Formation of Russian companies with competitive advantages on the basis of innovations

Formación de empresas rusas con ventajas competitivas basadas en innovaciones

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ABSTRACT:
The goal of the work was to reveal the impact of innovations, advanced manufacturing and digital technologies on the growth of industrial complex capacity, and determination of the main trends of its technological development and the formation of high-order competitive advantage. The article identifies the trends of the post-industrial methods of production and the most innovatively active companies in different sectors of the economy. A logical relationship between innovative opportunities, high-order competitive advantage, competitiveness and competitive strategies of companies is revealed.

Keywords: Competitive high-order advantage, innovative opportunities, competitive strategies.

RESUMEN:
El objetivo del trabajo fue revelar el impacto de las innovaciones, la fabricación avanzada y las tecnologías digitales en el crecimiento de la capacidad del complejo industrial, y en la determinación de las principales tendencias de su desarrollo tecnológico y en la formación de ventajas competitivas de alto orden. El artículo identifica las tendencias en los métodos de producción postindustriales y las empresas más innovadoras en diferentes sectores de la economía. Se revela una relación lógica entre oportunidades innovadoras, ventaja competitiva de alto orden, competitividad y estrategias competitivas de las empresas.

Palabras clave: Ventaja competitiva de alto orden, oportunidades innovadoras, estrategias competitivas.

1. Introduction

In modern terms of national economies increasing international competition, the determining factors of competitiveness are social, political, technological and communication aspects of the countries and regions’ development. At the level and quality of nations’ global competitiveness, most of the components are determined by the scientific and technical capacity, which is based on the economic actors propensity to carry out activities on the post-industrial method of production. The leading role at the post-industrial technological order belongs to new technologies, resources, nature of production, capital, marketing, driving forces and other elements that form competitive advantage at the micro and macro levels.

The world economy is in a state of technological transformation, characterized by, on one hand, the dynamic improvement of technological methods of production and technological structures; on the other hand, changing the functional role of technology, which assumes the character of the presenter, the basic resource of the postindustrial society; and, on the third hand, changing the society’s attitude to innovation as an objective process, not as a unique phenomenon.
Based on the essential transformation of the role of technology, the attitude of stakeholders to the formation of competitive advantage of the company is being changed. The industrial economy was dominated by natural (e.g. favorable climate) and acquired low-order competitive advantage (e.g. minimization of production costs). Under present-day society, given competitive advantages are not enough to ensure competitiveness on a global scale (Sorokin & Novikov, 2019; Veselovsky et al., 2015).

Competitive advantage based on innovation has an important difference arising from the accumulation, dissemination and effective use of knowledge, both internal and external, allowing to identify innovative opportunities at all stages of the life cycle of the company and to implement them in practice in order to ensure sustainable and long-term development and achievement of strategic goals (Solonina & Efanova, 2017; Veselovsky et al., 2015). On the basis of innovation, companies form competitive advantage of a high order. Therefore, the research of the process of achieving competitive advantages by identifying innovative opportunities of the company is of particular significance (Buckley, Clegg & Wang, 2007; Marx, Gans & Hsu, 2014).

The post-industrial technological stage of development is considered as a special technological style, characterized by certain features (Nizhegorodtsev et al., 2017). First of all, innovation is becoming a major source of competitive advantage for higher-order industrial companies. Secondly, at the macro level, the technologization of the economy creates a multiplier effect, which is expressed in the fastest and most significant increase on economic value added. Third, in a post-industrial economy, technology is shifting from a method of production to a driving factor and resource for economic growth (Veselovsky et al., 2017; Marx, Gans & Hsu, 2014). Fourth, competitive advantages are not local, but global in nature, and form the global competitiveness of companies.

Taking into consideration the above-mentioned features, a better-grounded and detailed approach to the formation of competitive advantage of Russian industrial companies is required to reveal the capacity of its competitiveness, which should be based on innovation, the use of priority trends of industrial production, and the technological development.

