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## **SWOT ANALYSIS OF INNOVATIVE PRODUCTS CONTAINING FOOD ADDITIVE «MAGNETOFOOD»**

*Об'єктом дослідження є методи оцінювання харчової продукції з використанням добавки «Магнетофуд» з огляду на перспективи її впровадження у виробництво. Однією з найбільших проблем комерціалізації технологій виробництва харчових продуктів на ранніх стадіях інноваційного процесу є комплексне оцінювання науково-технологічних розробок. Під час оцінювання нових харчових виробів дослідження здійснюються здебільшого з використанням методів кваліметрії за окремими показниками якості продуктів та з урахуванням існуючих стандартів чи технічних умов. Проте методи кваліметричної оцінки якості харчової продукції не дозволяють зробити висновок про потенціал її комерціалізації. Ураховуючи зазначене, оцінювання технологічних інновацій із застосуванням методів комплексної оцінки, зокрема SWOT-аналізу, є перспективним.*

*У ході дослідження перспектив впровадження в діяльність підприємств харчової промисловості інноваційної продукції, виробленої з використанням добавки «Магнетофуд», використано методи контент-аналізу, експертних оцінок, порівняльного та динамічного аналізу, середніх і відносних величин, інтегральної оцінки. Результатом є обґрунтування сукупності одиничних та інтегральних показників для проведення SWOT-аналізу харчової продукції, виробленої з використанням добавки «Магнетофуд». Показники розраховано з огляду на значущість і силу впливу чинників, які відображають якісні характеристики продукції та інтерес до неї споживачів, світові тенденції та національні особливості впровадження інноваційних технологій у сферу харчування. Зіставлення між собою узагальнених оцінок сильних і слабких сторін інноваційної продукції, можливостей і загроз її виробництва та реалізації дозволило зробити висновок про великі перспективи впровадження в діяльність підприємств харчової промисловості інноваційної продукції, виробленої з використанням добавки «Магнетофуд».*

*Розроблена система показників SWOT-аналізу дає можливість комплексно оцінити перспективи впровадження інноваційних технологій у виробництво харчової продукції, що сприятиме оптимізації інноваційної політики підприємств харчової промисловості.*

**Ключові слова:** харчова добавка «Магнетофуд», харчова продукція, ринок нанопродукції, впровадження інноваційної продукції.

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### **1. Introduction**

The food industry is one of the leading sectors of the economy of Ukraine. According to the State Statistics Service of Ukraine, during 2010–2017 of the total number of enterprises in the processing industry, 13.6–14.1 % was food production enterprises. In the field of food production during this period, 18.2–20.1 % of the total number of workers in the processing industry was employed [1]. Despite the negative trends observed during 2016–2018, in January–March 2019 compared with the corresponding period of 2018, food production in Ukraine increased by 2.2 % [1], which is a positive indicator of the development of this segment of the economy. According to the results of 2017–2018 the activities of food production enterprises were generally profitable. Of the total number of innovatively active enterprises, 22.0 % were accounted for by food production enterprises [2].

The success of the food industry enterprises is largely due to the introduction of innovative developments into production, the practical implementation of which involves a preliminary evaluation of innovative solutions, taking into account their prospects. Therefore, it is relevant to study

the scientific and methodological foundations and practical recommendations for determining the prospects for the implementation of the final product at the design stage. This will protect the manufacturer from losses in the event of investment in the production of products that may not be perceived by the market and provides an opportunity to form an effective strategy to promote innovative products.

A team of scientists from Kharkiv State University of Food Technology and Trade and the Ukrainian Engineering Pedagogics Academy (Kharkiv, Ukraine) conducted a study on the application of nanotechnology in the food industry. As a result, a new scientific direction has been created, based on the principles of nanotechnology, and makes it possible, on the basis of scientifically based technologies, to produce new food products with the necessary functional and technological properties. The practical aspects of scientific research are implemented in the technology of production of the food additive «Magnetofood» and food products with its use. Namely, bread and bakery products, meat splitting semi-finished products, dairy products, flour confectionery products, pastille-marmalade products, whipped fruit and berry and protein desserts.

