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METHODOLOGY OF COMPETITIVE INNOVATIONS DEVELOPMENT BY THE FOOD INDUSTRY ENTERPRISE

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The global food market is in the state of continuous transformation, which has been developing rapidly in recent years due to elimination of trade barriers. Fast technological attainments due to the transfer make technology available to everyone in the world on the acceptable terms [2]. Such a state of the economic environment and foreign trade provides significant opportunities for domestic enterprises, but it also strengthens the requirements for them with increasing tension in the competition [1].

One of the most important problems in the enterprise activities is the insufficient use of knowledge, first and foremost, it relates to the knowledge necessary for effective enterprise management. The greatest responsibility of managers includes proper management of the enterprise resources in order to achieve or maximize profits. In addition, the global economic crisis has highlighted the need to develop new business models [2].

Such complex problems can be solved only through mobilization of the entire scientific, technical, socio-economic, humanitarian and personnel potential on the basis of innovative development. Innovation is a defining characteristic of modern scientific, technical, industrial, socio-economic and all social processes, and scientific, technological and social progress in Ukraine depends on the acquisition of the innovative mechanisms of development [3].

Ukraine has a significant export potential for food production, but its implementation is burdened by a low competitiveness of both enterprises and their products. According to the State Statistics Service of Ukraine, in 2017, in the structure of Ukraine's foreign trade, vegetable products occupied 21.3%; fats and oils of animal or vegetable origin – 10.6% (with the trade of ready-made food products in this commodity class is more than 60%); mineral products – 9.1%; non-precious metals and its articles – 23.4%; machines, equipment and machinery, electrical equipment – 9.9% [4]. Statistics data show availability of raw material base and foreign trade potential of the food industry in Ukraine. In addition, import of machinery has increased in Ukraine in recent years. This indicates a gradual update of the technical and technological base in the leading branches of the Ukraine national economy, including food industry. On the other hand, the domestic food industry has not yet reached its competitive position in the global market. This may be due to the lack of conditions for the emergence and development of competitive abilities in the form of specific knowledge, methodology and skills for organizing innovative processes aimed at competitive innovations development.

The purpose of the paper is to develop a methodological approach to the innovations development at the production & trading enterprise and to present the results of its practical implementation at the food industry enterprise with the provision of the possible directions of strategic development.

The results of theoretical studies carried out by the authors of given paper are actively implemented in the food industry enterprises, entrepreneurs' activities, through all-Ukrainian public organizations and regional departments of international cooperation and economic development. An example of implementation of the above-mentioned methodological ideas is the organization and support of entrepreneurship in the oil and fat industry (Table 1).

Lack of equipment and technologies for walnut processing into foodstuff contributes to mass walnut selling by the private sector to the procurement structures. To overcome this constraint, the enterprise had developed special equipment and technology (Table 2). The study of consumer demand in the markets of Europe and Asia revealed the expediency of differentiation of the production technology based on the cooperation with contractors both in Ukraine and abroad, which let the products meet the quality standard requirements in the selected market segments.

Table 1. Characteristics of the State of Production & Trading enterprise

State of the Enterprise	Characteristics of the enterprise's state	
1	2	
Current state	Activities in the domestic market. Production technologies have been developed. An assortment of food products from the main raw materials has been developed. An assortment of non-food products from the main raw materials has been developed. A range of equipment for production of the luxury goods has been developed. Contacts with manufacturers of machinery have been established both in Ukraine and abroad to ensure mass production. Search for partners.	
Desired state	Activities in the foreign markets of Europe, Asia, Australia. Wider and deeper assortment. New technological developments are to be implemented. More productive machinery. Availability of foreign partners. Growth of income.	
Constraints	Market accessibility. Specific needs of consumers in the new markets are not investigated. Resource constraints. Technical constraints. Technological constraints.	
Conditions of Development	Marketing – mix	Product policy: innovations (can be considered at five levels of consumer value, both together and separately: key value; main product; expected product; improved product; potential product); quality (can be considered at three levels, both together and separately: main benefit; product in the real execution; product with reinforcements); complex use of raw materials. Pricing policy: cost pricing; market pricing; price discounts. Sales policy: participation in exhibitions; retail sale and personal delivery; wholesale for entrepreneurs and enterprises. Promotion: advertising in the media; promotion of a healthy lifestyle; propaganda of natural food; direct sales; sales promotion (offer of the set of goods; use of the network marketing).
	Consumers' expectations	Support for normal body development; improvement of immunity; faster healing of injuries; improvement of mind and brain activity in general; memory enhancement; improvement of vision; improvement of the fetus development during pregnancy; prevention of cardiovascular diseases; prevention of atherosclerosis; use as a spice in cooking; suitability for storage; long shelf life; ease of consumption; attractive appearance; affordable price; availability of products.
	Products	Polyunsaturated acids content; macronutrients content; micronutrients content; color; way of use; content of mycotoxins, content of toxic elements; content of radioactive substances; pesticide content; GMO content; convenience of packaging; tightness of packing; packing material; volume of the container; color saturation of the label; appearance of packaging; content of the promotional text on the label.
	Product components	Walnut oil; box; bottle; jar; sampler; label; leaflet; web-site; information support; consultation; delivering; loyalty program.
	Production process	Cold press; kernel drying; heating; settling; filtration; mixing; packing.
	Products	Sanitary control; fire security; logistics; management of production personnel; quality control; accuracy control; special production equipment; special equipment for performing support operations.
Ways of constraint overcoming	Certification and standardization according to the international standards. Research of consumer needs. Study of the expert opinions of mediators. Improvement of the technology and expansion of the technical base. Improvement of the technology and introduction of new technologies. Search for partners. Conclusion of franchise agreements.	