The aim of this work is to estimate impact of innovation on competitive advantages forming and competitiveness of manufacturing companies. The research tasks include: the study of the nature of company innovative opportunities and their impact on competitive advantages; competitiveness of the company; evolution analysis of companies competitive advantages; analysis of financial and economic indices characterizing the competitiveness of economy of Russia and different foreign countries; identifying strategic trends of competitiveness increase of Russian companies on the basis of innovation.

2. Methodology

The methodological basis of the research includes the theory of innovation and strategic management, technologization of business models. As a leading method, comparative analysis has been used in the article, allowing investigation the competitive advantage of the largest corporations in the world and Russia. Logical and historical methods of research allowed to reveal evolution of key competitive advantage of the companies. Together with the coefficient and statistical analysis the key indicators of the social-economic and innovative development of economy of the economically developed countries and Russia for 2017 were researched including the growth rate of industrial production, the level of capitalization utilization in industry, the growth rate of labor productivity, interest rates on credits, and the share of world exports and imports.

By means of the comparative analysis strengths and weaknesses of the Russian companies on innovative and technological development, in comparison with other countries, have been marked out. The structural method was used in order to identify priority economic activities for venture investment, contributing to the earlier formation of competitive advantage of industrial companies based on innovation. To estimate the effectiveness of forming competitiveness based on innovation the integral method was used. An integral index of the increment of economic value added (EVA) received during the investment activity was proposed which reflected the impact of high-order competitive advantages on the companies value.

3. Results

3.1. Formation of innovative opportunities of the Russian company

Innovative opportunities actually complement the understanding of the essence of competitive advantages from the position of strategic development of the company. The complexity of defining the term “innovation opportunities” is due to the practical lack of methodological research in this field. Opportunities are favorable circumstances that can be used to ensure the company’s advantage over
other economic entities. This is something that does not exist in the present qualitative certainty, but can arise and develop, to become a reality under certain internal and external terms (Nikiforova, 2010).

In our opinion, the concept of "innovation opportunity" is a whole set of innovation sources that can become a reality in specific internal and external terms. Innovative opportunities available to a company, subject to certain rules, can lead to the formation of competitive advantage of a high order. Innovative opportunities form the trajectory of the company's strategic development, acting as an explanation of its target settings. The company, having achieved competitive advantage, can keep them only by means of constant improvements as practically any achievement can be reproduced. Therefore, competitive advantage and its formation is a dynamic process with an upward trajectory. The source of innovation is the emergence, accumulation, use and dissemination of knowledge in the company during the course of financial and economic activities (Nikiforova, 2010).

Careful attitude to knowledge, turning it into a valuable capital, a source of added value is the starting position for the company in the development of innovative opportunities. Factors of innovative capacities of companies were systematized by the authors based on the conclusions of a number of scientists (Nikiforova, 2010; Nizhegorodtsev et al., 2017). The structure and character of formation of innovative opportunities of the company, their influence on competitive advantage, competitive ability of the company are presented in fig. 1.

**Figure 1**
Structure and nature of innovative opportunities formation and their impact on competitive advantage and competitive strategies of the company

Thus, innovative opportunities of companies influence not only the nature of the formed competitive advantage, but determine adequate competitive strategies as well. The development of innovative opportunities of companies determines the nature of high-order competitive advantage. Competitive advantage of a high order is characterized by uniqueness, that is, practical non-reproducibility in the current period of time of resources, technologies, products, specialists, connections with a high marginal cost (Veselovsky et al., 2017).

Global companies, as a rule, are most focused on competitive strategies related to leadership and large-scale offensive (Veselovsky et al., 2017). Innovative technology companies use a "challenging" strategy. Local companies are focused on the implementation of "guerrilla" strategy and differentiation
of product quality. However, all above-mentioned strategies are based on high-order competitive advantage, i.e. innovation (Rosstat, 2018; The most expensive brands of Russia. Brand Finance, 2018).

Thus, innovative opportunities have an important impact on the competitive advantages and competitive strategies of the companies. However, it’s necessary to clarify the evolution of approaches to their forming and the experience of leading companies that confirm this influence.

