

TEXTILE INDUSTRY: ISSUES OF MANAGING THE GROWTH OF INNOVATIVE ACTIVITY IN ENTERPRISES

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Abstract. The article analyzes the textile industry of Kazakhstan, considers its main problems and gives the main ways to increase the competitiveness of the industry by increasing the innovative activity of textile enterprises. During the research, the following problems were identified: having various opportunities for the development of the textile industry in Kazakhstan, most of the raw materials necessary for textile products are exported without processing; low coverage of textile products in the domestic market, ensuring the studied requirements mainly due to the import of textile products; low competitiveness of textile enterprises, etc. Kazakhstan is a member of the Eurasian Economic Union (EAEU), therefore, indicators of textile production in these countries were considered for comparison. This study discusses the RCA index of textiles for the EAEU member countries. Today, the EAEU includes five member states: Belarus, Kazakhstan, the Russian Federation, Armenia and the Kyrgyz Republic. The purpose of this work is to analyze the textile industry status in Kazakhstan and provide ways to increase the innovative activity of textile enterprises. The article considers: (a) the status and key problems of the textile industry in Kazakhstan, (b) the innovative activity of enterprises in Kazakhstan, (c) ways to increase the innovative activity of textile enterprises in Kazakhstan. The article presents methods for increasing the innovative activity of textile enterprises. These are: (a) transition to the production of competitive innovative textile products from domestic textile raw materials, (b) increase in the share of export-oriented products, (c) introduction of new equipment and new production methods by attracting foreign direct investment in the industry, (d) filling the deficit of specialists by attracting specialists from abroad. The implementation of these methods can have a positive impact on the development of the textile industry in Kazakhstan.

Key words: textile industry, competitiveness, export, import, innovation, innovative activity.

DOI: 10.17512/pjms.2020.21.1.22

Article history:

Received December 16, 2020; *Revised* April 12, 2020; *Accepted* April 22, 2020

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Introduction

The world experience shows that the light industry is one of the most promising sectors. In the developed and economically successful countries, the light industry is one of the leading industries, as the demand for its products is growing annually. Over the past 15 years, consumption of fabrics and clothes has grown in the EU countries by 90.5%, in the USA – by 99.3%, in Japan – by 220% (Light industry for responsible business, 2017). In China, Turkey and India the light industry has been declared a priority for the development of national economies. Most of them have developed support programs for the light industry sectors, including state support measures for producers (Antczak et al., 2019).

Although the share of the light industry in the manufacturing industry of the Republic of Kazakhstan is small, the share of the textile industry in the light industry is quite high. The state pays great attention to this area. It can be said that most of the raw materials necessary for the textile industry are produced in Kazakhstan.

The south region of the republic, in particular Turkestan region, is favorable for cotton growing, and farmers have extensive experience in this area.

On the territory of Turkestan region there are 18 cotton processing plants with a total production capacity of 800 thousand tons. But due to the crisis, in which the cotton industry has been for some years, these plants are loaded only on 26%. One of the important issues of production management is the most efficient possible use of the production capacity as the global level of the production fixed expenses depends on the unit's production capacity and their level per product unit diminishes as the degree of employment of such a capacity tends to be optimum (Man et al., 2011; Bychkova et al., 2019; Korshenkov, Ignatyev, 2020). Today, about 500 thousand inhabitants of the region are engaged in the cotton growing. Cotton production is not only an economic, but also a social issue, the well-being of these people depends on the successful solution of this issue (Galushko, 2019).

In addition, the textile industry of Kazakhstan has great potential for economic efficiency within the framework of the EAEU. This allowed to expand the access to the markets of Russian Federation, Belarus, Kyrgyz Republic and Armenia for products of Kazakhstan manufacturers.

Obviously, in order to intensify the process of expanding access for Kazakhstani products, the country must understand that the current world level of competition, the acceleration of innovations, requires a constant and full-fledged innovation process in order to conduct this type of business and succeed. Innovative activity is an important source of competitiveness, economic growth, as well as the image of each country (Janoskova & Kral, 2019), which is supported by the cognitive technologies and knowledge production (Udell et al. 2019).

Innovation is the key to the success of textile enterprises, as in other sectors of the economy.

Literature review

Research the problems and potential of innovative activity in this sector of the economy, the authors paid considerable attention to the concept of “access to new knowledge” and their importance in the production process (Kuştepli et al., 2013). Because, in the aggregate analysis «role of innovation capability to produce new product becomes crucial and important factor for sustainable marketing performance» (Mahmud et al., 2017) the authors studied the real possibilities and prospects of marketing innovations, especially to increase sales of domestic products.

The choice of the main areas of research in the article also depended on the type of economy that currently operates in Kazakhstan. Consequently, as a country with a transition economy, the authors were interested in the experience of developing the textile industry in countries in similar economic conditions (Lalic et al., 2019). «Organizational forms and strategic solutions from the textile industry, applied since 1930 up to present days, in representative countries for this sector...given the current overall situation of the textile industry, there has been set potential strategically solutions appropriate for Romania» (Dudian, 2012), this research also was significant for authors for analyzing situation in our textile industry.

