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## FORMATION AND IMPLEMENTATION OF THE CLUSTER APPROACH IN THE MANAGEMENT OF COMPETITIVENESS OF ENTERPRISES OF TEXTILE INDUSTRY

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**Introduction and aim of the research:** Networking as the establishment of long formal and informal relations between the subjects of the cluster, united in the technological chain by vertical and horizontal links, based on trust and common to the cluster, differs from the relations of production cooperation. Collaborative programs with the subjects of the cluster (educational, research, marketing, cross-border cooperation, exports, technological) increase the efficiency and competitiveness of the actors by combining ideas, material, technical, labor and financial resources, joint management and solving common problems. Public-private partnership is an institutional and organizational alliance between state, regional government and business, based on joint financing of projects. The interaction of these two forms of network cooperation determines the features of economic clustering and updates the research topic.

**Research hypothesis.** It is assumed that the use of the cluster approach to managing the competitiveness of light industry enterprises will allow to determine the sequence and methods of forming clusters in the economy.

**The aim** of this research. This study substantiates the mechanisms of self-organization and increasing the competitiveness of clusters on the basis of network cooperation and public-private partnership.

**Methodology:** for the method of identification and structuring of clusters, the criterion for determining the "key product", the questionnaire for the identification of cluster links, and the coefficient of bond strength were used. For the methodology of assessing the quality of network cooperation, histograms of the types of enterprises were used in the breadth of partner networks.

For the methodology for assessing the competitiveness of the cluster, the index method of comparing indicators and the method for calculating the integrated estimate (average geometric) was used, which made it possible to identify the most competitive potential clusters

**Results:** The model of formation of competitiveness of subjects of a cluster is developed. The objective sources of competitive advantages (localization and agglomeration) that create the conditions for the formation of potential clusters created through the state policy of stimulating cluster organization (network cooperation and public-private partnership) are identified. The formation of real clusters provides their subjects with strategic competitive advantages. This represents scientific novelty in the theory of clusters and determines the directions of their formation.

**Conclusions:** The proposed approach to assessing the economic results of the organization and development of clusters based on the forecast of economic effect indicators (enterprise competitiveness) and the efficiency of clustering (profitability of total assets) using economic and mathematical models, approbation of which showed that the cluster approach to enterprise competitiveness management is effective. The study based on the developed set of methods allowed to conclude that in the light industry of Ukraine there are prerequisites for organizing clusters, there are potential clusters that are not yet real.

**Keywords:** competitiveness of enterprises; clusters; light industry; network cooperation; public private partnership.

**Formulation of the problem.** The tasks of innovative development and effective entry into the world of economic space objectively predetermine the need to increase the competitiveness of domestic enterprises. The urgency of the study is due to the following circumstances: first, the effectiveness of the cluster approach to improve the competitiveness of economic systems is proved by world practice; secondly, the need to increase the competitiveness of Ukrainian enterprises is due to the difficult financial situation due to increased competition, the global financial and economic crisis and management inefficiency; Thirdly, the Ukrainian science has not yet been developed: the concept of clusters of commodity producers, the mechanism of self-regulation and increasing the competitiveness of clusters on the basis of network cooperation and public-private partnership, the cluster approach methodology and the organizational and economic mechanism for its implementation, with taking into account the tasks of innovative development of the economy and features of the sector.

**Analysis of recent research and unsolved part of the problem.** According to most experts, the competitiveness of a particular object is a combination of certain specific qualities of this object, which is more developed in comparison with the similar property of other objects of competition. Thus, according to M.I. Knysh [1], I. Simonov, Ya. Beleslavskaya [2, p. 95–101], D. Bugrova [3, p. 12–16] competitive advantages are all that all the strategies in the business are aimed at, including directions formed under the influence of many factors: effective production, possession of patents, advertising, competent management, attitude towards consumers. O. Yarotsky proposes for the competitiveness of the production enterprise to use the capabilities of the process approach in the management of the effectiveness of its operation [4, p. 65–67]. However, A. Guryanov and O. Grishko, on the contrary, believes that the systematic approach to strategic management of an enterprise is a key to achieving a high level of competitiveness [5, p. 274–277]. Some scientists (I. Danilov, S. Mikhailova, T. Danilov) suggest using specific methods of achieving competitiveness – benchmarking [6, p. 66–68].

