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THEORETICAL PREMISES OF RUSSIAN CORPORATIONS
INNOVATIVE DEVELOPMENT

E.L. Dorzhieva (a)*
*Corresponding author

(a) Irkutsk National Research Technical University, Irkutsk, Russia delham@yandex.ru, +79248381638

Abstract

At the present stage, innovation is one of the most important factors for the effective development and growth of the competitiveness of Russian corporations. The article introduces theoretical foundations for the innovation activities of a corporation and considers different approaches to the basic definitions of innovation theory. At present, there is no single approach to the definition of "innovation" in the economic literature. Despite the widespread use of the term "innovation", the basis for all interpretations is novelty, socio-economic efficiency, performance, productivity, industrial demand and applicability. Innovation is an important competitive advantage of a corporation in which a corporation sees potentially high profits and/or other positive characteristics.

To understand how an innovation can be managed, it is necessary to examine the various areas and ways of applying them, to consider the classification of innovations. The classification is a cognitive and practical process; it helps to define the structure and to systematize innovations on various criteria. The author highlights the features of an innovatively active industrial corporation and also shows the possible reasons for various innovative activeness of corporations.

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Keywords: Innovations; classification; innovative activeness; corporations, strategy.



1. Introduction

The key factors determining the direction of the development of most countries of the world are the enhancing of the economic role of innovation and innovation activity, changing the pace, direction and mechanisms for the development of innovative processes. In the current context, the most important task of the Russian economy is to move to the innovative way of development, diversify the economy and create the conditions for the realization of the innovative potential. The achievement of these objectives depends to a large extent on the innovation activity of Russian industrial corporations. An effective system of strategic management of the innovation activity will enable Russian industrial corporations to overcome their technological backwardness and become competitive in the world market. Rosenberg and Birdzell associate the economic development of the Western countries with the continuous search for opportunities and adaptation of changes favourable to further growth - that is with innovations (Rosenberg, 1995).

2. Problem Statement

In order to solve the problem of the transition of Russian corporations to innovative development, the theoretical aspects of the innovative economy must be explored. The research on innovative development theory requires, first of all, a study of key concepts such as innovation and its classification, an innovation process and innovation activity.

3. Research Questions

The theoretical basis for studying innovation began in the early 20th century. Josef Schumpeter one of the founders of innovation theory, regarded enlargement of a firm as organizational innovation that allows one to save with the help of such enlargement. It has developed the concept of an "entrepreneurial firm", as a special economic agent that acts through competition from new products, new technologies, and new sources of raw materials or new types of organization. The purpose of an entrepreneurial firm is not to maximize profits through cost minimization, but to seek for strategic advantage based on product, technological or organizational innovations (Schumpeter, 1982).

There is no single approach to the definition of innovation in the economic literature. An innovation is described as a process, result, method, and object. For example, B. Santo considers innovation as "the social, technical and economic process, which, through the practical use of ideas and inventions, leads to the creation of better properties of products, technologies, and if the innovation is oriented to the economic profit, its appearance on the market may generate extra income ... " (Santo, 1990). B. Twiss also means by innovation the process, "...in which an idea or invention acquires an economic meaning" (Twiss, 2009, p. 272). P. Drucker described innovations as "a special instrument of entrepreneurs, a means by which they seek to implement a new type of business or service" (Drucker, 2009, p. 292). Despite the widespread use of the term "innovation", the basis for all interpretations is novelty, socio-economic efficiency, performance, productivity, industrial demand and applicability.

The draft strategy of the Ministry of Economic Development "Innovative Russia-2020" defines the innovation as "the market launch of a new product or service, introduction of a new production process, development of a new business model, and creation of new markets" (Russian innovations strategy 2020). The recommendations of the Organization of Economic Cooperation and Development on collection and

analysis of data about innovation present the following definition: "Innovation is the introduction of a new or significantly improved product or process, introduction of a new marketing or organizational method of manufacturing process management." A prerequisite for innovation is that the product, process, or method should be new or significantly improved when a company developed and implemented the innovation faster than other companies. In such a way innovation is an important competitive advantage of a corporation which brings the corporation potentially high profits and/or other positive characteristics.