The fact that innovation and a built-in innovative business model entails corporate sustainability for the organization is much noted in the article (Pedersen et al., 2016). What measures have been calculated to enhance innovation activity in the EU when: «The creation substantial instruments supporting the innovative development of this industry in the several next years The current situation of the textile and clothing industry in the European Union is still quite difficult. For the most part, it is the result of the expansive development of the Asian industry» (Stanisławski & Olczak, 2010), studied by the authors on behalf of understanding the impact of the innovation system on the corporate sustainability of enterprises.

The authors came to the importance of applying an integrated approach to all types of innovations in the article as a result of studying the article «Product, process, marketing and organizational innovation in industries of the flat knitting sector» (Ganzer et al., 2017), that is why, in the article, not one type of innovation of relevance prevails over another.

Despite all the difficulties that Kazakhstan faces in the process of intensifying and stimulating innovation in the textile industry, business structures need to strive to apply the most advanced technologies in this industry. Such as the: «an end-to-end value chain from order to delivery for the manufacturing of smart, customer-specific textile products will be set up within the factory» (Küsters et al., 2017). And in this context, the experience of a Change Management model in Romanian textile SME experience (Tudor, 2018), which was studied by the authors of this article, is very important, and in the future it can represent further research for authors.

The information component of this article includes: data from the World Development Bank, statistical indicators of the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan.

Research methodology

To achieve the goal of the article, primary and secondary data are collected. Primary data include statistics on the volume of raw materials necessary for the production of textiles and products from it in Kazakhstan, statistical data on their exports and imports, as well as survey results among textile enterprises (small, medium, large) and textile consumers. The relationship between the volume of production of textile enterprises, including the volume of innovative products and indicators of innovative activity of textile enterprises was also studied, to link industry growth and innovation activity. In addition, the export flow of textile products in the EAEU member countries was analyzed using the RCA index (Balassa, 1965). More specifically, if RCA_j^A is country A's Balassa index for industry j , this is defined as to:

$$RCA_j^A = \frac{\text{share of industry } j \text{ in country } A \text{ exports}}{\text{share of industry } j \text{ in reference country exports}}$$

If $RCA_j^A > 1$, country A is said to have a *revealed* comparative advantage in industry j , since this industry is more important for country A's exports than for the exports of the reference countries. These data made it possible to identify the state and main problems of the textile industry in the industry.

Secondary data includes articles and abstracts, a literature review, and other information published in the journals of the Web of Science and Scopus databases on the topic under study. These data became a conceptual basis for strengthening the theoretical base and indicated the need for enhanced actions aimed at widespread innovative activity on the part of textile enterprises in order to increase their competitiveness.

According to these data, the indicators of innovative activity of textile enterprises in Kazakhstan were analyzed, as a result of which their low levels were noted. The authors consider the increase in the innovative activity of textile enterprises to be the main condition for the development of the textile industry in the country. To this end, it should be noted that product innovations, process innovations, marketing innovations and organizational innovations mentioned in the Oslo Manual (OECD, 2005) should be introduced into the activities of textile enterprises in Kazakhstan. It is worth noting that the textile industry is an sphere designed to implement almost all of the above innovations.

As a result of the research, the main directions for improving the innovative activity of textile enterprises were proposed taking into account the specifics of the textile industry and the geographical location of Kazakhstan.

The analysis was based on the textile industry indicators for 2011-2017 years.

Results

The status and main problems of the textile industry in Kazakhstan

Although Kazakhstan has ample opportunities, its share in the production of textile and textile products in the EAEU member states is rather low. In recent years, the volume of production of textile and textile products in the EAEU countries has increased, for example, in 2017 – by 7450,6 million US dollars, in 2018 this figure increased by 9,8% to 8182,8 million US dollars (EAEU statistics). If look at the volume of textile products produced by the member states by 2017, 74.4% is Russian Federation, 20.3% is Belarus, 3.7% is Kazakhstan, 1.1% is Kyrgyz Republic and 0.5% is Armenia.

The Customs Union of Kazakhstan, the Russian Federation and Belarus established in 2010 was one of the most recent examples of modern regional integration in the Eurasian continent. It was replaced by the EAEU as of January 1, 2015. Armenia and the Kyrgyz Republic joined the EAEU immediately after its creation. If the volume of production of textiles and textile products in the EAEU member States is envisaged from 2014 to 2017, the volume of production in Armenia increases annually. In other member States of the EAEU, production declined in 2015-2016, and in 2017, these countries experienced significant growth, but did not reach the level of 2014 (Table 1).