3.2. Evolution of competitive advantage of companies

Globalization is nothing but a way of accelerated technological development of certain countries, regions, companies through the search, selection and implementation of innovative projects. In general, post-industrial technological development is integration, taking into consideration the achievements of previous technological structures. The results of numerous researches made by various scientists (Buckley, Clegg & Wang, 2007; Porter, 1987; Rowold & Schlottz, 2009) have shown that in economically developed countries, the introduction of new information technologies gives an average of 40-50% of economic growth, capital - 35-40%%, labor - 15 - 20 %. Big data, industrial Internet, artificial intelligence, wireless communication technologies, and robotics components should be marked out as new information technologies. Capital factors remain significant in up-to-date conditions, especially advanced production technologies and technically complex innovative equipment. Among labor factors the most significant are labor productivity and employee qualifications.

Management of the competitiveness of companies is a complex and dynamic process based on the formation of internal and external institutions. Largely due to them, competitive advantage is created in the present and long-term future due to the efficient use of resources and more attractive, compared to competitors, market positioning for key stakeholders, while maintaining financial stability and positive dynamics of business value.

However, in the process of socially economic dynamics the competitive advantages of companies have been changed gradually moving from the second half of the twentieth century to the first quarter of the twenty-first century from qualitative changes based on positive returns from scale to strategic ones (competitive strategy, unique company values), then intellectual and technological (intellectual resources, advances production and digital technologies (Ivanova, 2008). The evolution of key competitive advantages of companies in the XX – XXI centuries is shown in figure 2.

Figure 2
Evolution of companies’ key competitive advantage

Source: authors

Thus, in the XXIst century, the main emphasis is placed on intellectual, digital and technological leadership, which ensures the competitive advantage of companies in the global economy.

In our opinion skillful and purposeful management of competitive advantage is a significant factor on improving financial and economic performance, increasing the market value of companies and their
The formation and development of competitive advantages of a high order plays a leading role in increasing the market value of companies, which is clearly demonstrated in Table 1 on the example of the largest corporations in the world.

<table>
<thead>
<tr>
<th>№</th>
<th>Company</th>
<th>Cost (billion $)</th>
<th>Competitive advantage</th>
<th>Competitive strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Apple inc.</td>
<td>182.8</td>
<td>The use of innovative technology and exclusive electronics design, the recognition of products worldwide.</td>
<td>Of the leader</td>
</tr>
<tr>
<td>2</td>
<td>Google</td>
<td>132.1</td>
<td>Intellectual leadership through comprehensive care of personnel (physical health, career, training, hobbies, etc.)</td>
<td>Of the leader</td>
</tr>
<tr>
<td>3</td>
<td>Microsoft</td>
<td>104.9</td>
<td>Well-known brand among buyers, low prices and availability of software package, convenient for use by any entrepreneurs, expansion in foreign markets</td>
<td>Challenging</td>
</tr>
<tr>
<td>4</td>
<td>Facebook</td>
<td>94.8</td>
<td>An enormous amount of customers (2 billion people), technological leadership.</td>
<td>Of the leader</td>
</tr>
<tr>
<td>5</td>
<td>Amazon</td>
<td>70.9</td>
<td>Client-orientation, diversification, long-term perspective orientation, information capacity</td>
<td>Of the leader</td>
</tr>
<tr>
<td>6</td>
<td>Coca-Cola</td>
<td>57.3</td>
<td>450 kinds of carbonated and non-carbonated drinks, technological leadership, innovation, geographical expansion in more than 200 countries.</td>
<td>Large-scale offensive</td>
</tr>
<tr>
<td>7</td>
<td>Samsung</td>
<td>47.6</td>
<td>Consumer confidence, technological leadership, modernization approach to management, innovative advantage.</td>
<td>Of the leader</td>
</tr>
<tr>
<td>8</td>
<td>Disney</td>
<td>47.5</td>
<td>Respectful attitude of employees to the founder of the company, its history and values; well-coordinated team of qualified employees; the formation of a base of quality products; the ability to build relationships with leading media.</td>
<td>Of the leader</td>
</tr>
<tr>
<td>9</td>
<td>Toyota</td>
<td>44.7</td>
<td>People are the main competitive advantage (staff should have such qualities as: mobility, originality, sociability, responsiveness, willingness to change, constantly improve; strong corporate culture).</td>
<td>Large-scale offensive</td>
</tr>
<tr>
<td>10</td>
<td>McDonald’s</td>
<td>41.6</td>
<td>Trust is one of the main advantages over rivals, the orientation towards natural and high-quality products, the franchise system.</td>
<td>Large-scale offensive</td>
</tr>
</tbody>
</table>