4. Purpose of the Study

To understand how innovations can be managed, it is necessary to examine the various areas and ways of applying them, to consider the classification of innovations. The classification is a cognitive and practical process; it helps to define the structure and to systematize innovations on various criteria. The classification helps not only to orientate in a variety of innovations, but also to define and establish interrelations and interdependencies between various innovations; to analyse, make assessment and forecasting.

5. Research Methods

Scientific works of Russian and foreign scientists: monographs, articles, devoted to the problems of innovative development at micro and macro levels; to issues of strategic management and planning or corporate governance, as well as to problems of production management efficiency, provide a methodological basis for the research. In the course of the research, the scientific methods of analysis, synthesis and statistical methods were used.

6. Findings

There are many approaches to classifying innovations according to different criteria. A classification feature is a distinctive characteristic of this group of innovations, its main characteristic. Innovations of different types can be associated with different phases of socio-economic, scientific and technological development.

G. Mensch singled out basic innovations, they encourage the emergence of new industries and new markets that improve innovation (increase the efficiency of the use of basic innovation or expand the market for them) and "pseudo innovations" (improve the quality of the subject or slightly alter the elements of the technological process). The criteria for classifying technological innovations according to G. Mensch are the degree of radicality of innovation. Y.V. Yakovez like G. Mensch also differentiates innovations according to the degree of radicality (Yakovez, 2004).

Applicable to the activities of the corporation, Russian scientists I.B. Gurkov and V.S. Tubalov offer the following classification of innovations: innovations relating to food; process innovation; technical innovations; innovations relating to management technologies; organizational incompany innovations, organizational intercompany innovations (Gurkov & Tubalov, 2004).

Organizational innovations often provide a prerequisite for technological innovation and determine the performance of a corporation to a large extent. According to Williamson (1996), the modern corporation should mainly be understood as a product of a series of organizational innovations, the purpose and result

of which is to minimise transaction costs (the necessary costs for institutional, organizational and information support of any activity). Williamson (1996) suggests that if it is difficult and expensive to agree on joint development and transfer of knowledge (i.e., the market transaction costs are large), then the coordination within an integrated structure is more advisable than market coordination.

On the other hand, one of the main objectives of the creation of a corporation is increase of the efficiency of production. Productive integration creates the possibility of innovative synergy, which is based on the concentration of resources on developing and mastering of key, radical innovations. Innovative synergy enhances the technological competencies of the entire corporation and contributes to low costs and better product quality in corporate businesses (Williamson, 1996, p. 702).

In Russian practice, innovations in corporation management has been paid little attention and the corporation development is associated exclusively with technical and technological innovations. However, the effectiveness of corporate management is reflected in the performance of new equipment and technologies. P. Drucker notes that innovation is not a technical, but an economic concept implying changes at all following levels of management: in-company management, manufacturing management, and human resources (HR) management.

It is necessary to distinguish between corporate management and corporate governance. Thus, the corporate governance is a system of relationships between corporations and shareholders and other stakeholders. These may be groups of persons, organizations or individuals who influence on the activity of the corporation, which in turn is dependent on them. At the current stage, corporations have begun to assess the interaction with stakeholders as an instrument that can help to create products and processes, enhance the strategic decision-making for sustainability both inside and outside of the corporation. The effective strategic interaction with stakeholders can:

- 1) ensure the better management of risks and reputation;
- 2) integrate resources (finance, infrastructure, and technology) to meet corporate challenges and objectives;
- 3) assess the external environment of a corporation in a comprehensive manner, including the development of markets and the identification of new strategic opportunities;
- 4) receive the information from stakeholders that could lead to the development of innovations;
- 5) inspire confidence between the corporation and its stakeholders (Dorzhieva & Lukyanchikova, 2014).

The corporate management or corporate governance covers the corporate processes, development; it means adoption and making of strategic and operational decisions in marketing, finance, manufacturing, HR management. The classicist of the management, F. Taylor, stressed that a good organization of work, even with old equipment, was always better than a bad organization with new equipment (Mecon, Albert, & Hedoury, 2009). Innovations in management have long been the least interesting for specialists to study. But at present, innovations in governance are increasingly being perceived by corporate managers as an indispensable element of development strategy and long-term competitiveness.