Table 1: Textile and textile products production in the EAEU member states by 2014-2017 year (million US dollars)

№	Member States in the EAEU	2014	2015	2016	2017
1	Armenia	18.9	21.0	25.0	36.2
2	Belarus	1940.9	1270.1	1237.9	1515.5
3	Kazakhstan	333.1	291.4	208.8	272.6
4	Kyrgyz Republic	98.5	68.7	63.4	84.1
5	Russian Federation	6402.9	4466.1	5149.2	5542.2
	Total	8794.3	6117.3	6684.3	7450.6

Source: Prepared by the Authors based on data www.eurasiancommission.org

In Table 1, Kazakhstan ranks third after the Russian Federation and Belarus in the production of textiles and textile products between the EAEU member States. However, given the geographical location of Kazakhstan, the population and the possibility of increasing the production of textiles and textile products, we believe that the volume of its production in comparison with Belarus is very small.

According to the statistics, the number of enterprises manufacturing permanent textile products in Kazakhstan is 298 in 2017, of which 94.3% are small, 3.7% are medium and 2% are large enterprises (SCMNE of the Republic of Kazakhstan).

Despite the fact that there are about 300 textile enterprises in Kazakhstan, most of the domestic raw materials necessary for production of textile products in the country are exported to foreign countries without processing. Cotton in Kazakhstan is mainly exported abroad. The problem now is to load and organize these enterprises for production of fabrics. Kazakhstani enterprises process 15 percent of cotton fiber at home, and export 85 percent of it. This indicates that most of the cotton products are exported in the form of raw materials, i.e. in the form of goods with low added value.

Considering the main indicators of the cotton industry for the period of 2011-2017 years, which occupy an important place in the composition of raw materials for the textile industry of the Republic of Kazakhstan, it can be noted that most of the cotton fiber produced is exported to the near and far abroad countries (Kazakh Cotton Association). The republic exported 34.2% of the cotton fiber produced in 2011, 93.8% in 2013, 76.8% in 2015, 96.2% in 2016, 88.3% in 2017.

Basically, the exporting countries of cotton fiber in Kazakhstan include such countries as Latvia, China, Turkey, Russia, Belarus, Moldova, Kyrgyzstan, Germany, Ukraine. In 2017, the share of exported fiber by countries: Latvia (54.7%), Moldova (20.3%), Russia (10.5%), Belarus (4.8%), China (4.5%), Turkey (4.2%) and other countries (1.0%).

The next type of raw material necessary for production of textile products is wool production. In Kazakhstan, 38.5 thousand tons were produced in 2011, 38.0 thousand tons in 2015, and in 2017 – 39.0 thousand tons of wool. It is worth noting that now in Kazakhstan, deep processing of wool and production of finished products from it are not sufficiently developed. Therefore, today wool is also exported to foreign countries in the form of raw materials. As for the export of wool in Kazakhstan in 2017, most of it falls to China, i.e. 94.8% - to China, 4.7% - to Russia and 0.5% - to other countries.

Considering textile and textile products export and import dynamics in the Republic of Kazakhstan, it is clear that the volume of import is much higher than that of export (Figure 1).

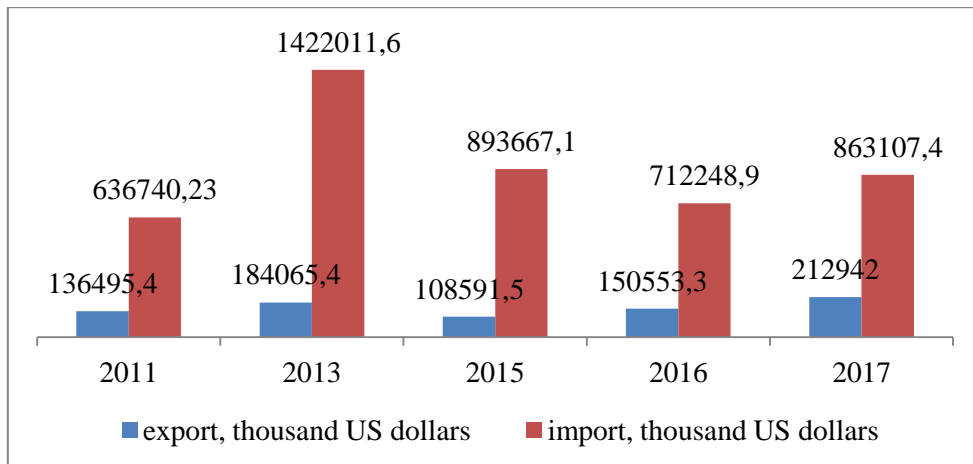


Figure 1: Dynamics of export and import of textile and textile products of the Republic of Kazakhstan

Source: www.stat.gov.kz

During the analysis period, significant changes were observed in the export of textile products. Compared to 2011, the volume of export increased in 2013 – by 34.8%, in 2015 – by 20.5%, in 2016 – by 10.3%, in 2017 – by 56%. As for the import of textile products, compared with 2011, the volume of import of textile products increased in 2013 – by 2.2 times, in 2015 – by 40.3%, in 2016 – by 11.8%, in 2017 – by 35.5%.

