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CLUSTER FUNDAMENTALS FOR THE DEVELOPMENT OF INTEGRATED BUSINESS STRUCTURES

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Introduction. Nowadays, both in the world economy in a whole and in the economies of the leading countries a major role play not individual entities, but their integrated structures. Thus, over the last 5 years, sales of the 2000 largest integrated business entities from 51 countries in the world have almost doubled, accounting more than 50% of the global gross domestic product. Taking into account the mentioned above, we can say that the problem of defining cluster foundations for the development of integrated business structures is urgent.

Hypothesis of scientific research. All existing organizational forms of integrated structures vary greatly in nature, principles, goals of association, features of the organization, degree of integration of participants, the breadth of coverage of the spheres of production and economic activity, but the use of cluster principles of their organization allows to achieve a synergistic effect of development at a new level.

Aim of this research is a study of the above problems within the global economy and across Ukraine.

Methods of investigation: in the basis of the analysis procedures lies the modeling of financial and production activities of the group of companies before and after the consolidation on the basis of the cost-output model adapted to the characteristics of consolidated accounting in industrial companies.

Results. A new cluster approach to the development of integrated business structures is proposed on the basis of the author's study of world economic practice.

Conclusions: The formed matrix of estimation of degree of integration of participants of forms of separate subjects' unification allows to choose one or another form of business integration depending on the goals which are set for them and the ways of achievement of these goals (for example, retaining or losing their legal, industrial and economic and financial independence).

Keywords: integrated business structures; branding; cluster approach.

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КЛАСТЕРНІ ЗАСАДИ РОЗВИТКУ ІНТЕГРОВАНИХ СТРУКТУР БІЗНЕСУ

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Вступ. В даний час як в світовій економіці в цілому, так і в економіках провідних країн головну роль відіграють не окремі суб'єкти господарювання, а їх інтегровані структури. Так, за 5 останніх років обсяг продажів 2000 найбільших інтегрованих структур бізнесу з 51 країни світу збільшився практично вдвічі, та склав більш ніж 50% до обсягу світового валового внутрішнього продукту. З огляду на вищевикладене, актуальною є проблема визначення кластерних засад розвитку інтегрованих структур бізнесу.

Гіпотеза дослідження. Всі існуючі організаційні форми інтегрованих структур значно різняться за характером, принципам, цілям об'єднання, особливостям організації, ступеня інтегрованості учасників, широтою охоплення сфер виробничо-господарської діяльності, але використання кластерних засад їх організації дозволяє досягнути синергетичного ефекту розвитку на новому рівні.

Метою даної статті і є дослідження вищевказаних проблем в рамках світової економіки і по Україні.

Методи дослідження. В основі процедур аналізу лежить моделювання фінансово-виробничої діяльності групи компаній до і після проведення консолідації на основі адаптованої з урахуванням особливостей консолідованого обліку в промислових компаніях моделі «витрати-випуск».

Результати. На підставі проведеного автором дослідження світової практики господарювання запропоновано новий кластерний підхід до розвитку інтегрованих структур бізнесу.

Висновки. Сформована матриця оцінки ступеня інтегрованості учасників форм об'єднання окремих суб'єктів дозволяє вибрати ту чи іншу форму інтеграції бізнесу в залежності від цілей, які перед ними стоять, і шляхів досягнення цих цілей (наприклад, зберігши або втративши свою правову, виробничо-господарську та фінансову самостійність).

Ключові слова: інтегровані структури бізнесу; брендинг; кластерний підхід.

Formulation of the problem. Under current conditions of globalization and liberalization of markets in the basis of economic relations between different countries and regions lies, on the one hand, competition for promising markets and attraction of factors of production, on the other hand, mutually beneficial cooperation and partnership in order to ensure national, regional and sectoral competitiveness. One of the complex mechanisms of development that ensure the growth of competitiveness is the formation of clusters, which today have become a part of economic and industrial policies of many countries. At the same time, foreign experience shows that the functioning of cluster forms of spatial organization of the economy is effective. These trends require a detailed and comprehensive study, especially because the development of clusters largely determines the current reproductive structure of world, national and regional economies. The desire of micro- and macroeconomic entities to create sustainable competitive advantages in the context of high dynamics of changes in the external environment leads to significant structural transformations of market relations and the emergence of new processes and institutional entities as a result. On the level of firms and industries (microlevels) – they are processes of inter-corporate integration and internationalization of production, which leads to the formation of vertically and horizontally integrated structures, various strategic alliances, as well as industry and inter-corporate associations, actively advocate and lobby for the interests of their participants. On the countries' level (macro levels) – these are regional integration processes that lead to the formation of regional associations. In these circumstances, the cluster approach can become a new vector of economic growth for large industrialized regions with a high degree of concentration of production. At the same time, the efficiency of regional branch complexes, formation and development of integrated business structures becomes a basic factor for their sustainable functioning and competitive development. The solution of these problems requires new practical actions aimed at the formation and development of regional sectoral complexes, which require theoretical substantiation.