At the same time, according to A. Kutsenko [7, p. 166], I. Gryshchenko [8, p. 284–286], T. Izovit, A. Kurgansky [9, p. 47], the competitive advantages are not the productivity or the use of resources, but the possibility of using the benefits of co-operation and specialization, which will allow to win in a competitive struggle. Recently, in science and practice, the view has emerged that the formation of national innovative cluster-united enterprises can act as a cementing component of the institutional provision of sustainable development, characterizing a competitive advantage as a result of a more advantageous market position (ownership of a larger market share) in a particular segment (L. Ganushchak-Yefimenko) [10, p. 51–53]. The inconsistency of the views of scientists on the role of clusters in managing the competitiveness of textile

industry enterprises and their impact on the competitiveness of enterprises has conditioned the relevance of the research.

**The aim** of the research is the development of theoretical and methodological foundations for the formation of the cluster approach and the organizational and economic mechanism for its implementation in the management of the competitiveness of textile industry enterprises.

**Results of the study.** The author's approach to the theory of clusters makes it possible to identify features that distinguish them from other network structures, to formulate the indications of a cluster of commodity producers (localization and agglomeration of enterprises, organizations and public institutions united by horizontal and vertical links, complementarity of subjects, production of a "key" product, the presence of competition relations and development of informal relations and cooperation between the subjects of the cluster, as well as partnership between them and regional bodies on management, a unified infrastructure and the institution of skin and furs environment, the unification of enterprises around the scientific and educational center).

Cluster of commodity producers is a network organization of complementary, territorially interconnected enterprises and organizations (including specialized suppliers, services, as well as producers and buyers) united around the scientific and educational center, which is linked by partnerships with local institutions, state and regional authorities management in order to increase the competitiveness of enterprises, regions and the national economy. The generalization of foreign experience in the organization and functioning of 192 clusters from 34 countries revealed the following patterns of the cluster approach: the objective nature of the occurrence (network cooperation resists the negative processes of globalization); state support of clusters, which consists in the development and implementation of cluster policy; specificity of cluster policy methods in different countries, which depends on the level of development of the economy, national traditions, as well as the accepted concept of the cluster; the duration of the real economic effect from the implementation of the cluster approach (from 3 to 10 years in different countries), which is explained by the complexity of the formation of cooperative and partnership relations in clusters.

The practical need to use the cluster approach to increase the competitiveness of domestic enterprises has necessitated the justification of the mechanism for the formation of competitiveness of the cluster entities themselves (that is, the microlevel), since all production and interpersonal relations are formed here, as well as competitive advantages that are realized in the market in the process market activity.

The second premise is the deterioration of the financial condition of the industry. The shortage of working capital increased by 5.6 times in the analyzed period, the level of supply with working capital acquired a negative value (-6%), the profitability of the industry's products fell by 1.8 times and amounted to 8.1% in 2015. The number of industrial organizations that have losses increased by 2.7 times in 2015 compared to 2005 and amounted to 27 (28.7% of the total number of enterprises).

The third prerequisite is the inefficiency of the competitiveness management system in the industry. Assessment of the competitiveness of 69 textile industry enterprises, including the Textile-Contact group of companies, the Textile-Ukraine corporation, the Cherkasy Shovkoviy Kombinat AT, the AT Ukraina, AT Rivnenelon, VOZKO, AT "Cherkas'ke knitwear company "Lubava" (the sample is 72%, the matrix of the raw data included  $69 \times 18 = 1242$  for the year 2015) is presented in Table 1.

Table 1

**Assessment of the competitiveness of textile industry enterprises  
in the context of sub-industries as of 01.01.2017, %**

Subsectors	Competitiveness factors								Assessment of the competitiveness of enterprises on average by industry
	competitiveness of goods	marketing efficiency	quality management	financial condition of enterprises	level of production organization	MTO efficiency	innovation activity	competitiveness of staff	
Shoe	32.5	4.6	2.13	1.32	2.61	2.92	0.35	2.86	49.29
Sewing	33.0	5.4	2.48	1.94	2.44	3.23	0.03	2.66	51.18
Knitted fabrics	32.0	4.75	2.08	2.20	2.55	2.64	0.45	2.43	49.10
Textiles and Fur	32.0	5.5	1.08	0.81	2.35	2.22	1.21	2.37	45.92
Average in the industry	32.38	5.06	1.94	1.16	2.49	2.75	0.51	2.58	48.87

Taking into account the specifics of the Ukrainian economic model, the characteristics of textile industry, the state of society and the external environment, the rationale for a multi-level approach to managing the competitiveness of textile industry enterprises is substantiated. To implement it using the method of organizational design, a multi-level system for managing

the competitiveness of textile industry enterprises was developed on the basis of a cluster approach. The composition of the subsystems is shown in Fig. 1.

