



Olha Hetman,
Hanna Kryvoruchko,
Olena Chupyr,
Nina Avanesova,
Iryna Fesun

DEVELOPMENT OF A PROACTIVE APPROACH TO DETERMINING THE TRANSFORMATION OF ORGANIZATIONAL STRUCTURES OF ENTERPRISES

The object of research is the process of transforming the configurations of structures. It is known that the timeliness of making a decision on the transformation of the configuration depends on the type of external environment, which is determined according to the level of influence of its main characteristics on the enterprise, while each type of environment corresponds to a specific configuration. Untimely determination of trends in the change of the influence of the external environment leads to untimely transformation of the enterprise and the negative consequences associated with it. This is the problem that was solved in the work. The study is aimed at developing a proactive approach to the transformation of the configurations of structures, which takes into account the assessment of the rate of change in the influence of external factors on organizations and is a sequence in the implementation of structural transformation. The issue of proper structuring concerns enterprises operating in various sectors of the economy, including industry, agriculture, utilities, etc. The article presents a developed matrix for determining the directions of structural transformation and the main stages of a proactive approach to the transformation of structures. The value of the study lies in the fact that a proactive approach allows to identify possible structural problems in advance, make changes, and prevent the decline of a company at any stage of its life cycle. According to the results of the analysis, taking into account the change in the influence of external factors, only 3 percent of enterprises experienced decline within five years of existence (compared to those that did not change the management structure, this figure is 45 percent). The proactive approach can be applied regardless of the age of the organization, industry, geographical location, or market.

Keywords: enterprise, transformation, configuration, structure, environment, approach, derivative, speed, proactivity, development.

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1. Introduction

The need for a theoretical justification for the effectiveness of enterprise transformation during its development emerged long before the advent of most modern methods of organizational structure design. However, the primary contributions to research directions and addressing issues related to the transformation of organizational structures have been made by contemporary authors.

The importance of timely changes in structure cannot be overstated, as it directly affects the determination of key design parameters, such as the degree of decentralization, the influence of key parts of the configuration, and the dominance of specific coordination mechanisms. It also determines the main style of top management and the strategic approaches to altering the enterprise's long-term development directions.

The issue of structural transformation affects various sectors of the economy and enterprises of all forms of ownership. For example, the industrial sector of Ukraine is one of the industries where the country plays a significant role in global markets. However, unresolved management issues, particularly those related to the organizational design of enterprises, are almost identical to those encountered by enterprises in other sectors of any country's economy. One of the critical issues

involves approaches to transforming enterprise structures in response to changes in external environmental factors.

This issue has been considered in many works by well-known scientists. Thus, in work [1] the most effective methods of building management structures are provided exclusively for innovatively active small enterprises, which really should be adaptive structures. There is a point of view [2] according to which organizational changes are considered as permanent transformations. They are aimed at changing values, aspirations and behavior with simultaneous improvement of production, sales and other business processes of the enterprise. In another work [3] it is shown that "the low efficiency of organizational structures at enterprises can be explained by the blurring of management functions, duplication of responsibility and authority between heads of different departments, lack of proper delegation of authority and insufficient information support for the activities of the enterprise..." In the works of well-known scientists [4, 5] the characteristics of adaptive organizational structures of entrepreneurial-type organizations are revealed "through the lens of a constant search for new effective adaptive structures, distinguished by purposefulness, flexibility and diversity..."

This indicates a tendency among scientists to move from "rigid", slowly adapting to external influences, to "organic", which, unlike the first, are flexible. The following work [6] shows that "the main reasons

that encourage management to optimize the existing organizational structure are low efficiency of the enterprise, lagging behind market requirements, difficulties in finding information, increased staff turnover and the use of outdated technologies...". Also known is the point of view [7] that "organizational changes affect all aspects of business activity and all levels of organization management, contributing to the achievement of set goals and sustainable development". It can be said that the above theories [6, 7] are based mainly on the analysis of internal environmental factors. The conceptual model of organizational change management proposed for consideration [8] also does not take into account the priority of the external environment. There is even a point of view according to which the calculations of the design parameters of structures should be primarily related to ethics, image, reputation, internal relations [9]. It is also necessary to dwell on the opinion according to which it is proposed to always use a flexible organizational structure, which is a hybrid of a matrix organizational structure, practically without taking into account the change in the level of influence of the external environment [10]. There is a point of view [11] that speaks of a direct connection between the size of the enterprise and the chosen type of organizational structure without a primary analysis of the environment. An interesting article is one that offers a unique view of the special role of human activity and its function in future organizational changes caused by artificial intelligence [12], but transformational changes are also considered mainly based on the analysis of internal environmental factors.

So, a number of papers [8–12] emphasize the need to consider the mechanisms of how organizational changes increase operational efficiency without taking into account the influence of external factors. The above works reveal a clear contradiction between the recognition of the decisive interaction of enterprises with the external environment and ignoring this fact when building the structure of the enterprise.