Source: developed by the authors.

Table 2. Assortment of Equipment for the Production of Walnuts Food Products

№	Name and conditions of production	Technology code		
1	2	3		
Ow	n production			
1	Mini press for the household use			
2	Manual press for the micro enterprise	Technology 1-OF		
3	Press with a hydraulic drive for small-scale production. Model D.	(oil-oilcake-flour)		
4	Press with a hydraulic drive for small-scale production. Model S.	(on oneake-nour)		
Nat	ional partnership production			
5	Automated press for the industrial production of walnut oil. 4 kW.			
Inte	ernational partner production			
6	KK8 automatic industrial (universal) 1 kW	Technology 1-OS		
7	KK 20 F automatic industrial (universal) 2-3 kW			
8	KK 40 F automatic industrial (universal) 5 kW	(oil-meal)		
9	KK 100 F automatic industrial (universal) 7.5 kW			

Source: developed by the authors.

Feedback on the results of the advertising campaign made it possible to urge about the mass production of the developed equipment and formation of sales channels to ensure mass production of walnut goods.

This equipment has a potential for mass application both at the enterprises and for consumer needs, which reduces the volume of exported raw materials, increases added value in the value chain and leads to the development of the walnut raw material base in Ukraine.

Today, as a result of the market research, differentiation and diversification, the product assortment of the given enterprise consists of two groups, namely, production equipment and food products. The range of food products includes 9 product varieties and contains up to 30 assortment items. Thus, the production & trading enterprise ensures assortment harmonization through the organization of two technologically independent production plants. As a result, the given enterprise offers 15 types of products and more than 30 assortment positions only by the types of the main products. Taking into account auxiliary materials and all elements of the industrial design, the nomenclature can include several hundred titles in different quality and price categories.

Conclusions. To improve the competitiveness of domestic food industry enterprises, it is necessary to ensure high quality production at the national level. On the other hand, top management of each separate enterprise must understand that the only way to establish, maintain and develop its competitive abilities is to innovate, differentiate technological solutions and provide high quality outputs to meet the needs of the target segments and niches in order to achieve the advanced goals experienced by the businesses.

The obtained results on the partners' activity enable to raise the question of a new oil and fat industry sub-sector organization with its own environment in order to ensure a complete cycle of reproduction in the production of walnut food products in Ukraine.

Transition of the food industry management to new principles based on the methodology of development of competitive innovations will ensure production expansion and increase competitive production, which in its turn will ensure food security, reduce unemployment and increase Ukraine's competitiveness on the world market.

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ЕНЕРГЕТИЧНА БЕЗПЕКА РЕГІОНІВ УКРАЇНИ, ЗАГРОЗИ ТА ЗАХОДИ ПОДОЛАННЯ

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Серед існуючої кількості визначень поняття енергетичної безпеки (ЕБ) вартує звернути увагу на визначення, яке адаптоване до конкретного стану економіки регіону і дозволяє корегування як пріоритетів у забезпеченні енергетичної безпеки, так і методів організації управління розвитком та функціонуванням регіональних системи енергетики та паливно-енергетичного комплексу загалом. Тому під регіональною енергетичною безпекою пропонується розуміти стан захищеності життєво важливих інтересів особистості, суспільства, регіону від внутрішніх та зовнішніх загроз. Відзначені інтереси полягають у безперебійному забезпеченні споживачів паливно-енергетичними ресурсами прийнятної якості: за нормальних умов – забезпечення (постачання) в повному обсязі обгрунтованого попиту; у надзвичайних ситуаціях – гарантоване забезпеченні необхідних обсягів попиту. У будь-якому разі регіональна енергетична безпека піддається впливу загроз, які не можна розглядати ізольовано та які доволі часто є взаємопов'язані:

- економічні: дефіцит інвестиційних ресурсів та їх неефективне використання; фінансова дестабілізація і зростання обсягу неплатежів; слабкість внутрішньодержавних господарських зв'язків; велика енергомісткість економіки, низька ефективність ресурсо- та енергозаощаджувальної діяльності; неефективне управління виробничо-господарською діяльністю та інвестиційними процесами; нераціональна система субсидуювання населення; децентралізація;
- соціально-політичні: міграція фахівців та робітників та нестача трудових ресурсів; діяльність громадських організацій; невдоволеність підняттям тарифів;
- зовнішньополітичні та зовнішньоекономічні: зобов'язання країни перед міжнародними інституціями; порушення імпортних поставок обладнання, матеріалів та палива; залежність експорту ПЕР від умов транспортування через територію транзитних держав;
- кількісні та структурні диспропорції в ПЕК: недостатня потужність міжрайонних енергетичних зв'язків; надмірна концентрація генеруючих потужностей і транспортних потоків;
 - техногенні масштабні аварії в енергосистемах;
 - природні: стихійні лиха; сильні прояви нормальних природних явищ.

У зв'язку із кризовою ситуацію на Сході України ще більше зросла залежність української електроенергетики від імпортованого палива, зокрема вугілля, водночає ситуація погіршується