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almira.askarbek@yandex.ru**FACTORS OF DEVELOPMENT OF INNOVATIVE ACTIVITY
AT THE FOOD INDUSTRY ENTERPRISES**

Abstract. The food industry is a strategically important sector of the national economy, so the development and implementation of innovative technologies in the food industry is sufficient interest. Innovation in the food industry should be focused primarily on issues such as improving the quality and safety of food, including products of socially significant and essential goods [1].

The processes of formation and the application of innovation in the food industry have their own characteristics. In the article, an author identifies the main factors of development of innovative activities at the food industry. These factors were considered within the framework of the process and resource approaches. According to the author for the revitalization of the food sector in the innovation sphere it is necessary to create networks and network organizations to support communication between enterprises in the sector. Moreover, to improve the innovation activity of food industry enterprises the main measures were proposed.

Key words: innovation, innovation activity, food industry.

Introduction

In today's unstable business environment, it is very important for the food industry to meet new market trends that require from enterprises of the sector, technical and economic changes. It has a significant impact on enterprises throughout the food production chain: consumer - trade - food product manufacturing - production of raw materials. Innovations are certainly a major factor of success for solving these problems. The ability to meet or exceed quality standards through innovative development can attract more customers by gaining trust and protecting their interests. Furthermore, it can help businesses to compete when they enters unfamiliar and risky new markets. For this reason, it is very important to determine the main factors of the development of innovation activities in the food industry.

The problem of food security is one of the fundamental strategic problems that must be solved to ensure stability in the state. Despite the fact that the approach to its solution in different states has its own national peculiarities, there is a general provision on supporting and ensuring the necessary level of food supply of the population in amounts that guarantee sustainable economic development and socio-political stability in society [2].

Results and discussion

The complexity, diversity and inconsistency of modern sociopolitical and economic transformations in society, their novelty and dynamism in the conditions of market transformation, acutely raise the question of maximizing the ability of using the scientific and technical potential of food production industries in the recovering and developing the real economy and giving it an innovative character.

The complexity, diversity and inconsistency of modern sociopolitical and economic transformations in society, their novelty and dynamism in the conditions of market transformation, acutely raise the question of maximizing the ability of using the scientific and technical potential of food production industries in the recovering and developing the real economy and giving it an innovative character.

The main role is played by science as a generator of the scientific and technical development of the food industry, which providing constant technical-technological and socio-economic renewal of the food production industries.

Innovative activities in the food industry require a qualitatively new approach. Instead of being a single act of introducing any innovation, it should be a strategically oriented system of measures for the development, implementation, mastering, production, commercialization and analysis of the effective innovations.

The following directions should be included to the main areas of innovation in the food industry [3]:

- technological;
- assortment (production of the new food products);
- marketing;
- innovation infrastructure

Technological innovations in the food industry are directed to:

- develop storage technologies for agricultural products that serving as the raw materials for food production, which allows to increase the shelf life without loss of quality;
- use of resource-saving technologies based on modern processing methods, characterized by the most useful yield and minimum waste;
- improve technological processes in order to reduce time of the production cycle without loss of product quality;
- develop and implement its own packaging lines that meet the specific of the manufactured products;
- improve of tare, packing and transportation methods.

The main features of assortment innovations in the food industry organizations are:

- development and production of environmentally friendly products of mass consumption: production of products for therapeutic and prophylactic purposes, taking into account modern medical and biological requirements to improve the structure of nutrition of the population;
- product development for children and special population groups;
- enhancing product quality, certification and standardization of products.

Innovation activities also include marketing research of sales markets and the search for new consumers, search and information about the possible competitive environment and consumer properties of goods of competing firms, search for partners in the implementation and financing of the innovation project.

Innovation infrastructure includes organizations, firms, associations, covering the entire cycle of innovation, from the generation of new scientific and technical ideas and their development to the production and sale of high-tech products.