Source: compiled by the authors, according to data (FXSSI company, 2019)

Thus, in the top ten largest corporations in the world by market value of business, the leadership belongs to the United States of America. They are also represented by one Corporation from the Republic of Korea and other one from Japan. By types of activity, the leading positions are occupied by information technologies and electronics. Consequently, it is emphasized once more that the main competitive advantage in the modern world is intellectual and technological leadership. There is also a high importance of competitive advantage based on the formation of unique values of the company (innovative advantage, the breadth of the range and assortment, product quality, consumer confidence).

Russian companies lag behind the world leaders in the formation of competitive advantage and brands. In 2018, the global consulting company Brand Finance estimated the value of the most
Table 2
Estimation of the most valuable brands and competitive advantage of Russian companies

<table>
<thead>
<tr>
<th>№</th>
<th>Name of the company</th>
<th>Type of activity</th>
<th>Cost in 2018 (billion rubles)</th>
<th>Competitive advantage</th>
<th>Competitive strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sberbank</td>
<td>Financial (banking) services provision</td>
<td>670 405</td>
<td>The strongest banking brand in Russia, reliability and confidence from all categories of the population, a wide range of services, availability in each locality, high speed and convenience of money transfer.</td>
<td>Of the leader</td>
</tr>
<tr>
<td>2</td>
<td>Gasprom</td>
<td>Geological exploration, production, transportation, storage, processing and sale of gas and other hydrocarbons</td>
<td>320 844</td>
<td>Rich raw materials and production base, reliable supply, technological leadership (95% of the technologies used meet modern requirements), geographical diversification, balance between economic, environmental and social efficiency.</td>
<td>Of the leader</td>
</tr>
<tr>
<td>3</td>
<td>Lukoil</td>
<td>Oil and gas exploration and production</td>
<td>281 063</td>
<td>Own cheap raw materials, diversification, reduction of production costs through the production of standardized products and economies of scale, close business relationship with other enterprises to create entrepreneurial networks.</td>
<td>Challenging</td>
</tr>
<tr>
<td>4</td>
<td>Rosneft</td>
<td>Search and exploration of hydrocarbon deposits</td>
<td>203 869</td>
<td>The unique resource base, low operating expenditures for production, the presence of a branched infrastructure of oil products (oil depots, gas stations).</td>
<td>Challenging</td>
</tr>
<tr>
<td>5</td>
<td>RZD (Russian railways)</td>
<td>Railway transport</td>
<td>158 975</td>
<td>Innovations, introduction and use of breakthrough technologies, activities on improving the quality of service to all categories of the population.</td>
<td>Of the leader</td>
</tr>
<tr>
<td>6</td>
<td>Magnit</td>
<td>Trade</td>
<td>145 182</td>
<td>A strong brand, a wide representation in the regions, an effective logistics system, established communications with consumers, the formation of a multi-format business, a developed corporate culture, positive effects from cost optimization.</td>
<td>Differentiation of goods’ quality</td>
</tr>
<tr>
<td>7</td>
<td>VTB</td>
<td>Financial (banking) services provision</td>
<td>117 556</td>
<td>High standards of technology of the offered banking products, availability of services, accessibility of digital technologies, personal communications with clients.</td>
<td>Of the leader</td>
</tr>
<tr>
<td>8</td>
<td>MTS</td>
<td>Communicative services provision</td>
<td>114 532</td>
<td>Profitable terms of service to clients, roaming around the world, personal service, low price for the services provided.</td>
<td>Large-scale offensive</td>
</tr>
</tbody>
</table>
Thus, the highest brand among Russian companies was the Public Joint-Stock Company (PJSC) "Sberbank", which is the most reliable credit institution in the country according to the Bank of Russia. It should also be noted that the value of PJSC "Sberbank" is 2.1 times higher than the value of the brand of PJSC "Gazprom", which has taken the second place in the ranking. The difference in the value of brand between PJSC "Sberbank" and PJSC "Pyaterochka", which occupies the 10th place, was 7.3 times. This is considerably more than the ten largest corporate brands in the world.