## 2. The object of research and its technological audit

*The object of research* is the methods of evaluation of food products with the use of the food additive «Magnetofood», taking into account the prospects for its introduction into production. For this, various methodological approaches are used, most of which are based on the principles of qualimetric evaluation, factor analysis or discounting of cash flows using indicators of the quality of the finished product so the effectiveness of the implementation of the innovation process.

One of the problems is the evaluation of innovative food products in the early stages of its life cycle. This necessitates a comprehensive study of its properties and the prediction of opportunities and threats from the external environment for its implementation.

## 3. The aim and objectives of research

*The aim of research* is evaluation of the prospects for the introduction of food products with the use of the food additive «Magnetofood» into the practice of economic activities of food industry enterprises based on a SWOT analysis.

To achieve this aim it is necessary to solve the following objectives:

1. To substantiate the scientific and methodological tools of using SWOT analysis in the development and promotion of food products.

2. To determine the strengths and weaknesses of production using the food additive «Magnetofood», as well as strategic prospects and threats to promote these products on the market.

## 4. Research of existing solutions of the problem

Analysis of the scientific literature on the introduction of innovations in the activities of enterprises allows to conclude that the methodological tools for evaluating innovation development depend on the type of innovation and the stage of the innovation process.

By type of innovation, the scientific literature distinguishes technological, organizational, managerial, economic, marketing, social, infrastructural [3], etc., which are considered as key factors for the effective development of an enterprise and entry into long-term competitive advantages. Despite the fact that each type of innovation affects the success of an economic entity, food innovations are significant for the food industry. According to the data of 2017, of the total number of food industry enterprises, they introduced innovative developments, 56.0 % were those that introduced innovative types of products [2].

Although there are certain achievements of researchers in assessing innovation, the question of determining the potential of development precisely at the initial stages of the innovation process remains unresolved. The existing methodological tools limit such an evaluation of the totality of efficiency indicators, innovation activity, taking into account certain types of innovations, based on the use of questionnaires with ranked answers. This leads to the ambiguity of the conclusions about the attractiveness of innovative development for implementation in production.

So, in works [4, 5], the problems of forming a system of indicators for evaluating innovations in an enterprise [4],

as well as motivating and stimulating inventive activity [5], are actualized. However, the practical aspects of introducing such a system into activity have not been considered.

In order to optimize management decisions on the development of a new product, the authors of [6] systematized the criteria and indicators of innovation, depending on the stage of its implementation. In particular, at the stage of introducing new products into production, the use of indicators of the quality and volume of product sales, availability of resources and customer satisfaction is recommended. At the same time, the risks of introducing innovative products are not covered.

Another approach to solving the problem of substantiating managerial decisions on the introduction of new products into production is described in [7, 8]. The authors of [7], stressing the importance of a new product as a factor in the competitive advantages of an enterprise, note that the success of introducing a new product largely depends on factors of the external and internal environment. However, attention is focused on the factors of the internal environment, namely, knowledge management and the formation of an effective team. According to the researchers of [8], the main criteria for evaluating innovative developments are the uniqueness of the product, its market potential, and technical feasibility. After the introduction of the product into production, the significance of these criteria decreases, yielding to the criterion of compliance with budget indicators. At the same time, according to the scientists' work [8], both before and after commercialization, the key characteristics that prove the feasibility of introducing the development into the enterprise's activities are customer satisfaction and sales of products. Agreeing with the criteria for evaluating innovative developments cited by the authors of works [7, 8], let's consider it necessary when taking management decisions on introducing new products to take into account also the favorable external environment.

