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The Strategic Concept of Economic Development in the Focus of Design Management: National Features and International Experience

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Abstract

The purpose of the article is the process of research and justification of the strategic concept of the development of the economy of Ukraine with the focus on design management using international experience. A comparison of theoretical approaches to the concept of design management was made. It was determined that the strategic management of the national economy in the focus of design management could be understood as the process of designing a socio-economic development model, the parameters of which will guarantee a decent level of meeting the needs of the population in the long term, the selection of a system of optimal strategies and mechanisms for their implementation, taking into account the factors of ensuring state security and preservation of the natural environment. A correlation-regression analysis of the impact of individual macroeconomic parameters, including GDP, gross added value, gross capital accumulation, and export balance, on the growth of household incomes and the employment level of the population, which, according to the design concept, act as key factors of social development, was carried out. The analysis showed that the number of people employed in the economy correlates by 72-73% with the growth of GDP and GVA, but such a relationship turned out to be negative. One of the reasons for the negative correlation may be the increase in labor productivity due to the introduction of innovative technologies. With the use of correlation-regression analysis, close correlations were established between household incomes and the growth of gross added value in the economy, the increase in the export balance, and gross capital accumulation, which proves the priority of the development of types of economic activity with a high level of added value, the increase of exports and capital investments as imperative factors of population poverty reduction in the long term.

Keywords: strategic concept, economy, design management, correlation-regression analysis, national characteristics, international experience

1. Introduction.

In the modern world, the words "design" and "innovation" are synonymous, after which it is the final design that creates the essence, consistency, and balance of the processes for creating a new product (project, service) that is focused on the maximum satisfaction of needs or their formation. Analytical thinking, which is based on the processing of already available information, defined procedures, rules, and methods of decision-making, which are the basis of the management of traditional systems in the conditions of rapid market changes, remains irrelevant, and the expected results are not accepted. For innovations and qualitative structural transformations of the economy at all levels, a fundamentally new type of thinking is needed, which is based on a mandatory creative component, namely the ability to synthesize and create new things.

It is evident that a wide range of problems, which characterize the possibility of the current state of the national economy and society, do not cause traditional administrative ways using the existing elements and levers of state regulation. To ensure the comprehensive modernization of the national economy and culture in the direction of the accelerated transition to the model of sustainable development, recognized as the basic concept of the development of Ukraine until 2030, a comprehensive strategic approach based on the idea of design management is necessary.

Considering the breadth, complexity, multi-vector and multi-aspect nature of the problems of the development of the national economy in a strategic perspective, many theoretical and practical studies have been devoted to these issues, methodological concepts, approaches, and models have been developed.

Also, various aspects of the strategic development of the national economy are highlighted in the works of N.S. Kashif, V.V. Galasyuk, I.V. Baranosvka. and many other domestic scientists. Despite significant scientific progress, issues of strategic development of the national economy in the context of management design were considered only superficially in household works. The successful implementation of design management in the activities of the governments of individual countries, global corporations that use leading positions in various spheres of the world and its impact on the effectiveness of their functioning cause scientific and practical interest in the prospect of its application in the national economy.

2. Discussion.

The current state of the national economy is a result of an irrational model of development, which was based on the inefficient use of available resources, bureaucratic and corrupt mechanisms of administration, the development of monopolies and the shadow economy, as well as the lack of effective strategies for socio-economic development, is characterized by several systemic economic and social crises, deterioration of the environment and significant loss of economic potential. In particular, over the past thirty years, the level of decline in real GDP compared to the output in 1991 amounted to more than 65%, which moved the country from 10th place to last in Eastern Europe in terms of GDP per capita, and the population decreased by almost 20%.

We agree with the opinion of N.S. Kshitof, "The objective and subjective prerequisites for making a state decision regarding the formation of a certain national economic model and its transformation are the growth of crisis phenomena, the exacerbation of contradictions in all spheres, the drop in the standard of living of citizens and the increase of state internal and external debt. This is the basis for reviewing the existing model and deciding on the need to adjust or change it. According to the analysis, Ukraine is currently in exactly such a situation" [1; p. 6].