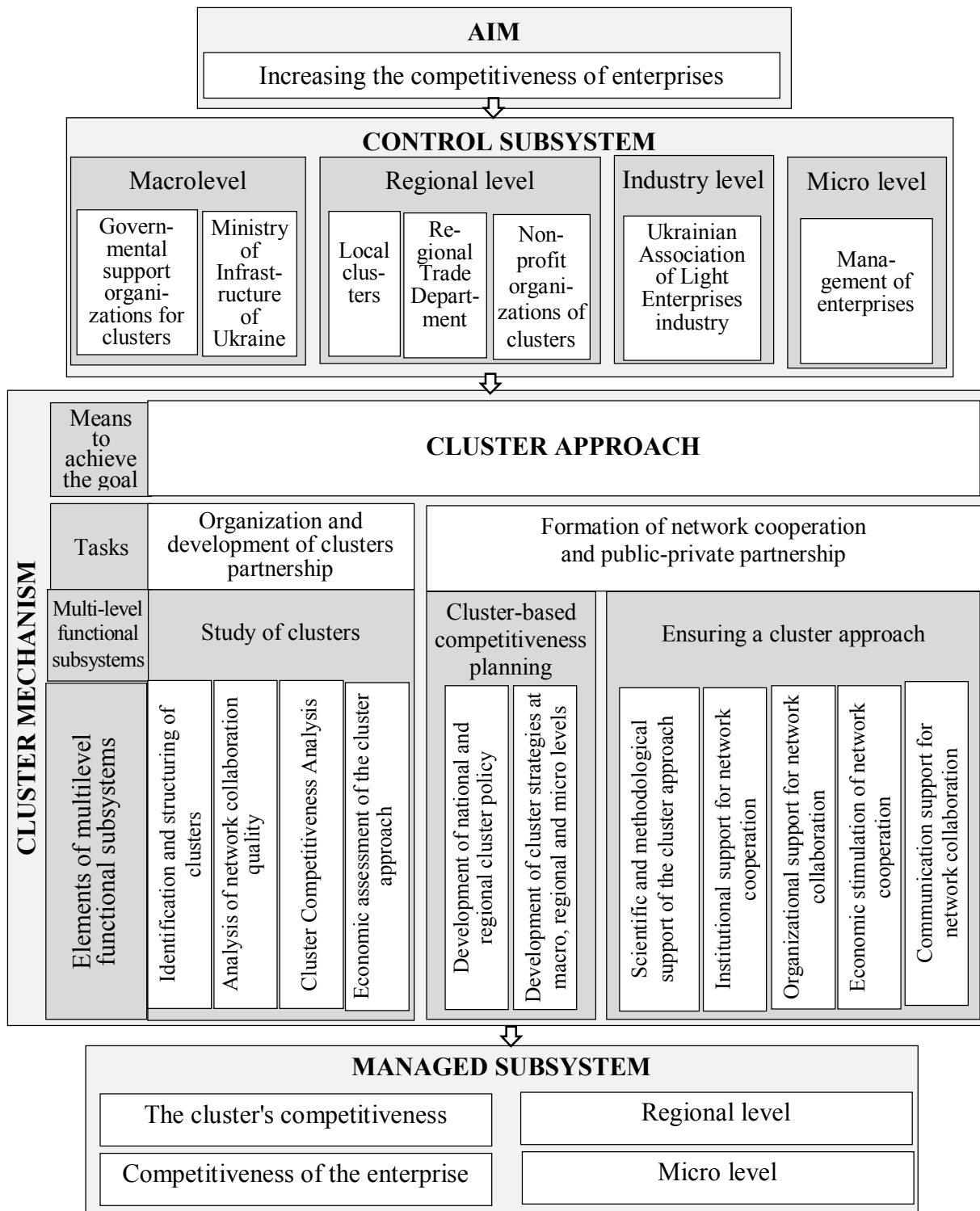


Fig. 1. Multi-level management system of competitiveness of textile industry enterprises on the basis of a cluster approach

The study of the external and internal environment of the functioning of enterprises of textile industry of Ukraine made it possible to identify the following prerequisites for the economic expediency of organizing clusters in the textile industry of Ukraine. The first prerequisite is globalization and increased competition in the domestic and foreign markets, as a result of which the share of the industry's output in the total volume of industrial production in Ukraine for 2005–2015. decreased by 4.2 times and amounted to 7.1%. The greatest decrease (5.5 times) occurred in the textile industry. During the analyzed period, the production of some types of textile industry products decreased (by an average of 2.7 times) and, as a consequence, the capacity utilization rate decreased (by 1.7 times).