Thus, it is obvious that the point of view on the need to consider the issue of transforming bureaucratic structures into organic ones, or introducing elements of organic structures into existing bureaucratic forms without prioritizing external environmental conditions, is shared by many scientists, as indicated above. It was also noted that the most numerous group consists of theories where the transformation is based mainly on the analysis of internal environmental factors. But there is a third group of scientists who emphasize the decisive role of external environmental factors in the transformation process, but do not provide a system for choosing a specific organizational form based on such factors as complexity, dynamism, taking into account the hostility of the external environment. Of particular interest are studies that claim that the structure determines how managers approach their work. The author of scientific works [13, 14] notes that managers organize their activities by making certain decisions, focusing on specific issues and developing various strategies [13]. In the context of the need to change the structure of the organization, the scientist suggests considering them as configurations with a set of basic forces that drive the organization. The author notes: "There are five forces in the configuration that pull it in different directions. This happens as follows: the top tends to centralize; the technostucture stimulates standardization; the operational core develops expertise; the middle line tends to "balkanize"; support staff – to cooperate" [14]. The author of this study believes that the structure should be designed to manage work systems and regulate the interaction between its parts. The author also emphasizes that using the configuration system, one can understand how and why organizations move from one structure to another. He gives several conclusions that emphasize the critical importance of external environmental factors that affect the organization: the more dynamic the environment, the more organic the structure; the more complex the environment, the more decentralized it becomes. This is a revolutionary approach to solving issues related to the transformation of organizational structures. At this stage of the study, it is necessary to highlight the concept

presented in a similar work [15]. Scientists have proposed a model of the impact of external and internal changes on the organization. The cumulative impact of all factors determines the overall change in the external environment. The issue of transforming the organizational structure will arise at this new stage of development. The internal environment is also a system that is inverted under the influence of the external environment. This approach is supported by other scientists. For example, in the work [16], not only the influence of the external environment is considered, but also the corresponding management styles, which are also used taking into account this influence. There is also such an interesting point of view that organizational transformation is, first of all, an emotional "journey" [17], although the scientist does not exclude the influence of the external environment and the choice of the configuration of the organization. In the paper [18], a general list of levers for successful transformation of the organizational structure is provided, but the sequence of choosing a specific organizational form based on the influence of the complexity and instability of the external environment is not provided.

But the issues related to the fact that existing approaches to the transformation of structural configurations do not give priority to determining the influence of environmental factors on the choice of the planned configuration, or take into account the influence of the environment without assessing the speed with which this influence changes, remain unresolved. All this allows to assert that it is advisable to conduct a study devoted to the development of a proactive approach to determining the transformation of organizational structures of enterprises.

The above determines the object, aim and tasks of research. *The object of this research* is the process of transforming the configurations of structures. *The aim of the research* is to develop a proactive approach to the transformation of structural configurations, which takes into account the assessment of the speed of change in the influence of external environmental factors on organizations. Achieving this aim requires solving the following interrelated tasks:

- proposing a classification of approaches to the transformation of organizational structures of enterprises;
- development of a matrix for determining the directions of structural transformation at enterprises;
- formulation of the main stages of transformation of structural configurations.

2. Materials and Methods

Using general scientific methods of cognition, theoretical generalization, and comparison, it is proposed to analyze currently existing approaches to the essence of organizational structure transformations and provide a classification of approaches to enterprise organizational structure transformation. This classification takes into account the influence of external and internal environmental factors on the transformation process of an organization's structure.

The expert evaluation method is proposed for assessing the impact of direct and indirect environmental factors (on a scale of 1 to 10). The assessment should be carried out by experts in economics, management, marketing, statistical diagnostics, and other relevant fields.

Mathematical statistics methods (correlation determination and function approximation) are proposed in this work to develop a matrix for determining the directions of structural configuration transformation. This matrix will enable the creation of a proactive approach to the transformation process.

It is known that if a given value of a factor attribute corresponds to one or more strictly defined values of a result attribute, the relationship between the two variables is called functional. Correlation is defined as a relationship between two variables where a change in one alters the average value of the other. Methods used to quantify this relationship are referred to as correlation and regression analysis [19].

Although the correlation coefficient emphasizes the direction and strength of the relationship, it does not reveal how a one-time change in the factor attribute (A) quantitatively affects the result attribute (B).

In such cases, regression analysis helps researchers, as it shows the extent to which attribute B changes when attribute A is altered by one unit. To determine correlations, the following steps should be taken: determine the presence of a correlation (if it exists), choose the type of dependency, calculate the regression equation parameters, and determine the strength of the relationship.

Based on theoretical analysis, the dependency form is typically chosen as a straight line (if the analysis results allow), as this most often approximates the empirical regression line [20].