The author claims that for countries that are currently characterized by structural crises, disparities in economic development, and a significant decline in the lives of citizens as a result of non-compliance with the competitive conditions of the global market, the most optimal way is not to adjust or improve the existing model of socio-economic development but to radically change it. At the same time, the nation needs to clearly understand its role and place in the world, fundamental values, and ideals, as well as an accurate assessment of the existing potential.

As noted by the developers of the Doctrine of Balanced Development "Ukraine 2030", the crisis state of the national economy is caused primarily by the implementation of a debt-dependent economic model focused on consumption: "In this way, the national economy reacts to the consequences of non-systematic reforms, technological backwardness, populism, and legal nihilism. It is also worth adding the total losses of the national economy from the occupation of Crimea and the war in the East to 25% of GDP. To correct the current situation, the Ukrainian Government is implementing the standard recommendations of creditors, which are set out in memorandums with the IMF and are essentially an attempt to optimize the current economic model" [2].

Undoubtedly, the financial situation of Ukraine, characterized by a high level of external and internal debt, requires strict measures to optimize expenditures and balance the budget to achieve macro-financial stability, which will make it possible to repay its obligations to external and internal creditors on time and, accordingly, avoid the threat of default. As the results of the research showed, focusing the economy exclusively on the reduction of state and budget expenditures while simultaneously increasing the fiscal burden, as required by the IMF, cannot lead to the economic development of the state and creates prerequisites for the exacerbation of social conflicts, the degradation of social institutions, a decrease in the standard of living, reduction the domestic market and the corresponding decrease in the business activity of domestic businesses. Solving the problems of economic development and stabilization of the financial situation of the national economy requires the result of an effective economic model that will ensure the most effective use of strategic potential, stimulate investment activity and increase gross income.

Additional obligations regarding the achievement of specific social, economic, and environmental parameters of the development of the national economy are defined in international treaties and memoranda, to which Ukraine is a

signatory. The most important for the strategic development and modernization of the state are the requirements outlined in the Agreement on the Association of Ukraine with the EU since their implementation is an essential prerequisite for full integration into the European Union. The peculiarity of the strategic management of socio-economic transformations in the EU countries is the development of a system of documents containing single strategic imperatives that are mandatory for all member states. In particular, "national reform programs, stabilization programs and convergence programs of the EU countries are formed by the general development strategy "Europe 2020", which provides for ensuring a high level of employment, productivity and social unity due to the synthesis of mutually reinforcing priorities: – smart growth: growth of the economy based on knowledge and innovation; – sustainable growth: promotion of more efficient use of resources, development of a more ecological and competitive economy; - inclusive growth: stimulation of the economy with a high level of employment, which will contribute to social and territorial cohesion" [3].

Ukraine has developed a set of strategic documents and reforms designed to implement them. In particular, an important step can be considered a clear definition of the strategic course of Ukraine, as well as a strategic vision of a new paradigm for the development of the national economy, which corresponds to the development model of prosperous countries, in particular the EU. As stated in the project "Sustainable Development Strategies: Ukraine 2030", the new worldview paradigm on which the Strategy is based is a political and practical model for such development of all countries of the world, which meets the needs of the current generation without compromising the ability of future generations to meet their own needs. This model aims to achieve an optimal balance between the three development components - economic, social, and environmental. The new worldview paradigm on which the Strategy is based is a political and practical model for such development of all countries of the world, which meets the needs of the present generation without harming the ability of future generations to meet their own needs. This model aims to achieve an optimal balance between the three components of development - economic, social and environmental" [4].

The effectiveness of the implementation of the Strategy will be determined primarily by the level of achievement of the sustainable development goals approved in the Sustainable Development Goals of Ukraine until 2030, which cover 17 areas: poverty alleviation, hunger alleviation, agricultural development, good health and well-being of the population, quality education, gender equality, clean water and adequate sanitation, affordable and clean energy, decent work and economic growth, industry, innovation, and infrastructure, reducing inequality, sustainable development of cities and communities, responsible consumption and production, mitigation of climate change, conservation of marine resources, protection and restoration of terrestrial ecosystems, peace, justice and strong institutions, partnership for sustainable development [2].