The fourth prerequisite was the ineffectiveness of the innovation system. The carried out analysis of innovative activity in the textile industry of Ukraine for 2005–2015 revealed the following negative facts: a low share of innovation-active enterprises (9.8%) and a share of new products in total production (3.2%), an irrational change in the structure of innovative products in terms of novelty (the share of products that underwent significant technological changes or newly implemented); low level of inventive and patent activity.

The fifth prerequisite for the economic feasibility of cluster organization is the global financial and economic crisis. As a result of the reduction in consumer demand and non-payment by buyers in 2011, the remainders of finished goods in the warehouse as a whole increased by 17% in comparison with 2005 for the enterprises of the group of companies Textile-Contact and the corporation Textil-Ukraina.

The proposed multi-level subsystem of cluster research is based on the aggregation of cluster research at macro, regional and microlevels of management and includes the characterization of the goals, subjects, objects and directions of cluster research. In accordance with the multilevel approach, the directions of cluster research are expanded by the following: analysis of the quality of network cooperation and public-private partnerships, assessment of cluster competitiveness, analysis of competitiveness of cluster subjects, which will allow for more in-depth study of clusters, not only for development but also for cluster strategy evaluation.

The methodology for assessing the competitiveness of a textile industry enterprise is based on an integrated assessment of the measures of measuring the competitive potential of the enterprise and the competitiveness of the goods.

The system of competitive potential assessment indicators and their significance are determined on the basis of correlation-regression analysis using the statistical base of textile industry enterprises (the matrix of initial data included 7728 indicators for 2005–2015), which allowed to take into account the specifics of the industry. As a result, the following indicators were determined for assessing the competitiveness of the enterprise: the competitiveness of the goods, the excess of the allowable level of finished goods stocks, the growth rate of sales, the return on investment, the cost of 1 UAH sales ratio, current liquidity ratio, capacity utilization factor, labor productivity, depreciation of fixed assets, decrease in the level of material consumption, material output, the share of innovative goods, the costs of innovation, the coefficient of anticipating the growth of labor productivity in relation to the growth of wages, the coefficient of staff turnover. To translate dimensional estimates of indicators into dimensionless, the index method was used. For the maximum (minimum) value for each indicator was taken the value of the enterprise index – the leader in the industry.

To evaluate the competitiveness of goods was suggested by assortment groups as a weighted average of the degree of satisfaction with consumer parameters of goods on the basis of the expert method. For this purpose, a system of consumer parameters of textile industry goods was developed; a questionnaire evaluating the significance of consumer parameters; questionnaire comparing the parameters of goods from different manufacturers. A comprehensive assessment of the competitiveness of the enterprise is proposed to be calculated as the sum of the product of significance for an index estimate of the enterprise's competitiveness indicators. The values of the enterprise competitiveness assessment can theoretically vary from 0 to 100. For a qualitative characterization of the obtained competitiveness assessments, a scale for assessing the qualitative level has been developed. The methodology allows for a multifaceted analysis of enterprise competitiveness by calculating absolute and comparative competitiveness, the degree of use of elements of the company's competitive potential.

The method of cluster identification and structuring includes two stages: cluster identification and structuring. The task of the identification stage is the identification of potential subjects of the cluster. Identification of clusters is proposed to be carried out on the basis of the definition of a "key" product (an assortment of goods having the largest specific weight in the volume of industrial production of the sub-sector); analysis of interbranch relations in the region based on the calculation of the coefficient of full costs; identification of cluster subjects and products using in-depth interviews with managers and specialists of manufacturing enterprises and organizations, for which a questionnaire was developed.