Hamel and Prahalad (1994) defines strategic innovation as the ability to rethink the existing business model in ways that create new value for consumers, stakeholders and competitive advantage. Strategic innovation is the creation of development strategies, new categories of products, services and business

models that change activities and produce significant, new values for consumers, customers and corporations. Strategic innovations are sometimes referred to as business model innovation. An innovative business model involves experimenting with new strategies, with new business concepts. Strategic innovations are innovations in products and services, business models, business processes, changing activities and positioning a corporation in relation to competitors to improve the performance of a company (Williamson, 1996).

The analysis of the main classifications of innovations has revealed a variety of areas and how they are used at the macro level, but the current classifications of innovation do not provide a clear picture of micro-level innovations within individual corporations.

In our point of view, the existing classifications of innovation need to be supplemented by the following features: by purpose, by scope of application, according to the strategic objective of the corporation, by degree of risk in relation to the previous state. Moreover, according to the author, these features are closely related to the choice of an innovative strategy for the development of an industrial corporation.

As innovatively active organization, according to the Organization of Economic Cooperation and Development, "may be considered the organization, regardless of its organizational and legal form and type of the activity, which continually develops and innovates new or improved products, technological, management processes or other innovative activities The organization is considered to be innovatively active during the monitoring period regardless of whether successful innovations have been carried out, whether they are in the process of implementation or the process of implementation has been stopped" (Dorzhieva & Lukyanchikova, 2014).

The innovative activity of a corporation is determined by its ability to create and implement innovation to ensure competitiveness and to retain shares of markets; it is determined also by the ability to continuously expansion, improving of production, and updating of the product. From a strategic approach perspective, we believe that the innovative activity of industrial corporations should be understood as the innovation in production and management to ensure competitive advantages and to achieve the objectives of innovative development in the long term. Thus, the features of an innovative industrial corporation may include: (1) goal-setting based on innovation; (2) formation and implementing of an innovative strategy; (3) change of management system in accordance with the selected innovation strategy; (4) positive dynamics of the innovative development of a corporation (Dorzhieva & Lukyanchikova, 2014).

The level of corporate innovative activeness is defined as the ratio of the number of corporations engaged in innovative activity to the total number of corporations surveyed over a period of time in the country, industry, region, etc. (Oslo manual, 2010).

Innovative activities include research and development; acquisition of machinery and equipment related to technological innovation; acquisition of new technologies, software; production design; education and training of personnel; marketing research, etc.

1) The innovative activity of an industrial corporation is determined by many factors. In our point of view, the factors of corporate innovation can be divided into two groups: the corporate external environmental factors, such as the level of competitive pressure, the institutional environment and public policy.

2) The internal environment factors of a corporation, such as the financial, technological and organizational resources of the corporation, as well as the size of the corporation, industry and ownership.

One of the most frequently investigated external factors is the level of competitive pressure. In many markets, company has to innovate constantly to remain competitive. "Innovative activity is a special tool that allows an entrepreneur to take advantages of changes and transform them into new opportunities ... The entrepreneur should be in a focused search for sources of innovations, ... to apply the principles of successful innovative activity" (Drucker, 2009, p. 292).

However, some researchers note that the connection between competition and innovative activeness is ambiguous. G. Demsec assumed that large corporations under monopoly conditions had an advantage in innovation, as opposed to small firms working in intense competition.

At the present time, the prevailing view is that there is an inverse U-shaped relationship between competition and innovation (Kuznetsova & Roud, 2011). This means that the impact of increased competition on innovative activeness is positive at the beginning, but from a certain level it decreases and becomes negative. If the competitive pressure is low, corporations do not have the incentive to increase innovative activeness and, with high external pressure, they are constrained in resources because of the rigid price confrontation.

An innovative capacity needs to be assessed in order to choose an innovative development strategy. An adequate assessment of the innovative capacity will help to select an innovative development strategy and adjust an innovation policy of an economic entity.

There are different approaches to the assessment of an innovative capacity; the reason is the textual discrepancy of the concept "innovation potential". At present, there is no single approach to the definition of "innovation potential" in a domestic literature. Some authors imply under the innovative potential a combination of resources (financial, material, intellectual, scientific and technological) or potentials on the basis of which innovative activities are carried out. Other researchers consider the innovation potential from the perspective of the innovation activity result. There is also a point of view that the innovative capacity must be equated with scientific, technical or intellectual, creative capabilities. In our view, the diversity of methods for assessment of the innovative capacity is due to lack of a unified methodology for selecting of components of the innovative capacity.