In our opinion, the effectiveness of the implementation of this concept and the achievement of the strategic goals of sustainable development of Ukraine requires the reengineering of the current model of management of economic and social processes at all levels and the development of a comprehensive project for the development of the state, taking into account the potential opportunities that arise as a result of the development of the world economic system under the influence of NTP. For this purpose, it is advisable to turn to methodological approaches that have proven effective in the practice of the best world experience in this field. In particular, design management can be considered such an approach.

We agree with the opinion of V. V. Galasyuk that "neoliberal economic policy, which many international experts continue to call successful, instead of modernization, causes economic stagnation in countries that are at lower levels of technological development and the quality of the production structure than the advanced countries of the world. It is necessary to get rid of the dogmas of market fundamentalism and take as a basis that neglecting the conscious management of the national economy is no less imprudent than refusing regular management in business since, at the macro level, the economic system is subject to "projection" through the mechanisms of economic policy, just like the activities of individual enterprises through corporate management" [6].

Significant "gaps" between the strategic goals of Ukraine's development and the current situation require a temporary abandonment of the principles of neoliberalism and an increase in the role of the state in regulating economic processes to establish an effective and balanced structural-sectoral, a legal and administrative-territorial development model that corresponds to the real strategic potential of the country taking into account key trends, conditions and drivers of economic growth. For this, the transformational processes in socio-economic systems at all levels must be managed in a certain way, with a single strategic vector and defined imperatives.

The application of methodological design-management approaches to the formation of an effective model of transformation of the national economy requires the identification of critical features of this approach and points of contact with the classical theory of strategic management, which is used in public administration for further integration. The term "design" has been used in everyday life for many decades and occupies an important place in people's minds. When this word is used, works of art, geniuses, unique in their form and appearance of the phenomenon come to mind. By its very nature, design means a creative activity aimed at structural and functional changes to transform the design object into a single whole that is harmonious with the surrounding environment [7].

Design is recognized as one of the drivers of innovative development and ensuring the competitiveness of EU countries and is included in the creative development program of the European Union. The advantages of design as a modern business philosophy are outlined in the EU report "Design as a driver of innovative activity focused on the end consumer" [8].

As indicated in the report, companies that use design management achieve significantly greater success than companies with a traditional approach to management. Example: - enterprises that used design in the formation of strategic goals released new products five times faster compared to competitors; - an analysis of the activities of small and medium-sized enterprises in Ireland showed that 75% of them, which use design, commercialize innovations three times faster; - design increases profitability by an average of 17%, provided it is used effectively at all stages of product creation; - the design is less capital-intensive and allows you to get a return faster (on average already in 2 years) and has a shorter purchase period than other factors of innovation.

The conducted studies showed that taking into account the peculiarities of the concept of design, namely the direction of the organization's efforts to meet the needs of a specific consumer, the adaptation of design principles to the peculiarities of state administration in scientific works is considered only fragmentarily and is used mainly in the organization of the activities of political parties and partly in the formation of government programs. In this connection, there is a need to determine the essence of design management in managing the national economy, its functions, features, and directions of adaptation to the realities of its development.

Scientists Aubry M. and Branet M., researching the possibilities of introducing design management into the processes of public administration, came to the conclusion that the existing organizational (bureaucratic) structures used in authorities and local self-government are not capable of effectively implementing projects in the field of design due to the lack of coordination of work, decision-making standards, and procedures, insufficiently defined scope of responsibility [9].

Scientists emphasize that implementing design management in state structures involves complex reengineering of management structures and the formation of an appropriate management culture based on competence and innovation. In a broad sense, design management consists of creating the most optimal (relevant) product model to satisfy the target audience's requirements and purposeful design of business processes for making this product, considering the available potential. The essence of the design approach to management is revealed in the features of design thinking and their key implementation in practice, including:

1. Focus on the consumer, on his actual needs. Empathy and identifying crucial consumer needs are the basis for developing a product or service project (model, prototype).