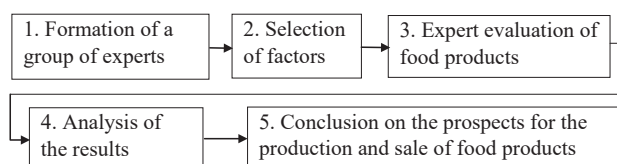
Among the main methods of research factors introducing new products, scientists highlight the SWOT analysis. Despite remarks about the complexity of properly distinguishing between external and internal resources of an enterprise, they are factors of product strengths or weaknesses described in [9], let's support the position of the author of work [10] on using SWOT analysis as one of the most effective methods to substantiate strategic decisions. Considering the above, in further studies to assess the market prospects for innovation, it is implemented in the technology of food production using the food additive «Magnetofood», using SWOT analysis.

The choice in favor of the SWOT analysis is based on the advantages of this method compared to others, used to evaluate innovative developments in the early stages. In contrast to GAP analysis, LIFT methodology, TAMETM, MAI, SWOT analysis allows to systematize a variety of information about product characteristics and the possibility of its promotion in the market and get a clear conclusion about the feasibility of its production and sale [11].

## 5. Methods of research

One of the modern tools to substantiate management decisions on product promotion on the market is the SWOT analysis. This is one of the most common research methods

used by scientists to determine competitive advantages and formulate strategic priorities for the development of a specific management object. Typically, SWOT analysis is considered as an analysis tool, which is based on expert conclusions regarding the strengths and weaknesses, opportunities and threats of the enterprise, its individual divisions, the region, the industry. At the same time, in some works, there are the results of quantitative evaluation of threats and opportunities [12, 13], as well as the practice of SWOT analysis of products [14] are presented. Based on the developments presented in [12, 15, 16], SWOT analysis of innovative products using the food additive «Magnetofood» is carried out in the following stages (Fig. 1).



**Fig. 1.** The sequence of SWOT analysis of food products (based on [12, 15, 16])

1. *Formation of a group of experts.* To determine the competitive advantages of innovative products using the food additive «Magnetofood» and environmental factors that determine the prospects for the production and sale of these products, a group of experts is formed, which included experts from the food technology industry. The number of experts ( $m$ ) is determined by the following dependency:

$$m = \frac{t_{\alpha}^2}{\varepsilon^2}, \tag{1}$$

where  $m$  – the number of experts, people;  $t_{\alpha}$  – tabular value in accordance with an acceptable confidence level  $\alpha$ ;  $\alpha$  – confidence level, %;  $\varepsilon$  – maximum permissible error.

To determine the competence of experts the methods of the questionnaire survey and self-evaluation are used. The questionnaire includes questions of professional level, research work and work experience. For self-evaluation questions were asked about the awareness of experts on the development of the market of nanotechnologies and nanoproducts in the world and Ukraine, factors affecting the prospects for the production and sale of food products. The generalized coefficient of competence of experts (0.83) shows a sufficient compliance degree with the established group of specialists for expert evaluation of the prospects for introducing innovative products using the food additive «Magnetofood».

2. *Selection of factors.* To substantiate the prospects for the implementation of innovative products on the market, a content analysis of the scientific literature, as a result of which a list of the main characteristics for evaluating food products is formed. The characteristics of the strengths and weaknesses of the innovation products selected by experts, as well as the threats and opportunities of the environment for innovative products using the food additive «Magnetofood» are given in Table 1.

3. *Expert evaluation of food products.* For the quantitative measurement of the strengths and weaknesses of innovative products with the food additive «Magnetofood», the opportunities and threats of its production and sales,

let's use the scoring method with the use of a certain rating scale (Tables 2, 3).

**Table 1**

SWOT analysis matrix of innovative products using food additive «Magnetofood»

Strengths	Weaknesses
Uniqueness of the proposal. Possibility of additional profits for the manufacturer. Patent security. Affordable price	Low consumer awareness of new products and their benefits. Risks of introducing new products for manufacturers
Opportunities	Threats
Significant demand for the implementation of the results of nanoresearch in the field of nutrition. Growth of the nanotechnology and nano-products market. Improving the culture of interaction between business and science on the introduction of innovative products	The unresolved issues of technology transfer. Small potential of food industry enterprises in implementing projects for the introduction of nanotechnology. Low level of financing innovative projects