Analysis of recent research and unresolved part of the problem. Major contributions to the development of cluster theory have been made by T. Andersson, T. Brenner, K. Ketels, G. Lindquist, R. Martin, M. Porter, F. Raines, S. Rosenfeld, P. Sunley, O. Solwell, and S. Sweeney, E. Feser, M. Enright and others. The problems of creation and functioning of integrated business structures are devoted to the work of both foreign and domestic scientists: D. Aaker, T. Ambler, J.-N. Kapferer, J. Robinson, K. Stiles, D. Trout, P. Fatkhutdinov, L. Ganushchak-Efimenko, O. Nifatova, V. Shcherbak and others.

However, despite the vast amount of research on these issues, most of them are local in nature and focused on specific issues. The spectrum of problems in the

field remains unresolved: Scientific and practical significance of the research results is to substantiate the formation of theoretical and methodological provisions in the field of spatial-cluster organization of regional integrated business structures based on the improvement of its forms and methods, taking into account the synthesis of economically and fairly social nature of their functioning within the framework of the developing theory of economic and sectoral clusters.

The aim of the study lies in substantiation and development of theoretical provisions and scientific and methodological tools for the development of regional integrated business structures based on a cluster approach.

Results of research. Integration processes occurring between enterprises of different ownership and activities are the basis for a promising model of economic development of the country's economy. An important direction of creating an effective and competitive integrated business structure is to provide organizational conditions for forming an integrated business structure based on a systematic approach (Figure 1).

The regulation of interaction of components of effectiveness system of branding of integrated business structures is realized through a sequence of stages (Figure 2).

Under the influence of internal factors, a set of consistent measures of brand management is carried out, aimed at achieving the goal. The first stage is diagnostics, which includes the analysis of strengths and weaknesses, threats and opportunities, the choice of strategy of brands of IBS, creation of brand image. The second stage involves defining the criteria for choosing a set of brand management measures, namely: the level of brand competitiveness, consumer satisfaction, brand value, identity compliance, brand portfolio structure, brand complex, brand life cycle, corporate culture. The next stage is the development of alternatives of the brand management strategy, among which the author proposes: repositioning, that is, adjusting a firm view of a particular brand in the consumer's mind; restyling that involves changing brand attributes, rebranding, that is, adjusting (or changing) brand identity; elimination – withdrawing a brand from the market.

Accordingly to the mentioned above, the proposed approach to the organization of control over branding of integrated education within the operationalization of a balanced scorecard is shown on Figure 3. When organizing the control of an integrated entity's branding activities, the system of interaction between brands of business units should be taken into account, aimed at maximizing the value or capitalization of the integrated entity. The implementation of a control organization system will help to address such issues as identifying internal growth reserves, maximizing capacity, increasing the

soundness of decisions made, and adhering to the chosen strategic development trajectory.