After analysis of existing approaches to the definition of the category "innovative capacity", the following definition is proposed: a combination of intellectual, infrastructural, material, financial, human resources and organizational capacities and motivations for the innovation activity implementation. A resource potential of an economic entity is a basis for the innovative capacity. The innovative capacity identifies ability and percentage of completion of the economic entity to create and implement innovations in order to achieve strategic objectives.

Depending on basic approaches to the definition of the concept of "innovation capacity", the following approaches to the assessment of the innovative capacity are singled out: resource-based, results-based, and process-based. In these approaches, some researchers use expert assessment methods, and other scientists use statistical, quantitative data. In our view, in most cases a mixed version should be used, as the innovative capacity assessment methods have advantages and disadvantages.

The assessment of an innovative capacity through expert assessments involves an analysis of all components of the innovative capacity. This method provides an opportunity to estimate an innovative capacity for many components and demonstrates the interconnection of all the factors of the innovative capacity, which is the undeniable dignity of this method. In our view, the main drawbacks of the expert assessment method are: the subjectivity of the indicators (it makes an influence on the result of the assessment); the difficulty in determination of the reliability of private indicators; the necessity to attract highly qualified professionals.

Methods based on the determination of coefficients are more objective and independent of subjective opinion and expert competence level. However, the lack of criteria and the innovative capacity assessment possibility only in the dynamics are drawbacks of these methods.

An innovative capacity assessment method by Trifilova A.A. makes it possible to assess financial and economic potential for an implementing of an innovative strategy. However, the drawback of this method is that it allows estimating only one component of the innovation capacity.

The identified shortcomings of the discussed methods indicate the need of development of the innovative capacity assessment. In our view the resource-based approach is the most effective approach for assessment of the innovative capacity and for choosing of the economic entity development strategy. The basis of such approach is the presenting of an economic entity potential as a complex of intellectual, infrastructural, material, financial, human resources; the sharing of which provides a synergetic effect within an economic entity and its rapid adaptation to the changing of an economic environment. The assessment of the innovative capacity is based on indicators that reflect the specific characteristics of the concrete economic entity; these indicators are compared with indicators of other economic entities. In our view, it is appropriate to distinguish three sets of development strategies for an economic entity, depending on the strategic objective: (1) outrunning growth strategies aimed at creating of innovative products and processes; (2) gradual growth strategies, based on radical and incremental innovations; (3) market retention strategies implying the market entry of improved products and technologies.

The choice of an outrunning growth strategy shows a striving of an economic entity to achieve a long-term being in leadership positions in an innovation activity. This development strategy implies a high degree of radicality of implemented innovations and significant or medium-sized innovation capacity. The lack of separate elements of innovative capacity requires a prior build-up and development. The outrunning growth strategy is risky, but it can provide a significant competitive advantage and high incomes to the economic entity. This type of the development strategy requires high skills in the development of innovations; a possibility to innovate a novation quickly; an ability to foresee market needs. It requires permanent and considerable investment in a new Research and Advanced Development. It is possible for a few economic entities in the current context of a scarcity of financial resources. Radical innovations are very irregular and a small number of economic entities have established practices for their implementation. It is advisable to choose a strategy of gradual growth in following cases: with a low innovation potential, by high degree of radicality of innovations; with an average innovation potential, by medium degree of radicality of innovations; with a significant innovation potential, by a low degree of radicality of innovations. This innovation strategy is less risky than the outrunning growth strategy, but the income level is here lower. The strategy of continuous improvement "Kaizen" is one of technologies of the "Lean

Manufacturing" concept. Many successful examples of the global market demonstrate the effectiveness of this strategy. The main idea of the lean manufacturing is a striving of a corporation to reduce processes and operations involving unnecessary costs, so-called losses.

The market retention strategy can be chosen in a case of low and medium degree of radicality of innovations with a little innovation potential.

A simulation strategy is a characteristic of a corporation which is not a leader in an innovation activity, but uses innovative products of other corporations with some improvements and upgrades. Such corporations have organizational and technological capabilities. They know market demands and often have strong market positions. Such corporations can be based on innovations developed and implemented both by large corporations and small enterprises. Often such firms are in the forefront of their industries and markets. In some cases, the simulation strategy becomes very profitable.