If we characterize the competitive advantage in the retail sector, they are mostly based on the effect of scale, product quality and breadth of the range. In the fuel and energy, financial and information technology sectors, innovation and technological leadership are actively used. Not enough attention is paid by the largest Russian companies to the development of competitive advantage based on intellectual leadership.

### 3.3. Analysis of financial and economic indicators characterizing the competitiveness of the Russian economy and certain foreign countries

The competitiveness of companies, industries and national economies is determined by a sufficiently large number of factors, among which the most significant are financial and economic indicators. These include indicators of production indices, the level of capacity utilization, the rate of increase in labor productivity, and others. The analysis of financial and economic indicators in the whole economy of Russia and certain foreign countries is presented in table 3.

<table>
<thead>
<tr>
<th>Countries</th>
<th>The growth rate of industrial production.</th>
<th>The level of capacity utilization in industry</th>
<th>The rate of growth of productivity and labor</th>
<th>Share in world import</th>
<th>Share in world export</th>
<th>Rate of loans*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>2,1</td>
<td>64</td>
<td>1,5</td>
<td>1,3</td>
<td>2,1</td>
<td>12,60</td>
</tr>
<tr>
<td>Belarus</td>
<td>6,1</td>
<td>...**</td>
<td>...</td>
<td>0,2</td>
<td>0,2</td>
<td>...</td>
</tr>
<tr>
<td>Germany</td>
<td>3,0</td>
<td>87</td>
<td>0,7</td>
<td>6,6</td>
<td>8,5</td>
<td>5,85</td>
</tr>
<tr>
<td>Great Britain</td>
<td>1,0</td>
<td>83</td>
<td>0,7</td>
<td>3,5</td>
<td>2,6</td>
<td>...</td>
</tr>
<tr>
<td>India</td>
<td>4,0</td>
<td>...</td>
<td>...</td>
<td>2,6</td>
<td>2,6</td>
<td>9,68</td>
</tr>
<tr>
<td>Canada</td>
<td>4,0</td>
<td>...</td>
<td>1,1</td>
<td>2,5</td>
<td>2,5</td>
<td>2,70</td>
</tr>
<tr>
<td>Poland</td>
<td>7,0</td>
<td>...</td>
<td>3,4</td>
<td>1,3</td>
<td>1,4</td>
<td>...</td>
</tr>
<tr>
<td>USA</td>
<td>2,0</td>
<td>...</td>
<td>...</td>
<td>13,9</td>
<td>9,1</td>
<td>3,51</td>
</tr>
<tr>
<td>Finland</td>
<td>4,0</td>
<td>82</td>
<td>1,6</td>
<td>0,4</td>
<td>0,5</td>
<td>4,52</td>
</tr>
</tbody>
</table>

Source: compiled by the authors according to data (Brand Finance, 2018)
France  | 2.0 | 85 | 0.7 | 3.6 | 4.0 | 5.51
Sweden  | 4.0 | 85 | -0.1 | 0.9 | 1.0 | 2.65
Japan   | 4.0 | ... | 0.0 | 3.9 | 4.1 | 1.04

Source: compiled by the authors in accordance to Rosstat data (Russian statistical yearbook, 2018)
* According to data of 2016
** ... - No data are available

According to the results of table 3, Russia is inferior to many European countries in terms of industrial production growth, including Germany, Finland and Sweden. The level of capacity utilization in Russia is one of the lowest among European countries, it is only 64 % against 87 % in Germany, and 85 % in France and Sweden. This is an indicator of the lack of competitiveness of domestic industrial enterprises.