**Table 2**

Scale for evaluation of the strengths and weaknesses of food products

Score	Wording
<b>Strengths</b>	
5	Outstanding advantage of a new product in comparison with a similar product (a characteristic inherent only in a new product)
4	Significant advantage of a new product in comparison with a similar product (a characteristic that has the best values for all types of new products)
3	Definite advantage of a new product compared to a similar product (a characteristic that has the best values for most types of new products)
2	Average advantage of a new product in comparison with a similar product (a characteristic that has the best values for certain types of new products)
1	Insignificant advantage of the product in comparison with the analogous product (the characteristic that has the best values for a certain new product)
<b>Weaknesses</b>	
-1	Somewhat weak side of a new product as compared with a similar product (characteristic, which leads to complication in certain operations of production and sale of a new product)
-2	Average level of weakness of a new product compared to a similar product (characteristic, which leads to complication of individual processes for the production and sale of new products)
-3	Weak side of the new product compared with the product-analogue (characteristic, which leads to complication of the processes of production and sale of new products)
-4	Significantly weaker side of a new product compared with a similar product (a characteristic that casts doubt on the feasibility of the production and sale of a new product)
-5	Very weak side of a new product as compared to a similar product (a characteristic indicating the inexpediency of the production and sale of a new product)

**Note:** developed based on [12]

**Table 3**

Scale for evaluation of the opportunities and threats to the production and sale of food products

Score	Wording
Opportunities	
5	Very strong, provide strategic support for the production and sale of food products
4	Significant, greatly facilitate the achievement of goals for the production and sale of food products
3	Moderately facilitate the achievement of goals for the production and sale of food products
2	To some extent, facilitate the achievement of goals for the production and sale of food products
1	Almost do not facilitate the achievement of goals for the production and sale of food products
Threats	
-1	Almost do not threaten the achievement of goals for the production and sale of food products
-2	To a certain extent they threaten the achievement of goals for the production and sale of food products
-3	Threaten the achievement of goals for the production and sale of food products
-4	Significantly threaten the achievement of goals for the production and sale of food products
-5	Very much threaten to achieve the goals for the production and sale of food products, making them almost impossible to achieve

**Note:** developed based on [12]

It is recommended to evaluate the strengths and weaknesses of innovative food products, threats and opportunities for their production and sale, taking into account the coefficient of significance of a certain factor ( $K_i$ ), calculated by the formula:

$$K_i = \frac{\sum_{j=1}^m x_{ij}}{\sum_{i=1}^n \sum_{j=1}^m x_{ij}}, \tag{2}$$

where  $K_i$  – significance of the  $i$ -th factor, coefficient;  $x_{ij}$  – the number of points, which is intended by the  $j$ -th expert of the  $i$ -th factor.

To confirm the consistency of expert opinions on the significance of factors, it is recommended to use the Kendall coefficient of concordance ( $W$ ):

$$W = \frac{12}{m^2 \cdot (n^3 - n)} \cdot \sum_{i=1}^n \left( \sum_{j=1}^m \left( a_{ij} - \frac{n+1}{2} \right) \right)^2, \tag{3}$$

where  $W$  – coefficient of concordance;  $a_{ij}$  – rank of the  $i$ -th factor of the  $j$ -th expert;  $m$  – the number of experts;  $n$  – the number of factors.

The coefficient of concordance ( $W$ ) can take values from 0 to 1. The consistency of expert opinion indicates the approximation of this coefficient to 1.

A generalized evaluation of the strengths and weaknesses of innovative food products, threats and opportunities for

their production and sale is carried out taking into account the average score of each of the factors under study and their significance factor:

$$P_s = \sum_{i=1}^n K_i \cdot B_i, \tag{4}$$

$$B_i = \frac{\sum_{j=1}^m B_{ij}}{m}, \tag{5}$$

where  $P_s$  – a comprehensive indicator of innovative products by the  $s$ -th research direction (strengths, weaknesses, opportunities and threats), score;  $B_i$  – average score by the  $i$ -th factor;  $B_{ij}$  – score of the  $i$ -th factor by the  $j$ -th expert.