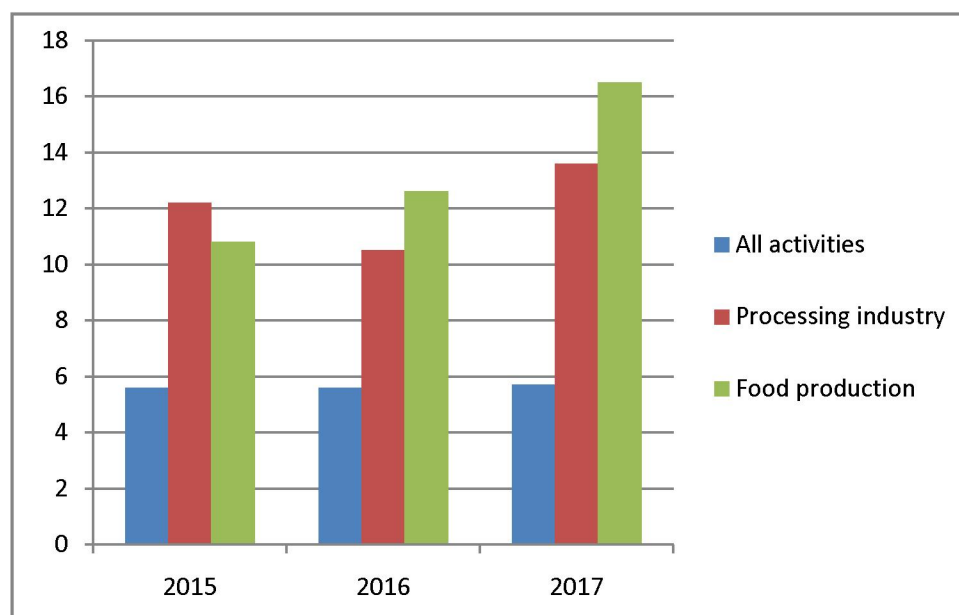


Figure 1 –Innovation activity of food production enterprises in the Republic of Kazakhstan for the period of 2015-2017

The structure of indicators of innovative activity of the enterprise includes human resources, costs of innovation and financial support of innovation, the results of innovation in the form of output of innovative products and services. In the Figure 1, we have shown the changes of the level of innovation activity of food production enterprises in the Republic of Kazakhstan for the period of 2015-2017 [4].

In terms of the innovation activity level of enterprises producing food products in Kazakhstan, it can be noted that this indicator increased by 1.5% in 2017 compared to the level of 2013, and is 16.5%. In addition, it should be mentioned that in comparison with all the activities in the country and the processing industry, the activity in the field of innovation in a food production company is much higher.

In the most general form, the factors of development of innovation in an industrial enterprise can be considered in the framework of the process and resource approaches [3].

Within the process approach, it considers a part of the economic system of an enterprise (including its processing system), at the input of which is processes, and the output is the process component of the finished product of work performed, services rendered, which is a combination of process costs and profits, formed by processes.

Also, the resource approach to the development of innovative activity considers that part of the economic system of an enterprise (including its processing system), at the input of which are used resources, and the output is the resource component of the finished product of work performed, services rendered, which is a combination of process costs and profits, formed by processes.

Within the framework of the process-resource approach, solving problems of effective innovation management at an industrial enterprise goes back to analyzing the process and resource factors (marketing, organizational, economic, social, technological, financial, as well as factors associated with government regulation of business activities), either directly or indirectly determining the competitiveness of products manufactured by the enterprise.

Introduction of innovation is related to ensuring their competitiveness, which is an important aspect for any business.

Before making a decision on the development of activities related to innovation, it is necessary to thoroughly examine the company, as well as its main players (competitors) [5].

Marketing factors are one of the important parameters in the planning of the implementation of innovative products, in particular, market size, since reassessing the parameters of demand for products can lead to unprofitability of production, since the share of fixed costs in the cost structure is reduced only with an increase in production.