Share of Russia in world exports and imports is considerably lower than that of the above-mentioned countries. The situation is aggravated by high interest rates on loans, which are considerably higher than in economically developed countries. Therefore, Russian companies are in an unfavorable position to form innovative opportunities and competitive advantages based on innovation.

The material basis of companies' competitiveness is created with investments, including foreign ones. The amount of attracted foreign direct investment (FDI) is a direct factor of competitiveness of economic entities. The volume of FDI in 2017 in Russia amounted to 33.2 % in relation to Germany, 28.7 % - to the UK, 43.8 % - to France (Rosstat, 2018).

In general, Russia has considerable, underutilized traditional resources that provide opportunities to accelerate the pace of socio-economic development of the country. At the same time, most economically developed countries are more focused not on natural but acquired factors in their competitiveness, including technological resources. According to the impact on competitiveness, technologies can be classified into macro-technologies, breakthrough and critical. There are about 50 macro technologies in the world. According to six macro technologies, Russia has a higher potential than most world powers. Such macro-technologies include aviation, space, nuclear power, shipbuilding, metallurgy and power engineering (Nikiforova, 2010). Therefore, the task of Russia's industrial policy in the medium term should focus on maintaining the achieved advantage over existing positions and the development of new macro-technologies, which will bring the national economy to the world level (Nikiforova, 2010; Varian, 2000).

3.4. Strategic trends of increasing competitiveness of Russian companies on the basis of innovation

It is almost impossible for companies to solve the problem of maintaining the achieved advantage over existing positions and the development of new macro technologies alone. Therefore, it is efficient to combine them and the formation of organizational and economic forms of entrepreneurship. Alliances between industrial and scientific, educational and scientific organizations serve as forms of bridging gaps in the innovation process. An effective form of integration of research and development is an innovation cluster. Organizational and economic forms of development of strategic trends of innovative and technological development of industries and complexes are technological platforms. The organization of innovation at the "junction" of industries can also contribute to the concerns.

Close attention should be paid to the innovation and technological processes, not only by Federal, but by regional authorities as well. Therefore, at the regional level, it is efficient to create a working body in the form of a non-profit organization - the center for coordination of innovation. This center will perform the functions of forming a database, monitoring the innovativeness of the region, and preparing proposals for the use of opportunities for further development of the innovation and production sphere.

In terms of high population with low income, the solution of the technological leadership problem is only possible with the social orientation of the business, providing innovative motivation of employees and the population. The key feature of the formation of the mission of social entrepreneurship is the orientation of companies to interact with the lower part of the social pyramid, the formation of self-respect, increasing their social status from others, introducing the understanding that a cheap item does not mean sub-quality.

Traditional innovation theory often justifies the higher cost of innovation by higher production and commercialization costs than traditional goods. However, in our view, innovative products using modern advanced technologies can cost less, which increases their attractiveness for different consumer segments. In addition, the implementation of social functions provides a higher stability of
the business in the medium and long-term business, which favorably affects the financial and economic indicators of competitiveness (Rowold & Schlotz, 2009; Veselovsky et. al., 2015).

The concept of relatively low cost of innovation presented here, is based on the active introduction of digital technologies into production, distribution, exchange and consumption. In modern terms of globalization and informatization of the main business processes, many goods radically change their form from physical to electronic, on information carriers. The so-called digital goods, which exist in a digital format, are spreading and the broad masses of the population are able to use the achievements of world civilization in the form of videos, music, articles, textbooks, monographs, instructions, cartoons, or computer games.

The criterion for assessing the effectiveness of the formation of competitive advantage based on innovation should be the increment of economic added value (EVA) obtained in the course of investment activities.

\[
EVA = IC \times (ROA - WACC)
\]

Where, IC – is investment of the current year (billion rub.);
ROA – is asset rents ( %);
WACC – is the weighted average cost of capital, which in 2017 according to our calculations amounted to 5.1 % in Russia.