One of the main reasons for the multiple excess of textile products' import over export is that for export goods with primary processing are produced, and for import goods that are mainly intended for production of finished products.

In 2017, the volume of import of textile products is 4 times higher than that of export. This indicates a crisis in the foreign trade of textile products, which is still at a high level of import dependence.

If we consider the export of textile and textile products of the EAEU member countries, Belarus has a high export volume (Figure 2).

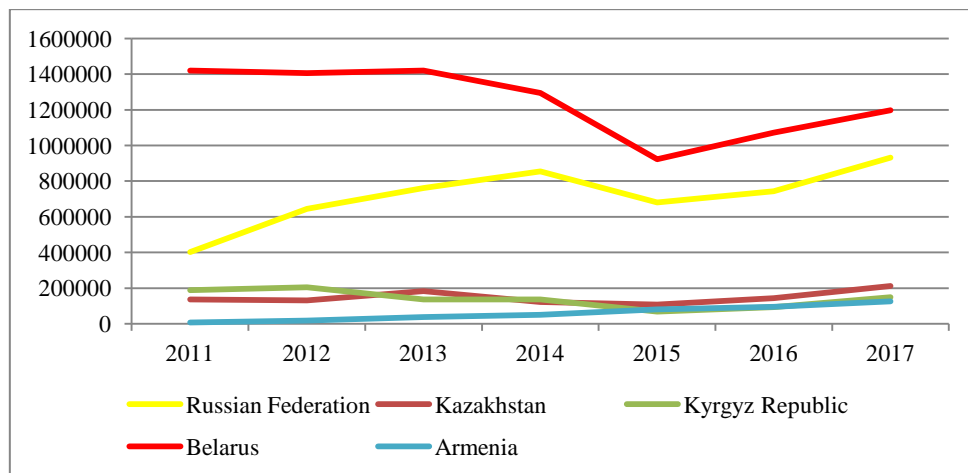


Figure 2: Export of textile and textile products of EAEU member states (in thousands of US dollars)

Source: Prepared by the Authors based on data <https://wits.worldbank.org>

In Figure 2, the volume of exports of textile and textile products in Kazakhstan compared to the EAEU member countries in 2011-2017 takes place after Belarus and Russia, but is higher than in the Kyrgyz Republic and Armenia.

And now, given the volume of exports of textile and textile products of these EAEU member countries, we calculated the RCA index (Balassa Index). You can see the following result (Table 2).

Table 2: RCA Index on Textile and Textile Products of EAEU Member States

	2011	2013	2015	2016	2017
Belarus	0,42	1,45	0,98	1,2	1,1
Kyrgyz Republic	6,58	2,58	1,46	1,32	1,48
Armenia	1,1	1,33	1,59	1,92	2,36
Russian Federation	0,03	0,04	0,05	0,07	0,06
Kazakhstan	0,03	0,06	0,06	0,11	0,1

Source: <https://wits.worldbank.org>

From the data in Table 2, $RCA > 1$ for textile and textile products in Belarus, Armenia and the Kyrgyz Republic shows that these states have relative advantages in the production of this type of product. And in Kazakhstan and Russian Federation, the $RCA < 1$ shows that the identified comparative advantages do not exist.

Therefore, it is necessary to implement measures to achieve a level that has a competitive advantage in the production of textile and textile products in Kazakhstan.

The textile industry of our country covers only 10% of the domestic market. The rest of the volume required by the country is imported. It is worth noting that for the economic security of the country 30% of our own goods must be produced (SCMNE of the Republic of Kazakhstan).

The specifics of the textile industry is technologically closely related to agricultural sector and chemical industry. The textile industry development has a significant impact on restoration and development of the most important areas of agricultural production. In general, to improve competitiveness in this area, a comprehensive solution to emerging problems is necessary. Therefore, clusters widely used in the world practice play an important role in increasing the textile industry competitiveness. The cluster model should be considered as one of the directions of innovative development of textile enterprises, contributing to long-term sustainable relations between suppliers of raw cotton, cotton processing enterprises and sellers of finished textile products (Tulemetova et al., 2018). For this purpose, "Ontustik" special economic zone has been created and is functioning. "Ontustik" special economic zone is focused on specific areas. One of its main goals is the integrated development of high-tech cotton processing, industrial textile and clothing production.

Despite the active support from the state, the competitiveness of domestic textile enterprises remains low, since they do not show progressive development. The volume of production of manufactured textile products, the share in total volume of industrial production is very low, i.e. 0.2% remain unchanged in 2011-2017 years (SCMNE of the Republic of Kazakhstan).