3. Results and Discussion

Taking into account all regarding the dominant points of view of well-known scientists regarding approaches to considering issues of configuration transformation, the study proposes a classification of approaches to the transformation of organizational structures of enterprises, developed using the matrix analysis method (Table 1). The classification includes three groups of approaches (organic, infrastructural, and reactive).

The above represents a classification of approaches to the transformation of organizational structures of enterprises. In the organic and internal-structural approaches to the transformation of an enterprise's structure, there is a decrease in the importance of external environmental factors relative to the existing organization, or their primacy in determining the need for structural transformation is denied.

The absence of a set and sequence of actions for the transformation of an organizational structure, taking into account the influence of external environmental factors, is also observed in the reactive approach. Scientists propose to use the functional dependence of environmental factors on time. They consider the construction of such dependencies after determining the influence of factors (using expert assessment), further determining the dependence and approximating the function. Thus, the transformation of organizational structures is carried out on the basis of determining the influence of environmental factors without taking into account speed indicators. But the external environment directly changes its influence on the activities of the organization.

It is known that the rate of change of a function at a certain point is equal to its derivative. Therefore, in further improving the approach to the transformation of structural configurations, it is considered necessary to use derivatives as a characteristic of the change in the influence

of external environmental factors. However, when assessing the level of influence of external environmental factors by the expert assessment method [19], it should be emphasized that there is no reference system in which the value of environmental factors is zero. It is proposed to compare the influence of factors of complexity and dynamism of the environment with the base level, namely with the determined influence of these factors directly on the industry and region in which the enterprise operates.

It is known that complexity is an integrative number of factors to which an enterprise must respond simultaneously. Environmental dynamism is the rate of change of external environmental factors affecting the enterprise. Therefore, the significance of the level of influence of complexity and dynamism factors is proposed to be considered in comparison with the corresponding changes in the base level (industry, region).

Next, it is necessary to directly determine the functional dependencies of the complexity and dynamism of the external environment over time (for the organization and the baseline) and obtain their derivatives. There may be a situation where the comparison of factor values based on functional dependencies (specific points) for the organization and the base level do not coincide. When comparing such changes in the influence of factors using derived functional dependencies, it is necessary to urgently transform the configuration taking into account the identified trends (Fig. 1). This forms the basis of the proactive approach.

The proactive approach, unlike the reactive one, does not offer an immediate response to changes that have already occurred, but instead enables early reactions to upcoming changes, preventing shifts in influence levels in advance.

In Fig. 1, points (T1–4) show the intersections of the time-dependent functions of the influence levels of external environmental factors on the baseline with the time-dependent functions of the influence of these factors on the organization (complexity (X) and dynamism (Y)). It is clear that when these functions intersect, the management of the enterprise should urgently decide on adjusting the configuration of the organizational structure, considering the change in the type of external environment affecting the enterprise.

Below is a matrix for determining the directions of structural transformation in organizations (Fig. 2). It is based on the derivatives of functional dependencies of the levels of influence of complexity factors on the organization ($x'_{0(t)}$) and the base level ($x'_{b(t)}$).

In addition, it is based on the level of influence of dynamism factors on the organization ($y'_{0(t)}$) and the base level ($y'_{b(t)}$) taking into account time.

Classification of approaches to the transformation of organizational structures of enterprises

Group number, name	Strengths of the approach	Weaknesses of the approach
1. Organic approach [1–5]	1. The transformation of enterprises is viewed as a set of actions aimed at improving efficiency. 2. The need for a global shift from functional organizational structures to organic ones is emphasized	1. Transformation is defined as the shift from bureaucratic to organic structures without considering the impact of external environmental factors. 2. There is a lack of a well-defined set and sequence of actions for transforming the organizational structure of the enterprise, taking into account external environmental factors
2. Internal-structural approach [6–12]	1. The issue of minimizing transaction costs during the transformation of the organizational structure is considered. 2. The transformation process is viewed, including as a merger process, aimed at increasing the enterprise's competitiveness	1. Transformation is reduced to changing the organizational structure based primarily on the analysis of internal environmental factors. 2. There is a lack of a well-defined set and sequence of actions for transforming the organizational structure of the enterprise, taking into account external environmental factors
3. Reactive approach [13–18]	1. Emphasis is placed on the decisive role of external environmental factors in the process of organizational structure transformation. 2. The fact of the enterprise's organizational structure transformation during development is recognized	1. There is a lack of a well-defined set and sequence of actions for transforming the organizational structure of the enterprise, taking into account external environmental factors