4. *Analysis of the results.* Comparison of generalized evaluations of the strengths and weaknesses of food products, opportunities and threats to their production allows to determine the most significant factors for the practical implementation of innovative developments.

5. *Conclusion on the prospects for the production and sale of food products.* Comparison between the generalized evaluations of the strengths and weaknesses of innovative products, the opportunities and threats to their production and sales leads to a general conclusion about the prospects for introducing innovative products into the practice of economic activity.

**6. Research results**

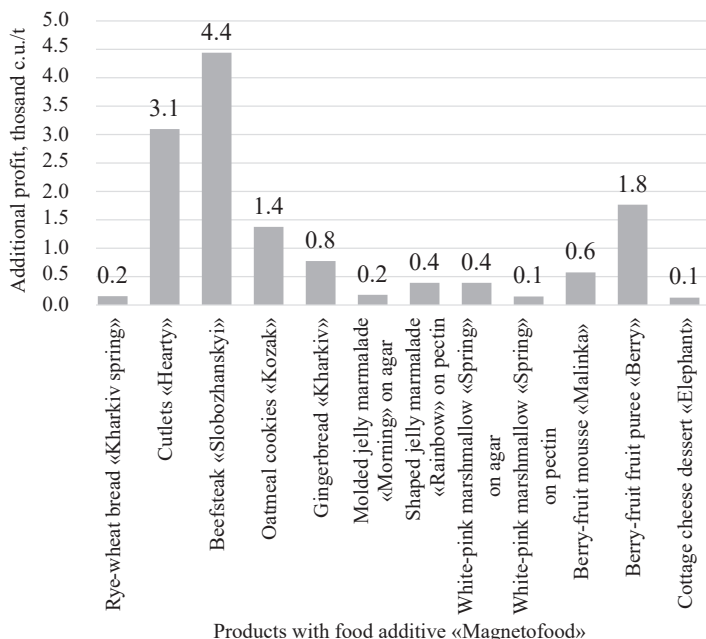
The research results show that the strengths of innovative products with the food additive «Magnetofood» prevail over the weak ones, and the potential opportunities of its production and sale on the market exceed the threats.

It should be noted that food products manufactured using the «Magnetofood» additive have a long shelf life and do not contain preservatives. The introduction of scientifically based technologies for the production of food products with the use of the food additive «Magnetofood» ensures the production of competitive products. Bakery, meat, flour, confectionery, paste-marmalade, dairy products and whipped desserts made with the addition of «Magnetofood», acquire improved functional and technological characteristics. The increase in their sorption, emulsifying, structuring, stabilizing, water-freezing, water and fatty properties promotes resource saving in food production and enhances the economic efficiency of its production.

As a result of the use of the food additive «Magnetofood», the costs for raw materials and materials for new products are lower as compared with similar products. This (other things being equal) leads to an increase in profits and an increase in product profitability (Fig. 2).

The strength of the product innovation is also patent protection. For food additive «Magnetofood»:

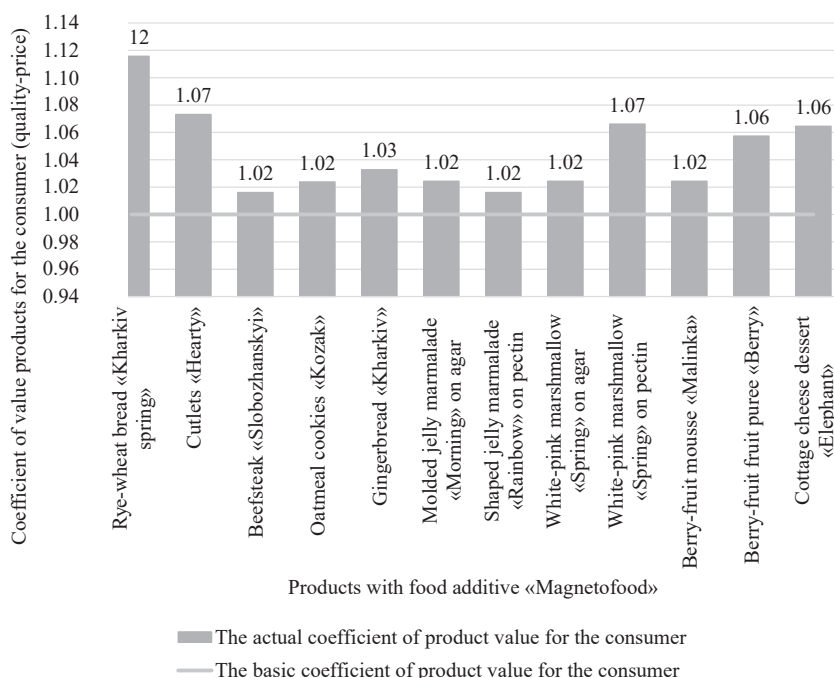
- approved regulatory and technical documentation (TU U 10.8-2023017824-001:2018. Food additive «Magnetofood». Technical conditions);
- Patents for the additive and methods for its preparation were received (UA patent No. 126502, IPC (2016.01) A23L 13/40, A23L 33/10; UA patent No. 126507, IPC (2018.01) B82Y 40/00, B82B 1/00, B82B 3/00).



**Fig. 2.** The economic efficiency of production using food additive «Magnetofood»

The research results show high consumer properties of innovative products. By organoleptic characteristics and shelf life of food products with the addition of «Magnetofood» significantly exceeds the products-analogues. The calculations also indicate its availability to consumers. The ratio of quality and price of products exceeds 1.0, which confirms the value of innovative products for the consumer (Fig. 3).

According to experts, weaknesses in product innovation are low consumer awareness of new products and their advantages, as well as manufacturers' risks in introducing new products. These factors are to some extent related to the unresolved issues on the implementation of nanotechnology and nanomaterials in the practice of the food industry.



**Fig. 3.** Indicators of the quality-price ratio of products with food additive «Magnetofood»

According to researchers [17], in countries where nanotechnology is actively used in the production of consumer goods, there are national standards in the field of nanotechnology. Despite the fact that the creation of the nanomaterials and nanotechnology industry is among the priority areas for the development of innovations in Ukraine [18], the issues of nanoindustry development and the use of research results still do not have a definitive solution. The following should be noted about the opportunities of introducing products with the addition of «Magnetofood» into practical activities of food industry enterprises. The production of nanoproducts is one of the most dynamic areas of activity. The global nanotechnology market is growing rapidly and, according to some forecasts, will exceed 125 billion USD in 2024 [19]. Taking into account the tendencies of introducing the results of nanoresearch [20, 21], the use of nanotechnology in the food industry is recognized as one of the promising areas for the production of consumer-made nanoproducts. In the structure of demand for nanoproducts [22] by the consumer market segments, 5.0 % falls on the food market (Fig. 4).

The factors that contribute to the promotion of nanoproducts on the market also include increasing the culture of interaction between business and science on the introduction of innovative products, confirmed by the improvement of Ukraine's position in terms of the Global Innovation Index (Table 4).

According to the estimates of scientists of work [22], the development of nanotechnologies and the introduction of nanoproducts into the activities of enterprises is largely determined by the success of the transfer of developments, as well as investments in scientific research, the concentration of high-tech companies.

On this occasion, it should be noted that in the ranking of innovative countries of the world, according to the Bloomberg 2019 Innovation Index, Ukraine ranked 53rd among 60 countries, having lost 7 positions compared to the previous period [24]. Exploring this issue and focusing on the importance of university science, it is important for fundamental and applied research, scientists simultaneously note the difficulty of implementing a model for creating technology transfer centers at Ukrainian universities. This is due to the need for significant financial resources to the university, as well as the inconsistency of actions and the strengthening of bureaucracy within such structures [25].