During the research, main problems specific to this industry were identified as a result of a survey at textile enterprises and domestic consumers of textile products:

- low level of technical equipment of enterprises;
- significant depreciation of fixed assets and low level of competitiveness of products;
- low interest in the industry from domestic entrepreneurs and lack of investment;
- low labor productivity, low digitalization due to the large amount of manual work in enterprises;
- underdevelopment of marketing in the industry;
- lack of qualified human resources due to adverse working conditions;
- low wages of workers employed in the industry;
- low price of imported products compared to domestic products;
- absence of tax and customs benefits for enterprises in the industry compared with neighboring states;
- lack of deep processing of raw materials necessary for textile production;
- high share of export of goods with low added value;
- lack of R&D in enterprises;
- actual absence of domestic brands.

Indicators of the innovative activity in Kazakhstan enterprises

According to the OECD Oslo Manual Guidelines for collecting and interpreting innovation data an innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations (OECD, 2005).

Kazakhstan took the 48th place in the annual Bloomberg Innovation Index in 2017 (The Bloomberg Innovation Index, 2017). Currently, many countries are choosing the innovative path of economic development. Because the competitive advantage of a country or region as a whole occurs in its innovative activity. Without introducing new products or modifying production processes, the organization is not able to survive regardless of whether it is a company, association, or a municipality (Gorzelany-Dziadkowiec et al., 2019).

Sustainable economic development is conditioned by innovative activities (Mikalauskiene & Atkociuniene, 2019). The innovative activity will provide a competitive advantage not only at the macro level, but also at the micro level. Successful innovation introduced brings high profits to the enterprise and makes it possible to become a leader in its segment. The modern period of industrial development of the Republic of Kazakhstan in the conditions of competition and sustainable development requires innovative activity (Grabara et al., 2019).

According to the Oslo Manual Guidelines, during a given period, a firm's innovative activity may be of three kinds:

- Successful in having resulted in the implementation of a new innovation (though not necessarily commercially successful);
- Ongoing, work in progress, which has not yet resulted in the implementation of an innovation;
- Abandoned before the implementation of an innovation (OECD, 2005).

According to the data of 2014 year, in the EU countries, the innovative activity of enterprises averaged 48.9%, in Germany – 66.9%, Italy – 56.1%, France – 53.4%, Great Britain – 50.3%, Poland – 23% (Kamensky, 2016).

Today, the Republic of Kazakhstan has low innovative activity of enterprises. If consider the innovative activity of the textile industry enterprises, then from 2011 to 2016 we observe that its share in the republic as a whole is above the average level, and in 2017 decreased significantly (Table 3).

Table 3: Volume indicators of textile products (excluding clothing), innovative products and innovative activity of textile enterprises of the Republic of Kazakhstan

	2011	2013	2015	2016	2017
Volume of textile products (excluding clothing), million US dollars	123.3	207.6	155.3	114.8	154.5

Volume of sold innovative products, million US dollars	4.13	20.40	16.61	14.05	4.90
Share of innovative products in total volume of textile products, %	3.3	9.8	10.6	12.2	3.2
Innovative activity of textile enterprises, %	8.4	13.3	9.9	9.9	7.5

Source: www.stat.gov.kz

Table 3 shows the volume of textile products (excluding clothing) produced in the Republic of Kazakhstan for 2011-2017, including the volume of innovative products and indicators of innovative activity of textile enterprises. We analyzed these indicators in 3 stages: 2011-2013, 2013-2016 and 2016-2017.

From 2011 to 2013: textile production in 2011 amounted to 123,3 million dollars, in 2013 it amounted to 207.6 million dollars, i.e. increased by 68,4%. Innovative products in 2011 amounted to 4.13 million dollars, in 2013 it amounted to 20.40 million dollars, i.e. increased by 5 times. The innovative activity of textile enterprises in 2011 amounted to 8.4%, in 2016 - 13.3%, i.e. increase.

From 2013 to 2016: the production of textiles in 2013 amounted to \$ 207.6 million, in 2016 it amounted to \$ 114.8 million, i.e. decreased by 44.7%. Innovative products in 2013 amounted to 20.40 million dollars, in 2016 it amounted to 14.05 million dollars, i.e. decreased by 31.1%. The innovative activity of textile enterprises in 2013 amounted to 13.3%, in 2016 - 9.9%, i.e. that is, a decrease.

From 2016 to 2017: the production of textiles in 2016 amounted to 114.8 million dollars, in 2017 it amounted to 154.5 million dollars, an increase of 34.5%. Innovative products in 2016 amounted to 14.05 million dollars, in 2017 it amounted to 4.90 million dollars, i.e. decreased by 65.1 %. The innovative activity of textile enterprises in 2016 amounted to 9.9%, in 2017 - 7.5%, i.e. decline.

The analysis shows that in the first period from 2011 to 2013 there was an increase in all three indicators. At the second stage, from 2013 to 2016, there was a decrease in all three indicators. At the third stage, from 2016 to 2017, the volume of textile products increased, but the volume of both innovative products and innovative activity of textile enterprises decreased.