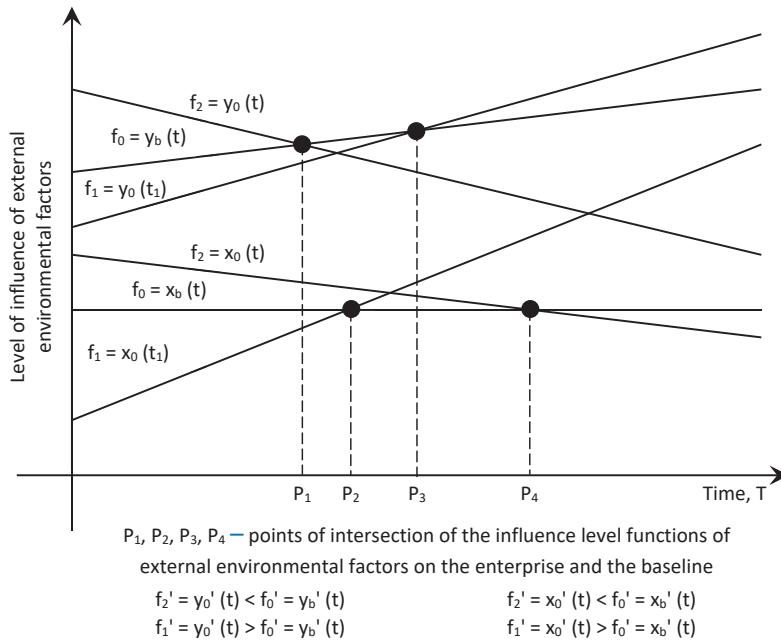


Fig. 1. Examples of dependencies of external environmental factor influence levels over time (developed by the authors based on studies (2025))

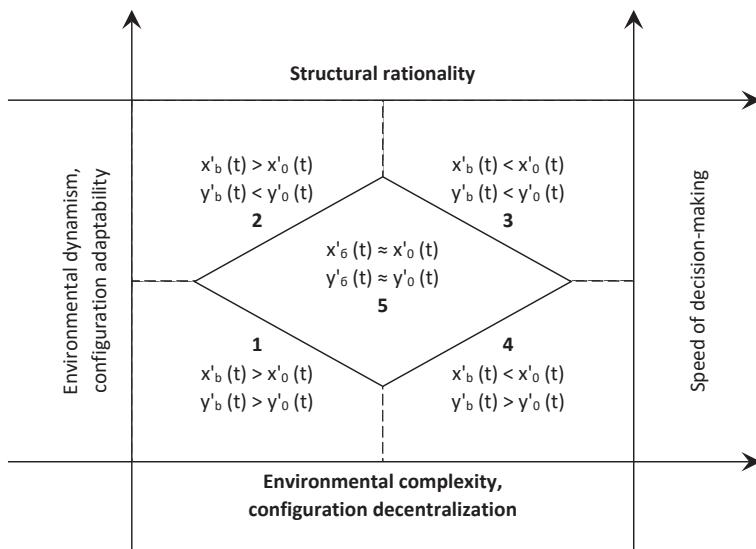


Fig. 2. Matrix for determining directions of structural transformation (developed by the authors based on studies (2025))

Additionally, Fig. 2 indicates the types of external environments for organizational activities for ease of use, namely:

- simple and stable (1);
- simple and dynamic (2);
- complex and dynamic (3);
- complex and stable (4);
- complex and moderately dynamic (5).

As the complexity of the environment increases, the rationality of the structure also grows, as this is the ratio of the total number of employees to the number of management staff [13], along with the decentralization of the configuration both vertically and horizontally. Accordingly, an increase in environmental dynamism positively affects the speed of decision-making and the adaptability of organizational structures.

An in-depth analysis of the sequence of measures for the transformation of the enterprise structure is possible only within the framework of a proactive approach.

This is possible after identifying the design parameters in the process of transition from a simple to a complex environment, from stable to dynamic (Fig. 3, 4).

Let's return to the above-mentioned main drawback of the organic, intra-structural and reactive approaches. This drawback is the lack of a clearly defined set of actions for the transformation of the organizational structure of the enterprise. Below are the main stages of the proactive approach to the transformation of the configurations of organizational structures.

The approach takes into account the need to use functional dependencies of factors (for the organization and the base level) to determine changes in the complexity and dynamism of the environment.

In considering this approach, attention is focused on the following (Fig. 5):

1. The assessment of complexity and dynamism levels is performed over a specified period of time, for example, six months, and takes into account not only the impact of external factors on the enterprise, but also their impact on the environment as a whole.

2. Functional relationships are considered in the context of the impact of the external environment on the company and its baseline. These dependencies can change. Linear functions should be used whenever possible, taking into account that the dependency is defined by only two data points.

3. When determining the derivatives of the obtained functions, special attention should be paid to the fact of the function's increase or decrease and the value of the derivative (not by its absolute value).

4. The matrix for determining the directions of structural transformation (Fig. 2) is applied after identifying the type of external environment in the context of its main characteristics and their derivatives.

5. Regarding the algorithm for comparing the design parameters of the existing and planned configuration, recommend using the data from Fig. 3, 4.