2. The direction of activity is not from the past to the future but from the future to the present, which distinguishes this approach from most management practices, including strategic management. Design management is focused on the final result in the form of a finished product that will meet the target consumer characteristics and not individual goals inherent in the strategic type of thinking.

3. Simplicity, versatility, and availability. Design - management focuses on finding the most simple and cost-effective ways to implement the project at all stages. The final product should also not contain redundant functions. Transferring design management principles to national economy management is difficult considering the complexity and scale of the national economy, operations, and management methods, multiplicity of goals, tasks, and influencing factors. At the same time, abstracting from the specified elements, it is possible to determine critical guidelines that will allow optimizing the strategic management system based on design management:

1) A clear definition of the essential needs of the conditional consumer, namely the population of Ukraine. That is, the leading function of the prototype of the model of strategic development of the national economy is its ability to sustainably and long-term satisfy the needs of more than 90% of the population. In our opinion, the state exists for the people living there. Therefore the fundamental basis of the strategic model of the development of the national economy is to ensure the general needs of the population. The higher the level of development of the country, the better the needs of its citizens is met.

2) Formation of economic parameters, as well as structural and functional relationships between them, which will ensure the implementation of the state's chosen structural and value model of social development, taking into account the existing strategic potential and development trends of the global economy.

3) Strategic analysis of resources and forecasting of the development of the international environment.

4) Development of a strategy for the implementation of the model, which includes structural and process sections and allocation of resources for its implementation. At the same time, at the design stage, the model should be as simple as possible with further complications in the process of discussion and adjustment.

Therefore, the strategic management of the national economy in the focus of design management can be understood as the process of designing a socio-economic development model, the parameters of which will guarantee a decent level of meeting the needs of the population in the long term, the selection of a system of optimal strategies and mechanisms for their implementation, taking into account the factors of ensuring state security and preservation of the natural environment. Considering the peculiarities of design technology, the strategic process of forming an economic model of economic development (at any level), and the choice of transformation strategies that will accompany its implementation. According to experts [2], an optimistic scenario of structural transformation of the national economy involves the creation of a national economy, the main qualitative differences of which will be the formation of such characteristics as high technological efficiency and social responsibility. Such an economy will generate increased demand for highly qualified specialists, accumulate significant financial resources and transform them on an innovative basis into long-term investments.

The economic conditions of the functioning of the model determine the main parameters of the economy, which ensure the achievement of the goals laid down in the structural and value model of economic development. From the point of view of meeting the population's needs, the priority of economic growth is the formation of a balanced model of economic growth capable of ensuring a high level of employment for the people, incomes of citizens, and a sufficient level of food security. One of the final key indicators that directly or indirectly contribute to the effective implementation of the structural and value model of social development is the population's employment level and income.

In this context, a strategically important consideration in managing economic transformations is the selection of priorities for economic growth, namely, conducting a sectoral analysis of promising types of economic activity that can ensure the development of employment and incomes of citizens. It is hypothetically assumed that the growth of citizens' incomes and the level of employment is stimulated by the level of production (operational) activity in the economy, which can be indirectly determined through the gross accumulation of fixed capital, the level of processing of resources and the complexity of production and service processes, which affects the increase in gross added value, as well as export balance, which characterizes the competitiveness of the economy on the global market.

To determine the influence of the main macroeconomic parameters affecting the employment of citizens and household incomes, a correlation analysis was conducted for the period 2008-2021 table 1 shows the raw data for the study.

These tables showed that during the studied period, the number of people employed in the economy of Ukraine decreased by 18%. The negative balance of exports also increased significantly, which shows negative trends in the decline of Ukraine's internal and external competitiveness. All other macroeconomic indicators increased by more than two times during the studied period, which is partly explained by rapid inflationary processes in the economy during the studied period.