Thus, the analysis shows that there is no direct link between the total volume of textile products and the volume of innovative products, indicators of innovative activity of enterprises. However, the analysis shows that there is a direct relationship between the indicator of innovative activity of textile enterprises and the volume of innovative products produced.

However, in our opinion, there are several main reasons for the decline in the innovative activity of textile enterprises in recent years in Kazakhstan. Firstly, due to financial difficulties in recent years, several enterprises in this sector have ceased operations, and most enterprises in the industry are small enterprises. As

noted above, according to statistics, in Kazakhstan the number of stably operating enterprises for the production of textile products is about 300, of which 94.3% are small, 3.7% are medium and 2% are large. It is known that the introduction of innovation in the enterprise requires a lot of money and high risk. And small enterprises have limited financial resources, and most of them are not at risk. Compared to large enterprises, small and medium-sized enterprises have limited opportunities, such as limited material, financial, informational, human and managerial resources, low negotiation capacity, high interest rates, etc. (Tudor, 2018). Secondly, in recent years, neighboring countries have begun to provide more textile and customs benefits to textile enterprises, and the prices of imported goods imported into the country in various ways are low, and the cost of domestic-made textile products is higher than theirs. This reduces the interest of domestic entrepreneurs in innovation in the industry, i.e. to invest. Thirdly, the textile industry lacks qualified personnel due to unfavorable working conditions and low wages.

Increasing the innovative activity of the textile enterprises as the basis for the industry development

In the context of transition of the Republic of Kazakhstan to the innovative path of economic development, it is important to increase the innovative activity of the country's textile enterprises.

The organisation of single innovation processes impacts on the innovation performance of the whole company (Szutowski et al., 2019; Wierzbicki and Nowodziński, 2019). The Oslo Manual Guidelines distinguishes 4 types of innovations: product innovations, process innovations, marketing innovations and organizational innovations (OECD, 2005). These types of innovations are divided into technological (product innovations and process innovations) and non-technological (marketing innovations and organizational innovations) innovations. It should be noted that the textile industry is a field for implementation of almost all of the above types of innovations (Ivanitskaya, 2014).

The innovative activity of the textile industry enterprises is understood as the product, process, marketing, organizational innovations aimed at developing and introducing new products and processes, new methods of promoting and marketing products to the market and changes in its organizational experience and structure.

The product innovation is introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses (OECD, 2005). This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics (OECD, 2005).

Today, attention is paid to the development of smart fabric production in the military, sports, and medical fields. This is why it is expected a significant growth on the global smart textile, like military smart textile that include GPS and wireless weapons, architectural smart textile that generate energy, sports smart textile that

monitor speed, distance and pulse rate, fashion smart textile that emit lights, medical smart textile that monitor health conditions, etc. (Tudor, 2018).

The product innovations include new solutions for finished products and for raw materials and semi-finished products. Today, the largest share in the production of the world textile fibers is made up of synthetic fibers consisting of polyesters. The study of the share of various materials in the global production of textile fibers in 2015 shows the following: wool – 1.3%; polypropylene – 4%; cellulose – 6%; cotton – 27%; acryl– 2%; nylon – 4.7%; polyester – 55% (Preferred Fiber Market Report, 2016). The use of breathable fabrics in clothing production is an example of the product innovation involving the use of new materials that improve the performance of the product (OECD, 2005).

With the use of cotton fibers produced in Kazakhstan, it is necessary to develop the production of breathable mixed fabrics that meet international standards, with a low price on the market, since the cost of textile products containing 100% cotton will be higher. To this end, domestic textile enterprises should be interested in the development of innovative activities and attach great importance to R&D. Unfortunately, research works are not carried out at domestic textile enterprises for the financing of which no funds are allocated; there are practically no special laboratories. In the EU countries, 85% of textile enterprises invest in innovations, of which over 90% in Germany and Italy, and 50% in Poland (Stanislawski & Olczak, 2010).

The process innovation is the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software (OECD, 2005).

Given the specifics of enterprises in the textile industry, to increase their innovative activity, great attention should be paid to providing the enterprise with modern machinery and equipment. Latest techniques in production and services increase efficiency and effectiveness, which shows a significant effect on organisational performance (Ślusarczyk et al., 2019; Batkovskiy et al., 2019). Today, products manufactured using modern equipment are in high demand for quality and have a minimum amount of production waste, which contributes to the production of competitive products with high added value. In the textile industry, the introduction of new materials and fabrics, new technical and technological solutions in the design of patterns, cutting of materials, new technologies for joining materials, molding and finishing are accepted. The introduction of the process innovation increases the demand for products and increases production.

