis of connection between QMS, innovations and organizational effectiveness

No.	Author	Country/sector	Conclusions (research methods)
Positive connection between QMS and innovations			
1	Ardestani A.S., Amirzadeh Y. (2014)	Iran, production and non-production	Positive connections between QMS, organizational and innovative effectiveness. (factor, correlation, regression analyses)
2	Bossink B. (2012)	The Netherlands, construction	Supports the role of QMS in innovative activities management (including ISO 9000 standards) in terms of production standards creation. (statistical methods and quality management tools)
3	McAdam R., Armstong G., Kelly B. (1998)	Ireland, small nonmaterial companies	General quality lays the foundation for an innovative culture of organizations. (estimation by EFQM and Centrim innovative model)
4	Mousapour H., Jusoh A., Md Nor K., Pakdel A. (2014)	Malaysia, motor industry	TQM implementation increases organizational effectiveness and has a positive effect on innovations. (statistical data analysis)
5	Prajogo D. I., Sohal A. S. (2002)	Australia, production and non-production	Positive connections between TQM, production quality and innovative activity. Quality management creates “conditions” for innovations. (polling, analysis, modelling)
6	Qunxiang Z.O., Feng X., Xiang X. (2016)	China, production and non-production	In case of uncertainty, a mature quality level leads to increase of an innovative activity level. QMS is considered as a mean of innovations development incitement. (factor, and regression analyses)
7	Satish, K. P., Srinivasan R. (2010)	India, production	Positive connections between QMS and results of innovative activity (confirmatory factor analysis, method of multiple regression)
8	Scott, A. (2010)	The USA, production	Companies implementing QMS are more effective in terms of quality and innovative activity (polling, cluster analysis)
No connection between QMS and innovations			
1	Leavengood S. (2009)	The USA, production	Companies can adapt QMS in order to increase a level of attention to innovative effectiveness estimation (e-mail polling followed by interview)
2	Singh P.J., Smith J.R. (2004)	Australia, production	No evidence of connections between quality and innovations were found. QMS increases innovative activities effectiveness. However, QMS does not influence the results of innovative activities (polling, structural equations, modelling)
3	Hoang D.T., Igelb B., Laosirihongthong T. (2016)	Vietnam, nonmaterial companies	Connections between TQM and new products development were not confirmed; only leadership is connected with a novelty level. (polling, structural equations, modelling)

One tends to consider general quality management practice as one of the major factors influencing innovative activity positively. Ardestani, Amirzadeh (2014) as well as Bossink (2012) and Prajogo, Sohal (2002) connect these notions with overall organizational effectiveness underlying that “an organizational that implement innovations cannot be successful unless its products meet the consumers’ demand”. Along with this, they consider quality management paramount to gain competitive advantage, with innovations being the impetus for further growth. Besides, there are completely opposite statement. Singh, Smith (2004) and Hoang, Igelb, Laosirihongthongc (2006) state that “global quality management is not compatible with innovations” because “innovations management greatly differs from quality management” and “standardization

hinders creativity and an innovative approach”.

The correlation analysis of International Innovation Index and a number of issued ISO 9001 certificates around the world allowed to discovery a strong reverse dependence (-0.77), i.e. the higher one indicator, the lower another. The difference among countries is plotted in Figure 2. The obtained data requires closer examination. Firstly, there is an indicator of a number of issued certificates a year while an organization can have a QMS developed, implemented, functioning but not certified. Secondly, sub-indexes of international innovation capacity in accordance with a calculation technique (Suslov (Eds.), 2015) excluding the indexes that reflect declared link.