The task of the structuring stage is the establishment of the strength of the connections between the subjects and the construction of the cluster scheme. Determination of the strength of the connections between the subjects of the cluster to clarify its composition is suggested to be carried out on the basis of the link strength factor calculated as the ratio of the volume of supply / supply of the products of the subject for the cluster to the total volume of sales of the product of the subject. The cluster includes producers along the technological chain, the coefficient of the binding strength of which is in the range from 0.08 to 1 (which is determined on the basis of empirical studies). Further, horizontal links in the production chain are identified to show producers of by-products or services. Then they are defined and shown on the cluster scheme of infrastructure organization, which create conditions for production and development – research, education, marketing etc.

The methodology for assessing the competitiveness of the cluster is based on an assessment of the indicators characterizing the importance of the cluster for the economic development of the region, as well as its investment and innovative potential of international cooperation, and is determined by the formula

$$K_k = 7 D_{add} \times EMP_{cl} \times EXP \times PROD_{cl} \times PROCES \times SUBJ_{cl} \times SUBJ_{org},$$

where  $D_{add}$  – value added index created in a cluster;  $EMP_{cl}$  – index of the number of employees in the cluster;  $EXP$  – cluster export volume index;  $PROD_{cl}$  – index of the share of the cluster in the volume of industrial production of the region;  $PROCES$  – index of the level of processing of the product in the process chain;  $SUBJ_{cl}$  – index of the number of subjects in the cluster;  $SUBJ_{org}$  – index of the number of innovation-active organizations in the cluster.

The level of processing is the number of types of products that are created in the cluster along the production chain. Indices of indicators are defined as the ratio of the  $i$ -th size index of the cluster's competitiveness to the maximum value of the  $i$ -th size index of the compared cluster identified in the region. Values for assessing the competitiveness of a cluster can theoretically vary from 0 to 1. The most competitive will be a cluster that has the most comprehensive assessment of competitiveness. The methodology is intended to identify prospective potential clusters for foreign investments within the framework of programs for creating international clusters, as well as for state support for the organization of clusters identified in the region within the framework of public-private programs, which allows comparing multi-sectoral clusters.



In order to methodically provide a multi-level system for planning competitiveness on the basis of the cluster approach, methods for the formation of cluster programs at the regional and micro-levels of management have been developed. The methodology for forming a regional cluster program includes the following stages and actions: Stage I – analysis of the preconditions of clusters in the region; Stage II – the definition of the idea of the project: the organization of the cluster in the region (or for the already created clusters – the development of cross-border cooperation of the cluster, the organization of an international cluster etc.); III stage – planning: suggested the logical and structural matrix of the cluster project; IV stage – financing: the necessary financial resources and sources of financing are proved, which are: the local budget (the contribution can be property, finance, provision of services, guarantees to banks, tax and other benefits); funds of enterprises and organizations of the cluster (finance, property, management, professional experience); funds of international organizations; Stage V – implementation: the organizational structure of the program management was proposed, monitoring directions and its indicators developed according to Balanced Scorecard (BSC) methodology, VI stage – assessment: evaluation tool (logical and structural matrix), evaluation indicators cluster program and the competitiveness of the cluster, as well as the mechanism for adjusting the program.

The micro-level competitiveness planning subsystem is presented by the methodology for developing a program to improve the competitiveness of enterprises based on clusters, which includes the following stages. At the first stage, a strategic analysis is conducted on the proposed algorithm, for which the factors of competitive advantages of cluster entities in the external and internal environment and the criteria for their evaluation are justified. At the second stage, competitiveness goals are formed – qualitative and quantitative. Qualitative goal is the participation of the enterprise in the cluster, and quantitative – the enterprise competitiveness standard, for the definition of which it is proposed to use the modelling method – the construction of the neural network. An algorithm for planning the enterprise competitiveness standard based on the construction of a neural network is developed.

At the third stage of enterprise competitiveness planning, alternative private strategies form the overall strategy of enterprise competitiveness. The classification of competitiveness strategies of the enterprise is developed, which is based on justified characteristics (type of competitive advantages, position in the market relative to competitors, directions of market development) and types of strategies (main, basic and private). The strategy for participation in the cluster is classified as basic.

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The paper defines: the purpose of the strategy for participation in the cluster (promoting the competitiveness of enterprises by taking advantage of network cooperation and PPP) and objectives (organization of network cooperation with cluster entities and partnership with regional government bodies; joint investment in the creation of a common specialized cluster infrastructure; development of special training programs for future cluster specialists in educational institutions of their qualifications, the entry into a non-profit organization Cluster; funding for joint research and development; the organization of joint marketing and sales of products in foreign markets).