Table 1. Source data for conducting a correlation-regression analysis of the impact on the level of income and employment in Ukraine

Period	Number of employed population, thousands of people, Y_1	Aggregate income of households, UAH per household per month, Y_2	GDP, million hryvnias, X_1	Gross value added, million hryvnias, X_2	Balance of export and import of goods and services, million hryvnias, X_3	Gross accumulation of fixed capital, UAH million, X_4
2008	19251,7	2892,8	990819	866939	-84734	206900
2009	18365,0	3015,3	947042	830178	28591	112872
2010	17451,5	3369,8	1079346	954472	-43533	225296
2011	17520,8	3708,2	1299991	1122558	-85918	291678
2012	17728,6	4031,9	1404669	1213069	-121525	305031
2013	17889,4	4331,0	1465198	1283812	-135329	270895
2014	17188,1	4470,9	1586915	1382719	-55635	212591
2015	15742,0	5122,0	1988544	1689387	-51926	316841
2016	15626,1	6095,0	2385367	2023228	-165162	518201
2017	15495,9	8013,1	2983882	2519561	-229438	595194
2018	15718,6	9720,2	3560596	3018190	-310497	661801
2019	16578,3	12118,5	3978400	2973636	-10745,5	623978,9

2020	15915,3	12432,3	4222026	3140864	-5144,3	508217,0
2021	15610,0	14490,6	5459574	3140864*	-4770,7	508217,0*

*data of the previous year

Source: data of the State Statistics Service of Ukraine [11].

The correlation-regression analysis made it possible to reveal linear dependencies between social factors and macroeconomic indicators, as shown in Table 2. The test of the significance of the relationship was carried out according to the Fisher test and at a probability of 0.95% showed that all models are statistically significant. The obtained regression models allow us to conclude the existence of a direct relationship between the main parameters of the economy and the social situation of the population, which is determined in work by indicators of the aggregate income of households and the number of employed people.

Table 2. Correlation-regression analysis of the influence of individual macroeconomic parameters on the indicators of the social situation in Ukraine

Indicators	Number of employed population, thousands of people, Y_1	Aggregate incomes of households, UAH per household per month, Y_2
1. GDP, million hryvnias, X_1	$Y_1 = 19072 - 0,006X_1$	$Y_2 = 474,9 + 0,002 X_1$
Coefficient of determination (R^2)	0,73	0,99
2. Gross value added, million hryvnias, X_2	$Y_1 = 19415,42 - 0,002 X_2$	$Y_2 = 332,6 + 0,003 X_2$
Coefficient of determination (R^2)	0,72	0,99
3. Balance of export and import of goods and services, million hryvnias X_3	<i>There is no functional connection</i>	$Y_2 = 2641,4 - 0,02 X_3$
Coefficient of determination (R^2)	0,35	0,80
4. Gross accumulation of fixed capital, UAH million, X_4	$Y_1 = 19072 - 0,006 X_2$	$Y_2 = 1019,9 - 0,12X_4$
Coefficient of determination (R^2)	0,66	0,90

Source: calculated by the authors

In particular: 1. The number of people employed in the economy correlates by 72-73% with the growth of GDP and GVA, but such a relationship turned out to be negative. One of the reasons for the negative correlation may be the increase in labor productivity due to the introduction of innovative technologies. This is indirectly evidenced by the negative correlation between the number of employed persons and the gross accumulation of fixed capital.

Employment growth is also negatively affected by the processes of optimizing the number of employees at enterprises due to specific structural changes, in particular, the reduction of the exact weight of industry in the GDP structure, the removal of employees in the budget sector, and the increase in the service sector, which does not require several such employees. Extrapolation of these trends in the future threatens further deterioration of the labor market. Therefore, one of the tasks at the current stage is to stimulate the development of sectors of the economy that are capable of creating new jobs and purposeful formation of state policy in the field of employment and education to ensure the effective functioning of the labor market and ensure balance, stimulation of the development of small entrepreneurship and self-employment.