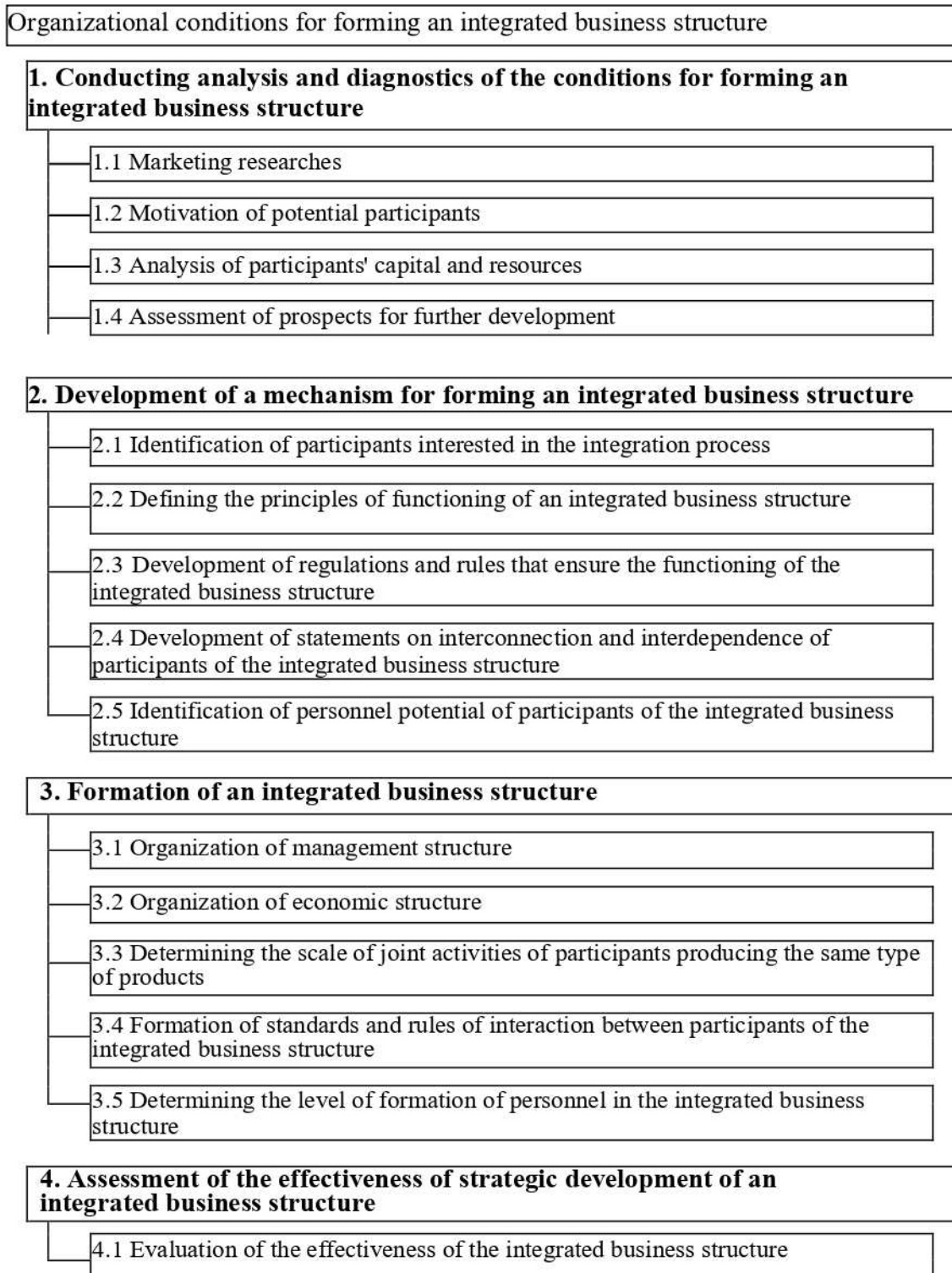


Figure 1. The recommended structural model of organizational conditions for the formation of integrated business structure