6. The transformation of the current organization into the planned one is possible only if the type of external environment changes, taking into account the criteria for comparing the values of the derivative function (Fig. 2).

7. Concerning the forecasting of the future dynamics of the influence of external environmental factors, attention should be paid to the accuracy and timeliness of the information regarding how the list and level of influencing factors might change.

Among the successful Ukrainian enterprises that have transformed their structural configuration in a timely manner are the following: PJSC Zaporizhstal, LLC ATB Market, LLC Avtomagistral Pivden, JSC Ukrzaliznytsia, Ajax Systems, Sigma Software Group, LLC SILPO-FOOD, OJSC NNEK Energoatom, NJSC Naftogaz of Ukraine.

Among the enterprises that have not transformed for more than three years and have not had a profit or have been liquidated: LLC Rapakovo Soy Trade, LLC RGK Trading, OJSC Machine-Building Plant, LLC TB Solchen and many others.

In general, according to the results of the analysis, using data from the Main Statistics Department [21], interviews with employees of enterprises, only 3 percent of enterprises have experienced a decline in five

years of their existence (operated taking into account the change in the influence of external factors), compared to those that did not change the management structure (this figure is 45 percent).

As an example, from the enterprises listed above, in order to confirm the need for timely transformation (if necessary), it is possible to note the fact of compliance or non-compliance of structural forms with the type of external environment (Table 2).

Coordination mechanisms		
1. Direct control 2. Standardization of work processes	→	1. Standardization of output 2. Standardization of skills and knowledge 3. Mutual adjustment
Influence of the key part of the structure		
1. Strategic apex 2. Technostructure	→	1. Support staff 2. Middle line
Decentralization		
1. Centralization 2. Limited vertical and horizontal decentralization	→	1. Selective decentralization 2. Parallel decentralization
Labor formalization		
1. Significant	→	1. Insignificant 2. Relatively insignificant
Training, indoctrination		
1. Specific training 2. Specific indoctrination	→	1. Significant focus on training 2. Significant focus on indoctrination

Fig. 3. Change in configuration design parameters in the case of increased environmental complexity (developed by the authors based on studies (2025))

Coordination mechanisms		
1. Standardization of work processes 2. Standardization of skills and knowledge	→	1. Direct control 2. Mutual adjustment 3. Standardization of output
Influence of the key part of the structure		
1. Technostructure 2. Operating core	→	1. Middle line 2. Strategic apex 3. Support staff
Grouping principle		
1. Functional	→	2. Market-based
Size of organizational units		
1. Relatively large	→	1. Relatively small
Training, indoctrination		
1. Specific training 2. Specific indoctrination	→	1. Significant focus on training 2. Significant focus on indoctrination
Planning and control system		
1. Action control	→	1. Result control
Availability of interaction tools		
1. Insignificant quantity	→	2. Significant quantity

Fig. 4. Change in configuration design parameters in the case of increased environmental dynamism (developed by the authors based on studies (2025))

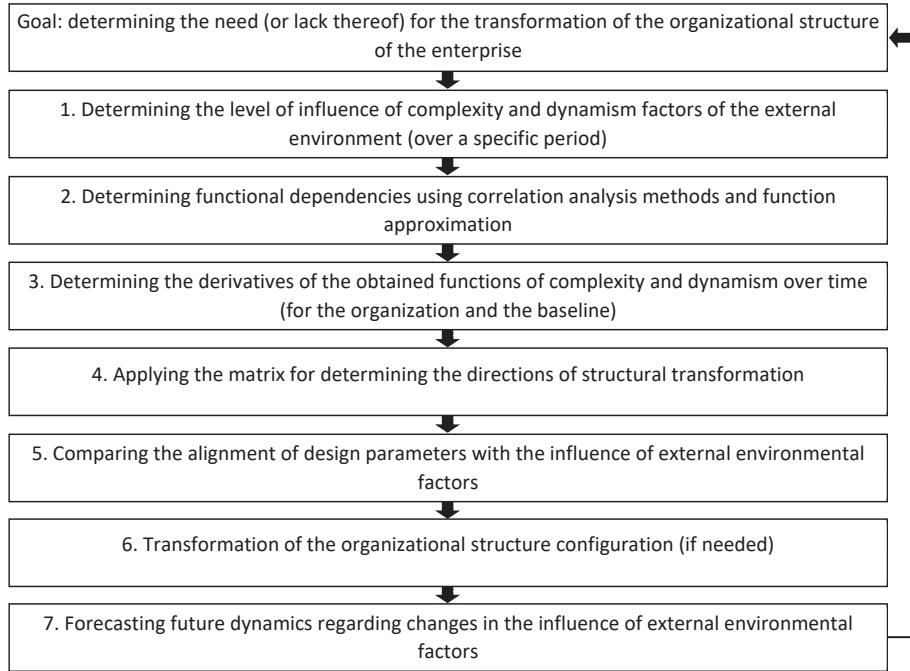


Fig. 5. Main stages of the proactive approach to configuration transformation (developed by the authors based on studies (2025))