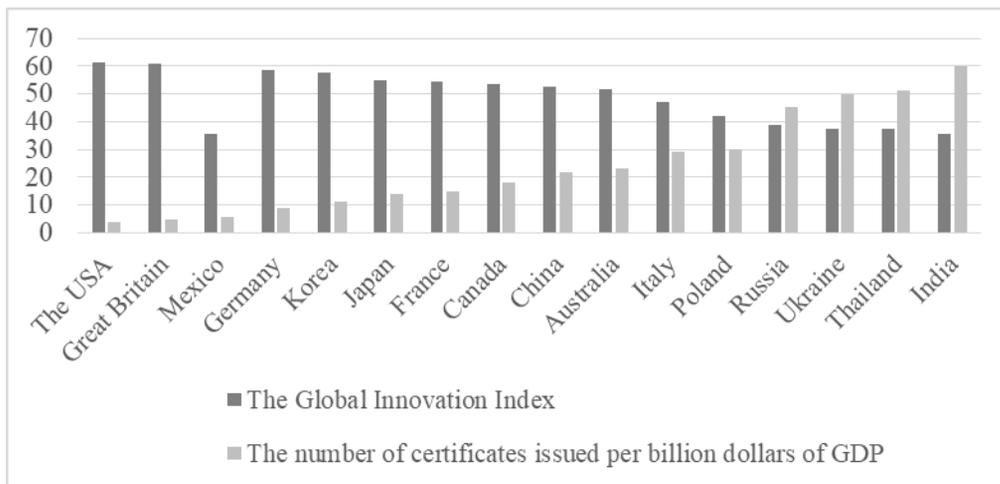


Figure 2. Cross-country difference on International Innovation Index and a number of ISO 9001 certificates issued, October 2016 (International Innovation Index, 2017)

The authors analyzed the dissertation topics at online dissertation library on the Russian State library website (RGB) based on the keyword “quality management system as innovation”. There were 25 coincidences within the specialization 08.00.05 “Economics and management of national economy” according to the Russian Higher Attestation Commission (VAK). The innovations regarding QMS are studied

based on enterprise/business company/organization (Medvedkina, 2004; Scherbakov, 2006; Ulyanov, 2007; Biryukova, 2007; Perezhogin, 2007; Bayda, 2010; Yavkaev, 2012; Surovitskay, 2012). Urzaev (2010) exemplified by cluster formations in the production sector. Other authors studied innovations regarding QMS based on natural monopolies (Gorodnov, 2007), corporate structure (Skovorodskaya,

2006), integrated corporate structure (Putivskiy, 2005; Mikhalenko, 2014; Levina, 2017), electric grid companies (Uskov, 2012). In these works, the authors define the features of QMS formation, suggested approaches to improve processes and plan organizational changes, to identify information reserves, a self-estimation model, and studied the QMS impact on the social and economic effectiveness of an organization. To sum, integrated corporate structures are widely studied while not enough attention is paid to complex economic entities with separate local business units.

4. Discussions

Based on the obtained results, the authors formulated three hypotheses:

- 1) There is no connection between QMS and innovations.
- 2) QMS represents environment for innovation performance.
- 3) QMS is innovation itself.

The statistical analysis of the literature

review allows to plot a share of each hypothesis in a general structure of the present research (Figure 3). Two-thirds of scholars believe that QMS is not related to innovations, with 58% considering QMS to represent environment for innovation performance and 11% agreeing that QMS is innovation itself.

The implementation and function of QMS can be undoubtedly referred to as an innovation process. It is because effective cooperation of all the elements of an organization (an enterprise) can be achieved only through new unconventional methods of management, motivation and organizational processes. This is to ensure constant improvement, only possible if there is a constant improvement of managerial processes, which is one of the quality management principles. Gorbashko, Rykova, Skripko (2016, p. 35) had the same idea noting that a new version of the standard “is oriented towards advanced contemporary management concept widely applied around the world”.