At the IV stage, the assessment of the possibilities of the enterprise's participation in the cluster and the selection of competitiveness strategies are carried out, for which the method of forming the overall strategy for increasing the competitiveness of the enterprise according to the criteria of priority and efficiency has been developed.

At the V stage, an action program and budget are drawn up. The competitiveness improvement program is being developed as a multiproject, which includes projects to improve product quality, participate in the cluster, reduce costs, etc. Recommendations are given on the formation of project activities for participation in the cluster, depending on the stage of the clustering process in the region, the stage of the cluster life cycle, the degree of development of cluster relations, the relationship of the top management of enterprises to cluster processes.

At the VI stage, the program is implemented, for which the proposed activities are proposed, at the VII stage – monitoring and analysis of its implementation, the monitoring method (adaptive) and indicators of monitoring and analysis of the competitiveness plan are justified.

Institutional structures that ensure cooperation in education, science, marketing, and textile industry are not developed. Secondly, there was a low activity in the implementation of joint research projects (12 or 12.5% in the corporation Textil-Ukraine in relation to the number of organizations surveyed (the sample comprised 96 enterprises for 2006–2016), which significantly less than abroad (61–97% in different countries). Analysis of the typology of enterprises in the breadth of partner networks based on the constructed histograms showed that only 1.1% of the surveyed enterprises were able to build fairly complete partner networks, including 11 and 12 partners; wider networks (from 5 to 10 partners) possessed 26.8% of enterprises. The largest statistical representation belongs to enterprises that had only two partners for the introduction of innovations (29.6%), with suppliers and consumers acting as partners. Component projects in the field of education, marketing researches, sales on the external market by the enterprises of light industry were not carried out.

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In accordance with the methodology for the development of the cluster program, an analysis of network links was carried out on a statistical and analytical basis, comprising 46 textile industry enterprises and 446 organizations of other sectors of the economy, which resulted in the identification of the clusters in the light industry of the Kyiv region, namely:

1) the conditions of economic expediency of creating clusters (decrease in production and sales of products for 2005–2015, deterioration of financial indicators, high depreciation of fixed assets, low innovation and investment activity, low level of competitiveness of enterprises in the industry – an average of 47.5%);

2) local factors of production (raw materials, materials, means of labor, specialized educational and research institutions, skilled labor resources);

3) interrelated and related industries: agriculture – primary processing of leather and fur (full cost factor – 0.137); primary skin treatment and fur – linen industry (0.423); linen – textiles and furs (0.524); linen - knitted (0.193); textiles and furs – sewing (0.202); textiles and furs – shoe (0.391); mechanical engineering and leather – shoe (0.018); chemical – textiles and furs (0.131);

4) high level of competition in the industry, which is confirmed by calculations of generalized indicators of intensity of competition ( $Uc$ ). The most sycophants and furs compete in the sub-sector "primary skin and fur processing" ( $Uc = 0.8$ ) and sewing industries ( $Uc = 0.49$ ). This provides, on the one hand, the possibility of clustering, and, on the other hand, stimulates the development of innovation and increased competitiveness of the subjects. The conducted competitive analysis (77 enterprises of linen, textile, knitting, sewing and shoe industry) were investigated and identified leaders in the market who can become initiators of the creation of clusters of commodity producers.

Thus, the analysis showed the existence of prerequisites for the creation of clusters, so the next stage in the development of the cluster program was the identification and structuring of clusters in the Kyiv region. As a result of their conduct:

1) identified key products of textile industry – leather and fur products, footwear, clothing;

2) identification of cluster subjects was carried out on the basis of in-depth interviews of key specialists, heads of enterprises and organizations, institutions of cluster infrastructure (the empirical basis for the study included 30 questionnaires), resulting in a list of potential subjects of each cluster;

3) links between enterprises and organizations were identified (based on statistical analysis and in-depth interviews), in particular 1,430 links in the skin and fur cluster between 65 enterprises and organizations from 22 industries, 3,150 ties in a shoe cluster between 175 enterprises and organizations from 18 industries, 3,084 ties in a cluster of clothes between 257 enterprises and organizations from 12 industries;

4) the coefficients of strength of ties between enterprises and organizations from different sectors of the economy were calculated, the values of which served as a criterion for including subjects in clusters (clusters included subjects that had a bond strength of 0.08–1.0). As a result, the schemes of three clusters of manufacturers of light industry goods in the Kyiv region – leather and fur, footwear and clothing – were identified and constructed.