Table 2

Compliance of enterprise configuration with the type of external environment

No.	Company name	Type of external environment	Existing configuration	Environment type compliance	Suggested (in case of mismatch of environment type)
1	LLC ATB Market	Medium level of complexity and dynamism	Divisional	Corresponds	–
2	LLC Avtomagistral Pivden	Medium level of complexity and dynamism	Divisional	Corresponds	–
3	JSC Ukrzaliznytsia	Medium level of complexity and dynamism	Divisional	Corresponds	–
4	LLC SILPO-FOOD	Complex and dynamic	Adhocracy	Corresponds	–
5	LLC RGK Trading	Complex and dynamic	Mechanistic form	Does not respond	Adhocracy
6	OJSC Machine-Building Plant	Complex and stable	Mechanistic form	Does not respond	Professional uniform
7	LLC TB Solchen	Complex and stable	Mechanistic form	Does not respond	Professional uniform

It is known that in the case of a change in configuration towards adaptability (increasing the dynamism of the environment), the flexibility of the enterprise should increase, which is equal to the ratio of the number of employees performing related functions to the total number of employees, in the case of increased decentralization (increasing the complexity of the environment), the rationality of the structure should increase, which is equal to the ratio of the total number of employees to the number of management staff. In the case of a qualitatively carried out transformation, the overall economic efficiency should increase and there should be a positive cost gap, which is calculated according to the following formula

$$NPV = (DPN - I + T) \cdot r, \quad (1)$$

where NPV – net present value of the transformation effect; DPN – profit from transformation; n – time period after transformation; I – additional investment for transformation; T – increase (savings) in tax payments; r – discount rate.

Such a set of indicators clearly indicates the presence or absence of effective transformation of enterprises. Let's consider the examples of the implementation of a proactive approach to the transformation of the configurations of the structures of Ukrainian enterprises, noting that the transformation was carried out under the condition of increasing complexity and dynamism of the environment. It is obvious that the proactive approach that was applied allowed enterprises to carry out the transformation in the right direction (Table 3).

From a practical point of view, the application of a proactive approach is difficult to overestimate. A proactive approach to the transformation of the organizational configuration allows for early identification of potential structural and other challenges, timely implementation of organizational changes and prevents the decline of the enterprise at any stage of its life cycle. A proactive approach can be applied in any external environment, regardless of the age of the organization, geographical location, industry or market position. The approach developed and presented in the article allows for organizational changes and prevents the decline of the company at any stage of its life cycle.

Table 3

Indicators of the efficiency of the transformation process of the studied enterprises

Performance indicators	PE "Budkor"		KP "Zmiiv-service"		LLC "S-trans"	
	Before the transformation	After transformation	Before the transformation	After transformation	Before the transformation	After transformation
Overall economic efficiency	1.002	1.021	1.011	1.103	1.077	1.222
Cost gap, UAH thousand	–	247.1	–	651.6	–	556.7
Rationality	6.49	8.42	5.25	7.74	4.00	4.76
Flexibility	0.09	0.11	0.03	0.09	0.02	0.08

This is extremely important in conditions of limited resources and time for the implementation of any, in particular, state programs. Awareness of the universality and practical significance of the proactive approach to transformational processes opens the door to numerous practical steps for the implementation of this new management technology.

If to consider the different conditions for implementing the approach, taking into account the characteristics of the industry or market, time or territory, it should be noted that there are restrictions that are currently possible in connection with hostilities on the territory of the state. But there are restrictions in applying the approach due to the impossibility of carrying out a qualitative analysis of the factors influencing the external environment at the enterprise and, as a result, an incorrect determination of the type of this environment. This is possible in the absence of involvement in this work of highly qualified specialists in the following areas: organization management, personnel management, competitiveness management, management of the organization's technical system, etc.

In the conditions of martial law and post-war reconstruction of Ukraine, a proactive approach to determining the transformation of organizational structures of enterprises acquires particular importance due to the need to quickly respond to all possible political, economic, social, legislative and other changes.

Regarding the prospects for further research, it is possible to note the relevance of scientific and practical experiments in the case of forming alliances between state institutions and business structures, which is of significant scientific interest and deserves further research.

4. Conclusions

1. A classification of approaches to the transformation of organizational structures of enterprises is proposed, which takes into account the classification feature that determines the influence of external factors on the process of transformation of the organizational structure of the enterprise, and includes three groups (organic, infrastructural and reactive approaches). First, the proposed classification allows to accumulate experience and knowledge, it becomes the basis for the further development of the specified scientific direction. Second, the specified classification makes it possible to understand the logic of other approaches. Third, the specified classification not only systematizes existing approaches, but also helps enterprises consciously choose the right path of transformation, since untimely determination of the influence of external factors on the activities of the organization leads to a dysfunctional construction of the enterprise's framework, which, in turn, leads to the decline of the organization.