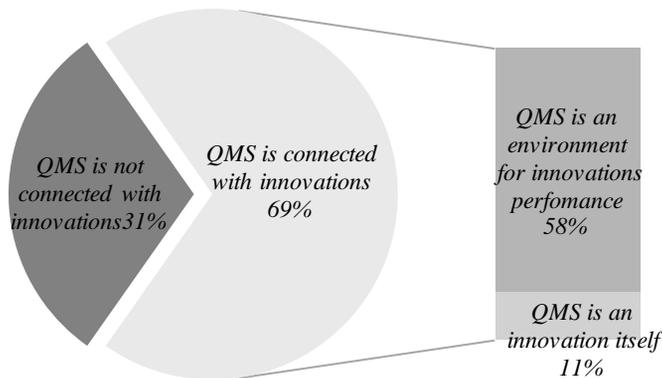


Figure 3. Results of literature review on QMS and innovations correlation

The QMS design and implementation in accordance with the international ISO 9001:2015 standard (Federal Standard ISO 9001-2015 “Quality management systems. Requirements”, 2015) for a complex economic entity is believed to be

organizational innovations have the main features of innovations. They:

- *are novel*, which is determined by the implementation of new methods for organizing and managing

business processes to integrate all activities and obtain value;

- *meet market demand*, which is determined by the adherence to the main principles of quality management, with “the orientation towards consumers” including the fulfilment of legal and regulatory norms being the key one;
- *have practical significance* in any field, *generate profit* as the QMS implementation and maintenance reduce expenditures because of preventive tools; ensure sustainability and development of an organization.

Scholars prove the positive connection between QMS and organizational effectiveness. “Leadership strategy positively correlates with quality management principles and financial activity of an organization” (Kurt, Zehir, Kabul, Afghanistan, 2016). “Permanent improvement and involvement of personnel are the key factors to ensure the effectiveness of an organization” (Mehmood, Pakistan, 2014). “The (democratic) management type influence the organizational effectiveness and competitiveness” (Ojokuku, Odetayo, Sajuyigbe, Nigeria, 2012). “Quality management is a way to boost the effectiveness of organizational activity” (Wahjudi, Moses, Singgih, Suwignjo, Indonesia, 2011). Nevertheless, despite a considerable number of detected coincidences, the topic of innovative development of an economic entity based on QMS formation is not sufficiently studied. QMS as a direction for the innovative development of an economic entity has not formed yet an integrative concept that includes definitions, methods, procedures and evaluation tools in accordance with the requirements of the international standard ISO 9001:2015.

Based on the results of the analysis, it is possible to draw the following unambiguous conclusion. In addition to the creation of the

environment for the effective innovative development of the parent organization and its separate units, the formation of a quality management system for a complex business entity in accordance with the requirements of the international standard ISO 9001: 2015 is an independent organizational innovation. The ability of the quality management system of a complex business entity to accelerate the diffusion of organizational changes in the parent organization and to launch innovative expansion into territorially isolated units is a continuation of the current study.

5. Conclusions

The increasing topicality of this research is determined by the implementation of a brand new version of international ISO 9001:2015 standard that refers to “high-ranking structure” and represents a basis for any unification of management systems and branch standards. Economic entities do not consider the QMS design and implementation to be a key to the competitiveness due to the poor formalizability of QMS implementation results in the Russian Federation and the lack of techniques to measure long-term economic effects. Therefore, it is necessary to systematize knowledge about organizational innovations concerning QMS formations and effectiveness substantiation of qualitative changes in a complex economic entity. In the context of the increased investment flow to the projects of major enterprises, it is vital to know which particular aspects of quality management boost the effectiveness of the innovative activity. It reveals gaps in this research area and the need for the substantiation of the authors’ concept. The concept presumes that the formation of the QMS for a complex economic entity not only create the environment for the effective innovative development of a parent company and its separate business units but also represents an independent organizational innovation itself able to boost the diffusion of organizational changes and launch the expansion of innovations.

The content analysis of the search engines based on the keywords “quality management system as innovation” laid the foundation of the research in order to ground its topicality, stress the existent discourse issues and gaps in the present scientific field. It is necessary to point out that search queries are formed by employees who belong to the category of ‘performers’. Further research is going to cover the empirical aspects to investigate how top management of

complex economic entities comprehend the quality management system within organizational innovations. The formation of strategic innovative thinking, where the basis for the effective development of a complex business entity will be a quality management system in accordance with the requirements of ISO 9001: 2015 and its further integration with industry standards, is a priority of the global economy.

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