EVA has a cost estimate and its level is expressed in a percentage. The calculation of economic value added in key industries of Russia in 2017 is presented in table 4.

**Table 4**
Calculation of economic added value in certain sectors of the Russian manufacturing sector in 2017

<table>
<thead>
<tr>
<th>Types of activity</th>
<th>Investment (billion rub.)</th>
<th>Asset rents ( %)</th>
<th>Economic added value (billion rub.)</th>
<th>Level of economic added value (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low technology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food production</td>
<td>191,9</td>
<td>6,5</td>
<td>2,69</td>
<td>1,14</td>
</tr>
<tr>
<td>Clothes production</td>
<td>2,0</td>
<td>8,8</td>
<td>0,07</td>
<td>3,50</td>
</tr>
<tr>
<td>Production of tobacco products</td>
<td>11,0</td>
<td>11,2</td>
<td>0,67</td>
<td>6,10</td>
</tr>
<tr>
<td><strong>Medium technology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metallurgical production</td>
<td>266,4</td>
<td>10,6</td>
<td>14,65</td>
<td>5,50</td>
</tr>
<tr>
<td>Coke production</td>
<td>5,2</td>
<td>22,3</td>
<td>0,95</td>
<td>18,30</td>
</tr>
<tr>
<td>Production of chemicals</td>
<td>401,6</td>
<td>8,1</td>
<td>12,05</td>
<td>3,00</td>
</tr>
<tr>
<td>Production of electrical equipment</td>
<td>30,5</td>
<td>7,9</td>
<td>0,85</td>
<td>2,79</td>
</tr>
<tr>
<td><strong>High technology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production of medicines and materials used for medical purposes</td>
<td>31,0</td>
<td>9,0</td>
<td>1,21</td>
<td>3,90</td>
</tr>
<tr>
<td>Production of computers, electronic and optical products</td>
<td>58,9</td>
<td>5,7</td>
<td>0,35</td>
<td>0,59</td>
</tr>
</tbody>
</table>

Source: compiled by the authors according to Rosstat data (Rosstat, 2018)
The increase in economic value added in 2017 was noted only in the production of coke. In most manufacturing sectors, regardless of their technological level, there is a decrease in economic added value, which leads to a decrease in their market value. This was the result of excessively high interest rates on loans and a decrease in return on assets in conditions of unstable market economy. Regulation of this issue is largely within the competence of state authorities. Companies can only affect the profitability of their activities through the formation of competitive advantage on an innovative basis (Oplatka, 2007; Thrash, 2012). Consequently, the macroeconomic destabilizing impact reduces the ability of manufacturing companies to form competitive advantages based on innovation.

4. Conclusions

The conducted analysis made it possible to highlight the opportunities of increasing the competitiveness of production companies by developing competitive advantage on the basis of providing innovative and technological leadership. For qualitative changes in the structure of products, transition to higher technological structures of production should increase the competitive capacity of Russian companies based on the increase of social responsibility of business, distribution of digital goods, digital technologies of the first tier, and development of a corporate culture.

Key trends of the strategic approach to the management of a production company focused on innovation include:

- creating macroeconomic conditions to provide sustainable development of companies in the long-term perspectives;
- formation of organizational and economic forms of entrepreneurship, including innovation clusters and technology platforms and concerns, for the implementation of strategic tendencies of competitive advantage development based on innovation;
- use of strategic and innovative marketing, formation and bringing to developers of corporate strategy of indicators of "selling information" with emphasis on the competitive innovative advantage influencing the consumer competences realized by a wide range of consumers;
- development of digital technologies of the first tier (robotics, artificial intelligence, "smart" production);
- distribution and promotion of digital goods that form the moral foundations of social and economic activity;
- formation at the regional level of the working body - the center of innovation coordination - which will carry out functions of formation of a database, monitoring of innovativeness of the region, and the preparation of offers on use of opportunities for further development of innovative and production sphere.

Bibliographic references


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