The licensing strategy is used when a corporation bases its innovation activity on the acquisition of licences for research, scientific and technological development. Both incomplete and completed developments are being acquired with a view to their further development and use in a realization process of its own Research and Advanced Developments. As a result, the corporation obtains its own results in a much shorter time-frame and often with less costs.

A market retention strategy implies a market entry of improved products and technologies. It is a copy-cat, protection, and borrowing strategy. The market retention strategy is characterized by medium and low risk. It has a high level of technology and production technology, high quality of output products, and relatively low production costs. It is used by firms that earn significant profits in a competitive environment.

The strategy of tags retention is used by corporations that have strong competitive positions, but for certain reasons, in some stages of their development they experience a strong and sudden onslaught of competitors and do not have the ability to invest the necessary resources in the upgrading of production and products. This technology can't be successful in a long-term development.

The strategy for supporting the product line is to drive the corporation to improve valuable for the consumer properties of traditional products (it means products without going out of date). The strategy of retro-innovations is applied to obsolete (but demand-driven and operational) products. For example, a manufacture of spare parts for complex equipment with long life. Innovations here will be aimed at the improving of the manufacturing process.

By borrowing strategy a corporation uses other innovative technologies. Such strategy takes place in a relation to both of products and production processes. If a corporation purchases a used technology, there is a danger of release of obsolete products. This strategy can be effective when the corporation lags far behind the competitors in its scientific and technical potential or enters a new business area.

In our view, the corporation should be involved in innovative projects that are of particular value to it. The value of an innovative project is determined by the extent to which the project influences the corporation's competitive advantage in the long term. Even if the corporation has the innovative potential to implement a certain innovative project, but the value of this innovative project is small, it should stop doing so and choose an outsourcing strategy for this project. The value of an innovative project is determined by the extent to which a given innovation project influences a corporation's competitive advantage in the marketplace.

In practical innovation activity, there is a combination of these types of strategies. So it is important to solve proportions, on the basis of which resources are allocated among these strategies. Thus, the success of a corporation's innovation strategy is largely determined by the leadership's ability to identify and realize an innovative potential of a corporation.

The choice and implementation of the development strategy determine activities of the economic entity in the innovative development and enable to deal more effectively with many issues related to the economic growth, to the improvement of production efficiency and competitiveness. In order to achieve strategic objectives, it is necessary to follow the development strategy of the economic entity that conforms to the innovative capacity. In a case of an innovative capacity building, the development strategy needs to be adjusted.

7. Conclusion

Thus, an analysis of the theoretical framework of innovative activity leads to some conclusions. Definition of the types of innovations that can be applied by corporations to improve production efficiency and product competitiveness requires a multi-criteria comprehensive classification of innovations. In order to understand the management of innovations and the possibility of exploring the various areas and ways in which they are used by an industrial corporation, the author proposed a generalized classification of innovations. Depending on the environment in which corporations operate, their propensity to innovate is different and manifests itself in different ways. For example, some corporations may focus their activity on the maintaining of the current level of competitiveness by implementing innovations that are largely based on the borrowing of already existing technological solutions, the aim of which is to ensure that resources are used efficiently, and the level of the use is not lower than of the main competitors. The others aspire through innovative breakthroughs to assume a monopoly position and to achieve a fundamentally higher level of efficiency and profitability in relation to their competitors.

The theoretical basis of innovations makes it possible to develop practical recommendations for active innovative activity in order to overcome the underdevelopment and to improve the competitiveness of domestic industrial corporations.

The innovative activeness of a corporation, according to the author, is determined by the ability to build and to implement innovations to ensure competitiveness in the long term. Although, in the long run, a corporation can not develop or even maintain the competitive positions in the market without innovations; the choice of innovations is made in each case by the corporation on the basis of the relative efficiency of the funds use to meet current or strategic objectives.

The experience of innovative activities of industrial corporations in the context of market relations in Russia is still insufficient. It is therefore important, at this stage, when studying the theoretical researches and using the experience of the developed market economies, to develop our own theoretical and methodological recommendations for the organization of innovative activity in a separate corporation and in the country as a whole.

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