The influence of organizational factors in the initiation of innovation is also plays a crucial role. These factors are: the desire for simple technological solutions, the rejection of hard work, and low wages of highly qualified specialists lead to a decrease in the competitiveness of industrial products. In order to avoid such problems, the head of the organization must to have a proper understanding of the strategic features of the implementation of an innovative project.

Additionally, when developing an innovation activity plan, it is necessary, based on crisis exit strategies, in the form of a plan of measures to overcome crisis situations, to concretize the causes which is giving rise to certain crisis conditions, as well as to determine the volumes and sources of resources (financial, personnel, information, etc.) necessary for the implementation of the planned activities.

Scientific and technical factors for the innovation development at the industrial enterprise require solving a set of tasks related to ensuring appropriate innovation activity involving highly qualified engineers and scientists, developing an innovation development program, and having sufficient production space (technical area).

Simultaneously with the solution of technical and production issues, active communication with the public (target audience) is carried out, because the practice test can weaken the effects of competition (its negative part, for example, in cases of mass return of goods), ensure rapid overcoming of problems and contribute to enhancing trust to the company (its innovative products, especially in the situation of detection of problems during operation and industrial testing) by the public.

Social factors of interaction with the public have a significant impact in the promotion of innovative industrial product, which requires the preparation of relevant specialists in the company and direct control of their activities in the format of the approval of the advertising brief by top managers of the company.

It should be also taken into account that an enterprise cannot surpass its competitors in all characteristics of an innovative product. It is necessary to prioritize and create strategies for the development of competitive advantages that most closely correspond to trends in the development of a market situation. In this regard, it is advisable to use the advantages of the international division of labor: many industrial innovation projects are based on consolidating the efforts of enterprises that have relative advantages in the production of certain parts, assemblies, mechanisms, or in the provision of services [6].

When developing an innovative product, companies often make a systematical error, which consists in over-focusing on the technical superiority of a product over competitive analogues, losing sight of the fact that competitiveness is characterized as the degree of attractiveness of a given product for a consumer, whose view on an innovative product is based on its own judgment.

The development of innovation in the food industry requires a new approach in the field of organization, technology, cooperation and communication [6]. The sector faces an important task - it is a solution of problems associated with the various needs of the population, which in the future may require a doubling of food production and nutrition, while production resources will decrease. Overcoming these problems for food industry enterprises is possible if they are not only open to innovation, but also support the creation of inventions and new discoveries, as well as the widespread dissemination of innovation.

In order to intensify the activities of the food sector in the field of innovation, it is necessary to maintain the creative potential of enterprises. The creation of networks and network organizations to support communication between sector's enterprises plays a major role in enhancing the participation of SMEs in the development of innovations. With the development of network interaction, these networks can follow the path of intensification, which begins with social interaction and gradually develops in the direction of more intensive interactions. At present, it is very important for food industry enterprises to promote and support industry initiatives, in the form of invention and discovery. As well as an equally important process is the selection, evaluation, acceptance of the given invention and their transformation into innovative developments. Depending on the level of problems and the radical nature of the new inventions, it is necessary for enterprises in the industry to improve or completely change the processes of organizing, processing and managing innovation activities.

Therefore, it is extremely important for the sector to evaluate the proposed inventions, select suitable funds for investment and agree on the steps for the implementation of innovative projects.

The following main measures are proposed to improve the innovation activity of food industry enterprises [7]:

- to create a department for innovative development, which functions would include the development of a project for the introduction of innovative technologies;
- it is necessary to introduce elements of civilized management,
- to introduce a staff of specialists in the field of management of the organization,
- to create a new system of staff motivation to innovation activity.

As it was mentioned before, food industry enterprises should adhere to the open innovation model, which in turn includes the use of innovative developments in various fields of science. These include developments in the area of information sciences, information technology, natural science, engineering, organization and management. The role and influence of the organization and management on innovative development are often underestimated and ignored by enterprises of the sector. For example, when developing innovative projects, the effect of organizational (cooperation and logistics) and management concepts (leadership issues or employee motivation) on the production of innovative products do not taken into account.