Undoubtedly, the limited financial resources for the introduction of new equipment and machinery at textile enterprises create certain difficulties. To solve this problem, it is necessary to consider the possibility of attracting direct investments from abroad and opening joint textile enterprises, taking into account the availability of large raw materials necessary for the production of domestic textile products and the proximity of the potential cotton producer in Uzbekistan,

Tajikistan and Turkmenistan, as well as the favorable climate for foreign investment by the state in Kazakhstan today.

In Kazakhstan, there are various ways of transporting finished textile products, including the possibility of quick delivery, due to its location in the center of the transport corridor Western China – Western Europe.

The marketing innovation is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing (OECD, 2005).

Today, to increase sales of domestic textile products in the domestic and foreign markets, the use of new marketing methods is required. It is necessary to convey to consumers the advantages of textile products from domestic natural raw materials than imported products. Therefore, domestic textile enterprises need to develop the marketing innovative strategy. As part of the development of the marketing innovative strategy, it is necessary to pay special attention to the use of the pricing process, packaging, distribution channels, advertising, and new ways of communicating with consumers. The role of innovation capability to produce new product becomes crucial and important factor for sustainable marketing performance (Mahmud et al., 2017).

The organizational innovation is the implementation of a new organizational method in a firm's business practices, workplace organization or external relations (OECD, 2005).

In the business practice of domestic textile enterprises, it is necessary to introduce a new organizational method. Today in the country due to the lack of qualified specialists, it is necessary to attract qualified, professional specialists from abroad and also to draw on their experience to local specialists (Stachová et al. 2019). Another important challenge for the organisations is to prepare the staff according to the situation (Ślusarczyk & Haque, 2019). This, in turn, will facilitate the organization of jobs and the introduction of new organizational methods in external relations in order to reflect on different market and social changes (Kliestik et al., 2018).

Most of the research focus on the technological innovations in manufacturing companies, while non-technological innovations are being neglected (Lalic et al., 2019). This indicates the need to focus on both technological innovations and marketing and organizational innovations in increasing the innovative activity of textile enterprises.

In this matter, it is always worth remembering one important point at which innovative entrepreneurship of the textile industry can be built: “all innovations start with details and locally” (Kulekeeva, 2012). This (main) principle will allow, according to the authors, over time, to effectively build on the whole innovative entrepreneurship of the textile industry.

Given all the positive aspects in the development of the state infrastructure for innovative entrepreneurship in Kazakhstan, it is necessary to really look at events.

Namely, to recognize the fact that Kazakhstan is not yet ready to organize a competitive, full-scale, innovative development in a large business sector of the economy. This requires titanic efforts, both moral, economic, labor, and financial. The attainable path to this ambitious goal, still a fairly young state, is seen by us from small steps. Namely, with innovations in small and medium businesses and in the field, i.e. at the local level. This is the natural path of any evolutionary process, i.e. all changes begin with small steps and on a small scale, then it gradually grows from district to area, to region, to the territory of the republic. A small enterprise will revive the idea, whether in the service and / or production sector, turn it into reality, satisfy the needs of the client positively – by this chain reaction will pass to the medium business, and ultimately will be implemented in large business entities of the country.

Failing to recognize this natural process, and violently trying to introduce active innovative development immediately into large areas of services and production, completely ignoring small achievements of small and medium businesses, the country risks, in our opinion, an anguish in labor, financial, and investment potentials. Therefore, it is so important to focus on small (sometimes gradual) variable components. In the field of the textile industry, it makes sense to create and continuously operate an innovative company in the textile industry with the work of all innovations together (product, process, innovative, marketing). Further, the process of “dissemination” of innovative trends sooner or later (sooner rather, given the development of the information space: Internet, social networks, etc.) will cover the entire textile industry of the country.

Textile products are the second most necessary product in the population after food. Therefore, continuous improvement of the production of this type of product should be the task of each company in this area. Since market trends in this area are constantly changing. At a time when such competition is in full swing, the company must be innovative in order to maintain its market position and succeed. Previous studies have shown that in the next few years it is necessary to create important tools to support the innovative development of the industry (Stanislawski & Olczak, 2010), as well as textile companies should ensure the introduction and effective implementation of Industry 4.0 technologies, which makes the main contribution to improving their productivity (Ślusarczyk et al., 2019; Chmielarza, 2019), all companies in the textile industry, regardless of size, must have the same strong, innovative, strategic management as change management in order to succeed in the ever-changing environment in this competitive market (Tudor, 2018). In this study, the authors focused on an integrated approach to innovation in the field of textile production.