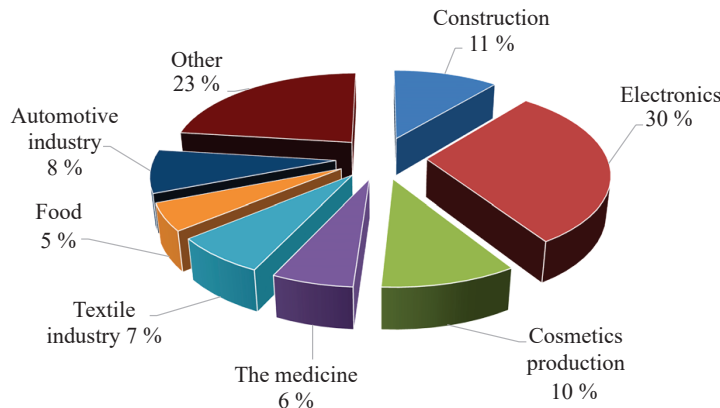


Fig. 4. The structure of demand for nanoproducts (built according to [22])

Researchers of the issues of commercialization of nanotechnologies in Ukraine note that food industry enterprises are the most prepared for perception and implementation of nanotechnologies [26]. At the same time, the activity of these enterprises in implementing projects for the introduction of nanotechnology is low. Note that this situation in the food industry is a reflection of general trends in the market of nanodevelopments in Ukraine. According to the official data of the Stat Nano website [27], the ratio of the number of patents according to the results of nanoresearch and articles on the problems of nanoindustry is small even during 2016–2018. It tends to decrease. The data also indicate that this ratio in Ukraine is significantly less than the world average indicators and the indicator of Turkey, the closest to it in the rating (Fig. 5).

An implementation of nanoproducts in the activities of enterprises is based on the perception of innovation as a factor in the competitiveness of an enterprise and activity from their introduction into business practice.

According to a report by Lux Research [28], global corporations involved in nanotechnology are developing strategies for introducing nanoproducts and actively cooperating with universities, start-ups and other participants in the nanoindustry in this direction. According to the European Nanotechnology Report [29], nanotechnology financing in Europe is mainly due to private companies. In the Ukrainian reality, venture financing has not received distribution. Financing of innovation activities is carried out mainly at the expense of own funds of economic entities, accompanied by high risks for enterprises introducing innovations. According to the State Statistics Service of Ukraine, the share of investors (foreign and domestic) in the total amount of funding for innovation in 2015–2017 it was 1.0–4.2 % over time periods [2].

The study of the key characteristics of the innovative products with the food additive «Magnetofood», as well as the state and prospects for the implementation of nanotechnologies in the production of food products became the basis for the SWOT analysis of the innovative products with the food additive «Magnetofood», the results of which are given in Table 5.

Ukraine's rating by indicators of the Global Innovation Index for 2016–2018

Indicator	2016	2017	2018
	Rating from 128 countries	Rating from 127 countries	Rating from 126 countries
Global Innovation Index	56	50	43
Sub-index «Knowledge and Technology»	33	32	27
Sub-points: Knowledge creation	16	16	15
Knowledge effect	90	77	40
Knowledge spread	61	54	53

Note: developed based on [23]

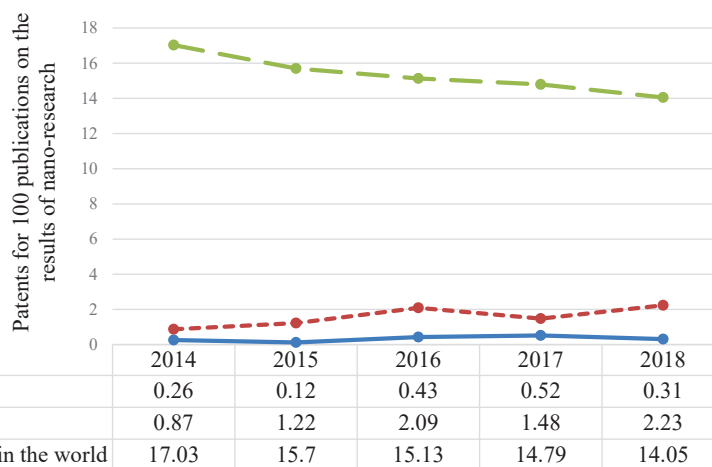


Fig. 5. The ratio of patents on the results of nanoresearch and articles on the problems of nanoindustry (based on data [27])