Especially, the combination of factors from different disciplines opens up new opportunities for creating innovations. This is illustrated by a discussion of the "bioeconomy" (EU, 2015b) [6], where new opportunities in the field of information technology, natural science and technology meet with economic and management changes.

Conclusion

The food and processing industry closes the production chain of the agro-industrial complex on the way of agricultural raw materials. Therefore it is important to preserve and more efficiently process agricultural products turning it into final products and raw materials for high-quality industry and consumer demand. This can be realized on the basis of an integrated innovative approach. In order to

solve this problem, it is necessary to strengthen the role of the state in terms of regulation of the economic processes, the development and implementation of scientific and technical areas and the introduction of innovations.

The implementation of the state innovation policy will contribute to the increasingly progressive technical, technological, organizational and economic renewal of the food production industries and raise their efficiency.

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ТАМАҚ ӨНЕРКӘСІБІ КӘСІПОРЫНДАРЫНДА ИННОВАЦИЯЛЫҚ ҚЫЗМЕТТІ ДАМУДЫҢ ФАКТОРЛАРЫ

Аннотация. Тамақ өнеркәсібі ұлттық экономикада стратегиялық маңызды рөл атқарады, сондықтан тамақ өнеркәсібінде инновациялық технологияларды дамыту және енгізуге ерекше қызығушылық артқан. Тамақ өнеркәсібіндегі инновациялар бірінші кезекте тамақ өнімдерінің, соның ішінде әлеуметтік-маңызды әрі аса қажетті азық-түлік өнімдерінің сапасы мен қауіпсіздігін арттыру сияқты мәселелерді шешуге бағытталуы тиіс [1].

Тамақ өнеркәсібі кәсіпорындарында инновацияларды қалыптастыру мен қолдану үдерісі өзіндік ерекшеліктерге ие. Мақалада автор тамақ өнеркәсібі кәсіпорындарында инновациялық қызметін дамытудың негізгі факторларын анықтаған. Бұл аталған факторлар үдерістік және ресурстық тәсілдер тұрғысынан қарастырылған. Автордың пікірінше, тамақ секторының инновация саласындағы қызметінің белсенділігін арттыру үшін сала кәсіпорындарының арасында коммуникацияны қолдайтын жүйелер мен жүйелік ұйымдарды қалыптастыру қажет. Сонымен қатар тамақ өнеркәсібі кәсіпорындарының инновациялық қызметін жетілдіру бойынша негізгі шаралар кешені ұсынылған.

Түйін сөздер: инновация, инновациялық қызмет, тамақ өнеркәсібі.

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ФАКТОРЫ РАЗВИТИЯ ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ НА ПРЕДПРИЯТИЯХ ПИЩЕВОЙ ПРОМЫШЛЕННОСТИ

Аннотация. Пищевая промышленность является стратегически важной отраслью национальной экономики, поэтому разработка и внедрение инновационных технологий на предприятиях пищевой промышленности представляет достаточный интерес. Инновации в пищевой промышленности должны быть направлены, в первую очередь, на решение таких вопросов, как повышение качества и безопасности продуктов питания, в том числе продуктов социально-значимых и продуктов первой необходимости [1].

Процессы формирования и использования инноваций на предприятиях пищевой промышленности имеют свои особенности. В статье автором определены основные факторы развития инновационной деятельности на предприятиях пищевой промышленности. Эти факторы были рассмотрены в рамках процессного и ресурсного подходов. По мнению автора, для активизации деятельности пищевого сектора в области инновации необходимо создание сетей и сетевых организаций для поддержки коммуникации между предприятиями сектора. А также были предложены основные мероприятия по совершенствованию инновационной деятельности предприятий пищевой промышленности.

Ключевые слова: инновация, инновационная деятельность, пищевая промышленность.

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