Conclusion

The development of the textile industry in Kazakhstan has great prospects. Because the country has enough raw materials for textile production. This study

recommended that this business representatives should focus on improving the process of this raw material as a finished product. Therefore, given the high competition in this area, it is necessary to look for ways to increase the competitiveness of domestic textile enterprises. To do this, managers of textile enterprises need, first of all, to effectively manage the innovative activity of textile enterprises. Therefore, domestic textile enterprises should pay more attention to the introduction of the latest innovations in the industry in the production process, to invest in R&D, testly collaborating with research organizations and actively using research development. This will increase the innovative activity of the enterprise. This study has many limitations such as only one factor used in the study the analysis of level of innovative activity development in textile industry and future researchers may include more factors that affect the innovative activity of textile enterprises (search for financial resources, state support, international and research collaboration etc.). In addition, future researches could consider indicators that determine the innovative activity of textile enterprises and such study could take innovative activity not as mediation (like this), but use it as moderator.

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PRZEMYSŁ TEKSTYLNY: KWESTIE ZARZĄDZANIA WZROSTEM DZIAŁALNOŚCI INNOWACYJNEJ W PRZEDSIĘBIORSTWACH

Streszczenie: Artykuł analizuje przemysł tekstylny Kazachstanu, rozważa jego główne problemy i podaje główne sposoby na zwiększenie konkurencyjności przemysłu poprzez zwiększenie innowacyjnej działalności przedsiębiorstw tekstylnych. W trakcie badań zidentyfikowano następujące problemy: posiadające różne możliwości rozwoju w przemyśle tekstylnym w Kazachstanie większość surowców niezbędnych do produkcji wyrobów włókienniczych jest wywożona bez przetworzenia; niskie pokrycie wyrobów włókienniczych na rynku krajowym, zapewniając badane wymagania głównie ze względu na import wyrobów włókienniczych; niska konkurencyjność przedsiębiorstw tekstylnych itp. Kazachstan jest członkiem Eurazjatyckiej Unii Gospodarczej (EAEU), w związku z czym wzięto pod uwagę wskaźniki produkcji tekstylnej w tych krajach. W tym badaniu

omówiono wskaźnik RCA tekstyliów dla krajów członkowskich EAEU. Dziś EAEU obejmuje pięć państw członkowskich: Białoruś, Kazachstan, Federację Rosyjską, Armenię i Republikę Kirgiską. Celem tej pracy jest analiza statusu przemysłu tekstylnego w Kazachstanie i zapewnienie sposobów na zwiększenie innowacyjnej działalności przedsiębiorstw tekstylnych. Artykuł rozważa: (a) status i kluczowe problemy przemysłu włókienniczego w Kazachstanie, (b) działalność innowacyjną przedsiębiorstw w Kazachstanie, (c) sposoby zwiększenia działalności innowacyjnej przedsiębiorstw tekstylnych w Kazachstanie. W artykule przedstawiono metody zwiększenia innowacyjnej działalności przedsiębiorstw tekstylnych. Są to: (a) przejście do produkcji konkurencyjnych innowacyjnych wyrobów włókienniczych z krajowych surowców tekstylnych, (b) wzrost udziału produktów zorientowanych na eksport, (c) wprowadzenie nowego sprzętu i nowych metod produkcji poprzez przyciągnięcie bezpośrednich inwestycji zagranicznych w branży, (d) wypełnienie deficytu specjalistów poprzez przyciągnięcie specjalistów z zagranicy. Wdrożenie tych metod może mieć pozytywny wpływ na rozwój przemysłu tekstylnego w Kazachstanie.

Słowa kluczowe: przemysł tekstylny, konkurencyjność, eksport, import, innowacje, działalność innowacyjna.

紡織工業:管理企業創新活動增長的問題

抽象。本文分析了哈薩克斯坦的紡織業，考慮了其重要問題，並提出了通過增加紡織企業的創新活動來提高紡織業競爭力的主要途徑。在研究過程中，確定了以下問題：具有各種發展機會在哈薩克斯坦的紡織工業中，紡織產品所需的大多數原材料未經加工就出口了；國內市場紡織產品覆蓋率低，主要是由於進口紡織產品，確保了研究要求；哈薩克斯坦是歐亞經濟聯盟(EAEU)的成員，因此，考慮將這些國家的紡織品生產指標進行比較。這項研究討論了EAEU成員國的紡織品RCA指數。今天，EAEU包括五個成員國：白俄羅斯，哈薩克斯坦，俄羅斯聯邦，亞美尼亞和吉爾吉斯共和國。這項工作的目的是分析哈薩克斯坦紡織工業的現狀，並提供增加紡織企業創新活動的途徑。該文章認為：(a)哈薩克斯坦紡織工業的現狀和關鍵問題；(b)哈薩克斯坦企業的創新活動；(c)增加哈薩克斯坦紡織企業創新活動的方法。本文提出了提高紡織企業創新活動的方法。它們是：(a)從國內紡織品原料向競爭性創新紡織品產品的生產過渡；(b)出口產品份額的增加；(c)通過吸引外國直接投資引進新設備和新生產方法(d)通過吸引國外專家來填補專家的短缺。這些方法的實施可以對哈薩克斯坦紡織工業的發展產生積極影響。

關鍵詞:紡織工業競爭力，出口，進口，創新，創新活動。