2. The conducted regression analysis showed a high level of dependence of the gross income of households on the studied parameters of the economy. In particular, in the absence of other factors, GDP growth by 1 million hryvnias causes an increase in the average monthly income of households by UAH 0.002 and an increase in the volume of gross added value in the economy by UAH 0.003. This indicates that one of the factors in reducing population poverty in the long term is the development of types of economic activity with a high level of added value. Since the balance of exports in Ukraine during the studied period was primarily negative, it also negatively affected citizens' income levels. In particular, the analysis showed that the excess of exports over imports by 1 million hryvnias increases the income level of citizens in the middle of the country by UAH 0.02. The gross accumulation of capital in the economy, i.e., capital investment, also positively affects increasing incomes. The growth of this indicator by 1 million hryvnias stimulates the growth of citizens' incomes by UAH 0.12. Thus, we can conclude that the construction of an effective and balanced structure of the economy and the development of an appropriate social policy are imperative prerequisites for achieving our country's sustainable development goals.

The authors of the doctrine of balanced development "Ukraine 2030" claim that "taking into account the potential advantages of Ukraine (human capital, geographical location, natural resources), it is important to determine the drivers of the future innovation leap - sectors of the economy and types of economic activity that could create high-quality products on an innovative basis and services with a high share of added value and would be in demand on international markets" [2].

Acceleration of the processes of economic transformations in the context of design management requires a rethinking of the current economic policy, reengineering of state administration at all levels (creation of an effective management system at the state, regional, and branch level, adapted to the performance of tasks necessary for the implementation of transformational changes), development of effective economic mechanisms that will support economic growth in a given strategic direction.

We agree with the opinion of a significant cohort of domestic scientists that the current stabilization course of economic development, which affects the economic policy of the state in all spheres and is primarily aimed at achieving macroeconomic stabilization, reducing the budget deficit by increasing fiscal pressure and reducing costs, priority fulfillment of the requirements of external agents, liberalization exchange rate of the national currency preserves the current commodity-oriented model of economic development and is unable to provide effective economic and social transformations, which are necessary for the transition to a qualitatively new, socially-oriented and competitive model of development. The design of economic changes in Ukraine requires a structural transformation of the economy based on its full complementation with high-quality and productive economic activity, which will allow a complete transition to a new technological system and ensure the effective use of human potential. In this context, enterprises carrying out priority activities should receive cheap loans, low taxes, access to state investment programs, and other preferences compared to less productive sectors (for example, commodity-oriented exports).

Thus, the review of separate existing and implementation of new mechanisms for the performance of economic policy based on the modernization course of economic development will allow the formation of a balanced, consistent,

systematic, and modern model of economic transformations that will contribute to overcoming the gaps between the current economic and social situation and the strategically defined parameters of a social-oriented, economically developed state.

3. Conclusion

It has been proven that the current economic model of the national economy is unsuitable for realizing sustainable development goals, ensuring the state's competitiveness in the global environment and a decent standard of living for citizens in the long term. Attempts to improve (reform) individual parameters and components of the outdated model can lead to a loss of time and resources, which will cause Ukraine to lag behind the world's developed countries. Solving the problem of ensuring a decent standard of living for citizens and developing human potential requires a comprehensive reengineering of the socio-economic system's structure and processes of functioning based on design management.

A correlation-regression analysis of the impact of individual macroeconomic parameters, including GDP, gross added value, gross capital accumulation, and export balance, on the growth of household incomes and the employment level of the population, which, according to the design concept, act as key factors of social development, was carried out. The analysis showed that the number of people employed in the economy correlates by 72-73% with the growth of GDP and GVA, but such a relationship turned out to be negative. One of the reasons for the negative correlation may be the increase in labour productivity due to the introduction of innovative technologies. Employment growth is also negatively affected by the processes of optimizing the number of employees at enterprises due to specific structural changes, in particular, the reduction of the exact weight of industry in the GDP structure, the removal of employees in the budget sector, and the increase in the service sector, which does not require several such employees.

Extrapolation of these trends in the future threatens further deterioration of the labour market. With the use of correlation-regression analysis, close correlations were established between household incomes and the growth of gross added value in the economy, the increase in the export balance, and gross capital accumulation, which proves the priority of the development of types of economic activity with a high level of added value, the increase of exports and capital investments as imperative factors of population poverty reduction in the long term.

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