2. A matrix has been developed to determine the main directions of structural transformation of the enterprise's development, which allows determining the direction of transformation towards decentralization and rationality (in the case of a complicated external environment) and structural adaptability (in the case of increased dynamism) based on the type of external environment using the defined functional de-

pendencies of the factors of complexity and dynamism of the environment and the derivatives of these functions. The matrix is constructed in such a way that in the case of determining the derivatives of the complexity and dynamism of the external environment of organizations and the environment in general, it is immediately possible to determine the type of environment. This provides an opportunity to calculate the design parameters of the structure that will function qualitatively in the specified conditions.

3. The main stages of structural configuration transformation have been formed, which are a set of actions that serve as a universal tool for updating any enterprise, since it takes into account the rate of change in the impact of external factors on organizations and allows for timely organizational changes. Timely changes in the configuration of the structure provide not only correctly calculated design parameters, but also the correct definition of strategic approaches and timely adoption of effective management decisions that allow the enterprise to function effectively both in the present and in the long term.

Conflict of interest

The authors declare that they have no conflict of interest regarding this research, including financial, personal, authorship, or other, that could influence the research and its results presented in this article.

Financing

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Data availability

Data will be provided upon reasonable request.

Use of artificial intelligence

The authors confirm that they did not use artificial intelligence technologies when creating the presented work.

Authors' contributions

Olha Hetman: Conceptualization, Writing – original draft, Project administration, Funding acquisition; **Hanna Kryvoruchko:** Methodology, Validation, Formal analysis, Funding acquisition; **Olena Chupyr:** Writing – review and editing, Funding acquisition; **Nina Avanesova:** Methodology, Writing – review and editing, Funding acquisition; **Iryna Fesun:** Data curation, Visualization, Funding acquisition.

References

1. Zaychenko, K. (2019). Methods and models of formation the organizational structure of innovation-active small enterprise: essence and practical value. *Ekonomika ta derzhava*, 2, 135–140. <https://doi.org/10.32702/2306-6806.2019.2.135>