**Table 5**

The results of the SWOT analysis of innovative products with the food additive «Magnetofood»

Strengths	Significance	Score	Value, score	Weaknesses	Significance	Score	Value, score
Unique offer	0.24	4.5	1.1	Low consumer awareness of new products and their advantages	0.10	-4.9	-0.5
Additional income for the manufacturer	0.19	4.2	0.8				
Patent protection	0.18	4.8	0.9	Risks of introducing new products for manufacturers	0.16	-4.9	-0.8
Affordable price	0.13	4.4	0.6				
<b>Total</b>	–	–	3.4	<b>Total</b>	–	–	-1.3
Opportunities				Threats			
Significant demand for the implementation of the results of nanoresearch in the field of nutrition	0.27	3.5	0.9	Unsolved technology transfer issues	0.12	-4.8	-0.6
Growth of the nanotechnology and nanoproducts market	0.22	4.7	1.0	Small potential of food industry enterprises for implementation of nanotechnology implementation projects	0.12	-4.4	-0.5
Improving the culture of interaction between business and science on the introduction of innovative products	0.08	3.9	0.3	Low level of financing innovative projects	0.19	-4.9	-0.9
<b>Total</b>	–	–	2.2	<b>Total</b>	–	–	-2.0

The results of a quantitative SWOT analysis given in Table 5 allow to determine that the strengths of innovative food products with the use of the food additive «Magnetofood» prevail over its weaknesses. It is also established that the opportunities for introducing the developed products into the practice of economic activity are dominated by the threats that accompany this process. This generally indicates the great prospects for the introduction of products with the addition of «Magnetofood» in the activities of the food industry.

## 7. SWOT analysis of research results

*Strengths.* The strength of research is that the research results are based on the results of a comprehensive analysis of internal and external factors for the introduction of innovative technologies in the activities of food industry enterprises.

*Weaknesses.* The combination of the results of the evaluation of the main characteristics of food products and the additional opportunities of introducing it into production creates the prerequisites for substantiating the strategic decisions of food producers to develop new markets and to intensify marketing activities. Further research will be devoted to this.

*Opportunities.* The system of SWOT analysis indicators developed in the work makes it possible to comprehensively evaluate the prospects for the introduction of innovative technologies in food production will help optimize the innovation policy of food industry enterprises.

*Threats.* At the same time, the results of the study indicate the need to develop measures to prevent potential threats associated with limited funding for research and using the growth opportunities of the nanotechnology and nanoproducts market.

## 8. Conclusions

1. The scientific and methodological tools for the use of SWOT analysis in the development and promotion of

food products. The sequence of evaluating the prospects for introducing innovative products into the food industry using the SWOT analysis is presented. It implies a comparison of complex indicators of strengths and weaknesses, opportunities and threats to the production and sale of products. The indicators are calculated taking into account the significance and impact of factors that reflect key strengths and weaknesses, opportunities and threats to the production and sale of food products with the addition of «Magnetofood».

2. The strengths and weaknesses of the production with the use of the food additive «Magnetofood», as well as strategic perspectives and threats to the promotion of these products on the market. It has been established that the strongest aspects of products using the food additive «Magnetofood» are the uniqueness of the offer and patent protection, the weak ones are the low level of informativeness of consumers about new products and the risks of producers when introducing new products. According to the strategic prospects of promoting new products on the market, they are mainly due to the growth of the market of nanotechnologies and nanoproducts, as well as the demand for introducing the results of nanoresearch in the field of nutrition. The main threats to the sale of products using the food additive «Magnetofood» are the low level of funding for innovative projects and the unresolved issues of technology transfer.

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