Analysis of the quality of network cooperation in clusters based on in-depth interviews of managers and key specialists (the empirical basis for the study included 30 questionnaires on 10 questions) led to the conclusion that the identified clusters are potential, not real.

The factors preventing the creation of real clusters in the region are revealed: the lack of cooperation relations between competitors in the field of research, education, marketing (100% of respondents); non-awareness of business and authorities about the benefits of cluster links, network cooperation and PPP (99%); undeveloped partnerships with local government (83%); weak links between enterprises and higher educational and scientific institutions (79%).

Analysis of the competitiveness of clusters as of 01.01.2015 revealed the most promising of them for the Kyiv region – leather and fur (a comprehensive assessment of its competitiveness – 0.82) and footwear (0.76). The clothing cluster received a low estimate of 0.47. At the same time, the level of competitiveness of the textile and footwear industries is currently low and amounts to 49.4 and 52.6% of the maximum possible, respectively. Based on the results of the analysis, it was concluded that the clusters identified in the Kyiv region are potential and are at the origin stage. For the organization of real clusters and their development there is a need to develop and implement a cluster program.

The program's goal is to organize three clusters of textile industry enterprises in the Kyiv region (leather and fur, shoes and clothes). This goal will ensure the achievement of the goal of a higher order, which is to increase the competitiveness of enterprises in the Kyiv region. In accordance with the developed methodology for the formation of regional cluster programs, a "strategy tree" has been constructed to define the logic of actions for creating clusters.

Based on the results of the analysis of strategies, the logical and structural matrix of the program is constructed, schedules of activities and resources are drawn up, funding sources are identified and program sustainability is assessed. The conclusion is made that the program is stable and effective, since the institutional capacity of the Kyiv Regional Executive Committee and Kyiv National University of Technologies and Design is high, the size of the membership fees of enterprises for the maintenance of the Association is small (0.002% of the sales volume).

The decision by the state and regional governments of Ukraine to use the cluster approach to increase the competitiveness of enterprises, industries, regions and the national economy will depend on a convincing economic justification for its effectiveness. To this end, a methodology has been developed for assessing the economic results of the organization and development of clusters. In contrast to the method used to evaluate clustering based on the forecast of production and employment, the developed methodology is aimed at assessing the efficiency of clusters at the microlevel using the economic effect indicators (the level of enterprise competitiveness) and efficiency (profitability of total assets). The methods of forecasting are expert and the method of linear approximation, the factors-arguments for constructing models are the costs for 1 UAH realization of products, weighted-by-product assessment of the competitiveness of goods and labor productivity of workers. The forecast period is calculated on the basis of empirical studies and was 7 years. Thus, the economic evaluation of the organization of clusters in the textile industry of Ukraine, conducted using multi-factor models, allows us to conclude that the cluster approach is effective in managing the competitiveness of industry enterprises.

**Conclusions and offers.** The methodology of the cluster approach in the management of the competitiveness of textile industry enterprises is developed, which, unlike existing exercises, considers the management of enterprise competitiveness from the point of view of the formation of a multi-level system and the process of organizing clusters. To substantiate the cluster approach from the point of view of the system, the methodological foundations for the formation of multi-level subsystems have been developed: managing, managed, target (a "tree of goals" for organizing and developing clusters); functional, including the subsystem of cluster research, for which goals, subjects, objects and directions of cluster analysis are defined; a subsystem of planning, the elements of which are the development of cluster policy and cluster strategies at macro, regional and micro levels; providing a subsystem consisting of methodological support of the cluster approach, institutional, organizational, economic, communication support of network cooperation and PPP in clusters.

The developed methodology for the formation of cluster policy in Ukraine includes: the rationale for its specificity, principles, purpose and objectives; subjects and objects of cluster policy; recommendations on the formation of a cluster strategy as an integral part of the cluster policy. Considering the management of enterprise competitiveness on the basis of clusters from the point of view of the process, it was possible to develop a clustering technology in the textile industry of Ukraine, including a sequence of steps and actions for organizing clusters in the industry and managing them.

A set of methods for the development of cluster programs is presented by the methodology for developing a regional cluster program, the distinguishing feature of which is the application of the methodology of project management and financing, which allowed implementing the principles of PPP. The application of the methodology will allow to coordinate the goals of partners (state and business) in the organization and management of clusters, effectively manage resources, time, budget (through a logical-structural matrix) and expand sources of financing through pooling of funds.

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