2. Pokotylo, T. (2020). Organizational change management as an element of competitiveness of the enterprise. *Economy and Society*, 22, 524–532. <https://doi.org/10.32782/2524-0072/2020-22-91>
3. Koshchii, O. (2021). Optimization of organizational structures of domestic enterprises. *Economic Forum*, 11 (4), 70–78. <https://doi.org/10.36910/6775-2308-8559-2021-4-10>
4. Dolgova, L. (2021). Application of adaptive organizational structures in modern business. *Efektyvna ekonomika*, 3. <https://doi.org/10.32702/2307-2105-2021.3.77>
5. Lepeyko, T., Gruzina, I. (2023). Conceptual approaches to the formation of the management structure of a competent organisation. *Economic Scope*, 184, 107–113. <https://doi.org/10.32782/2224-6282/184-18>
6. Solonenko, Y., Kutsa, Y. (2021). Optimization of organizational structure of enterprise management. *Financial Space*, 4 (44), 136–145. [https://doi.org/10.18371/fp4\(44\).2021.136145](https://doi.org/10.18371/fp4(44).2021.136145)
7. Novikova, M. M., Borovyk, M. V., Bubyrov, Y. A. (2022). The Theoretical Aspects of Organizational Change Management at the Enterprise. *Business Inform*, 10 (537), 219–225. <https://doi.org/10.32983/2222-4459-2022-10-219-225>
8. Chernyav'ska, I., Kovtun, R. (2023). Management of organizational changes as a direction of improving the organization's activities. *Economic bulletin of the Dniprovs'k state technical university*, 2 (5), 42–51. [https://doi.org/10.31319/2709-2879.2022iss2\(5\).270793pp42-51](https://doi.org/10.31319/2709-2879.2022iss2(5).270793pp42-51)
9. Magalhaes, R. (2020). The Resurgence of Organization Design and Its Significance for Management Education. *She Ji: The Journal of Design, Economics, and Innovation*, 6 (4), 482–504. <https://doi.org/10.1016/j.sheji.2020.09.002>
10. Kiruba Nagini, R., Devi, S. U., Mohamed, S. (2020). A Proposal on Developing a 360° Agile Organizational Structure by Superimposing Matrix Organizational Structure with Cross-functional Teams. *Management and Labour Studies*, 45 (3), 270–294. <https://doi.org/10.1177/0258042x20922108>
11. Angelova, M. (2019). Classic Organization Management Structures Versus Project Team Management in Creative Business – Straights and Weaknesses. *2019 International Conference on Creative Business for Smart and Sustainable Growth (CREBUS)*. IEEE. <https://doi.org/10.1109/crebus.2019.8840066>
12. Rudko, I., Bashirpour Bonab, A., Bellini, F. (2021). Organizational Structure and Artificial Intelligence. Modeling the Intraorganizational Response to the AI Contingency. *Journal of Theoretical and Applied Electronic Commerce Research*, 16 (6), 2341–2364. <https://doi.org/10.3390/jtaer16060129>
13. Mintzberg, H. (2019). *Bedtime Stories for Managers: Farewell, Lofty Leadership... Welcome, Engaging Management*. Oakland: Berrett-Koehler Publishers. Available at: https://books.google.com.ua/books?hl=uk&lr=&id=DwxzDwAAQBAJ&oi=fnd&pg=PP1&dq=Bedtime+Stories+for+Managers:+Farewell,+Lofty+Leadership%20%80%A6+Welcome,+Engaging+Management&ots=6PgfLDYUzT&sig=DNA4AAXx-VB_IkjZ2A6324K7Kaw&redir_esc=y#v=onepage&q=Bedtime%20Stories%20for%20Managers%3A%20Farewell%2C%20Lofty%20Leadership%20%80%A6%20Welcome%2C%20Engaging%20Management&f=false
14. Mintzberg, H. (2023). *Understanding Organizations...Finally! : Structure in Sevens*. Oakland: Berrett-Koehler Publishers. Available at: https://books.google.com.ua/books?hl=uk&lr=&id=7viHEAAAQBAJ&oi=fnd&pg=PP1&dq=Understanding+Organizations...Finally!:+Structuring+in+Sevens&ots=_zK3j4fty&sig=gN3SusjIagoIsuIWU0Y69KMcJPM&redir_esc=y#v=onepage&q=Understanding%20Organizations...Finally!%20%3A%20Structuring%20in%20Sevens&f=false
15. Andrieieva, T. Ye. (Ed.) (2018). *Aktualni pytannia suchasnoho menedzhmentu v umovakh ekonomiky, shcho transformuetsia*. Kharkiv: FOP Mezina V.V., 237.
16. Dizdes, I. (2019). *Yak podolat kryzu upravlinnia*. Kharkiv: Fabula, 272. Available at: <https://books.google.com.ua/books?id=UQawDwAAQBAJ&printsec=frontcover&hl=uk#v=onepage&q&f=false>
17. White, A., Smets, M., Canwell, A. (2022). Organizational Transformation Is an Emotional Journey. *Harvard Business Review*. Available at: <https://hbr.org/2022/07/organizational-transformation-is-an-emotional-journey>
18. White, A., Wheelock, M., Canwell, A., Smets, M. (2023). 6 Key Levers of a Successful Organizational Transformation. *Harvard Business Review*. Available at: <https://hbr.org/2023/05/6-key-levers-of-a-successful-organizational-transformation>
19. Hetman, O. (2023). Evaluating the efficiency of the process of changing the configuration of the enterprise. *Ekonomika transportnoho kompleksu*, 41, 18–31. Available at: <https://journals.indexcopernicus.com/api/file/viewByFileId/1723177>
20. Hetman, O., Velychko, Ya. (2023). The effect of the transformation process: organizational changes and mathematical statistics. *Economics of the Transport Complex*, 42, 93–102. <https://doi.org/10.30977/etk.2225-2304.2023.42.93>
21. Holovne upravlinnia statystyky u Kharkivskii oblasti. Available at: <https://kh.ukrstat.gov.ua/>

✉ Olha Hetman, PhD, Department of Management, Kharkiv National Automobile and Highway University, Kharkiv, Ukraine, ORCID: <https://orcid.org/0000-0003-4538-5736>, e-mail: getman.olga.actinon@gmail.com

✉ Hanna Kryvoruchko, PhD, Department of Restaurant, Hotel and Tourism Business, Education and Research Institute "Ukrainian Engineering and Pedagogical Academy" of V.N. Karazin Kharkiv National University, Kharkiv, Ukraine, ORCID: <https://orcid.org/0000-0002-5730-1942>

✉ Olena Chupyr, Doctor of Economic Sciences, Department of Entrepreneurship, Trade and Tourism Business, Simon Kuznets Kharkiv National University of Economics, Kharkiv, Ukraine, ORCID: <https://orcid.org/0000-0002-2560-894X>

✉ Nina Avanesova, Doctor of Economic Sciences, Department of Management and Public Administration, O. M. Beketov National University of Urban Economy in Kharkiv, Kharkiv, Ukraine, ORCID: <https://orcid.org/0000-0003-3636-9769>

✉ Iryna Fesun, PhD, Department of Accounting, Auditing and Taxation, Khmelnytskyi National University, Khmelnytskyi, Ukraine, ORCID: <https://orcid.org/0000-0003-2901-031X>

✉ Corresponding author