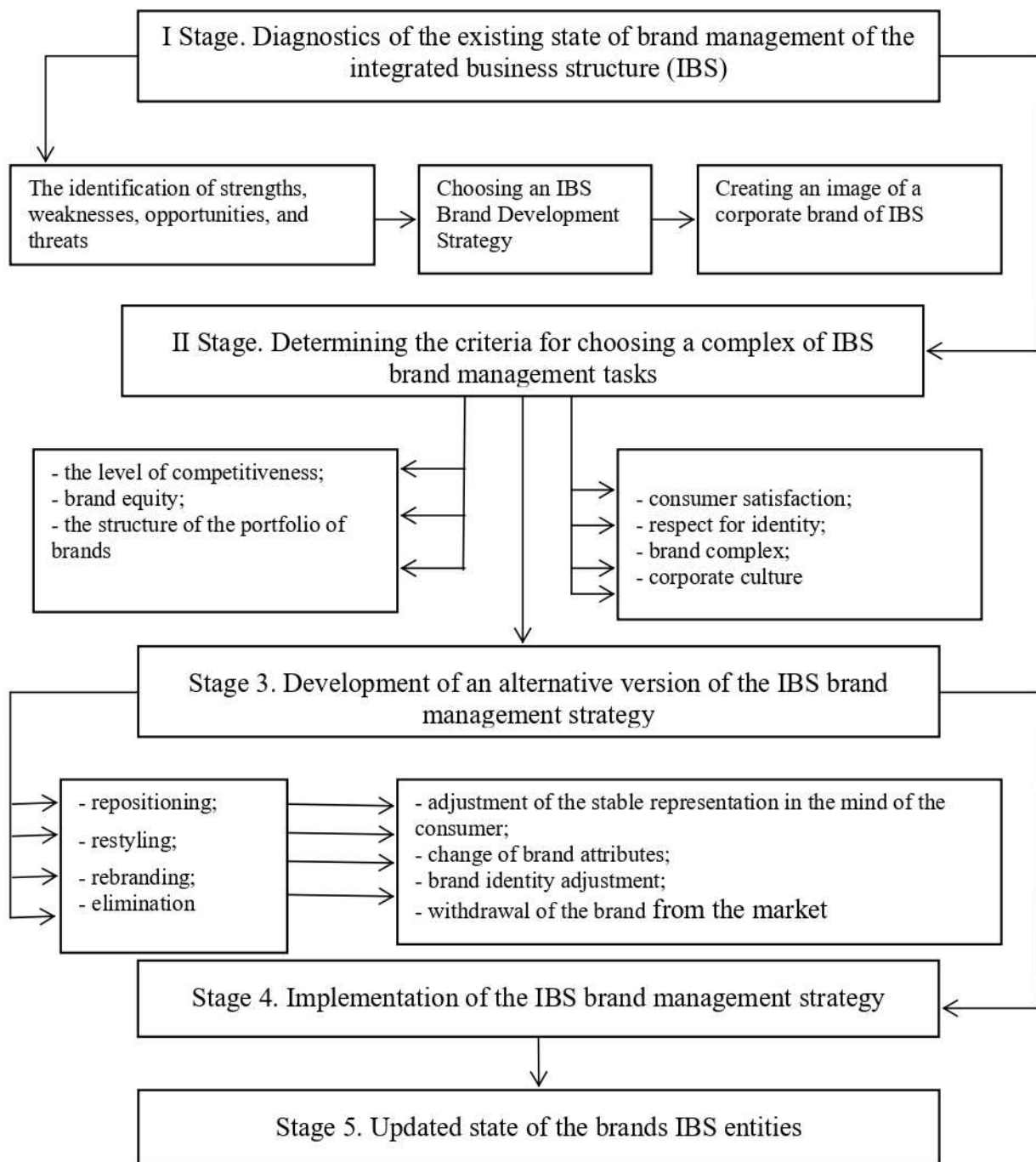


Figure 2. Regulation of interaction of components of effectiveness system of branding of integrated business structures

It is advisable to use a balanced scorecard to implement this monitoring organization. For this purpose, a comparative analysis of existing measurement systems was carried out and an approach to the structuring of key performance indicators was developed, based on the creation of classification of indicators

systems, and hierarchically separated levels and centers of responsibility of the integrated business structure. This approach allows to establish effective interaction of different participants of integrated formation and to orient them to achieve synergy from interaction of brands of different business units with simultaneous maximization of capitalization, or brand capital, of integrated structure as a whole. At the same time, the use of the indicated landmarks as the main strategic goals of the branding is proved.

The commonality of the mechanism and the balanced scorecard occurs both in terms of developing branding tools and levers of influence on the functions performed by individual business units, and in terms of institutionalization of the interaction environment (internal market) of participants in the integrated business structure. The consolidation of these tools is carried out within the framework of the developed model of implementation of a balanced scorecard and brand management mechanism of the integrated business structure, which provides multiple options for both the mechanism of organization and the approaches of integration.

The implementation of consolidation processes in integrated business structures is inextricably linked to the strategic level of management. To assess the strategic level of functioning of an integrated structure, it is necessary to monitor the current degree of efficiency of the integrated structure as a system and to determine what measures related to consolidation processes should be implemented to improve production efficiency and sales. For this purpose, a system of indicators is proposed that will allow comparing competing companies with each other.

To solve this problem, it is proposed to use a developed graphical structure, called "strategic consolidation cube" (Figure 4). The strategic cube is built on three axes, with a corresponding mathematical representation of the company's ability to develop in the market on the basis of branding: horizontal, reverse and direct vertical consolidation.

The first axis is market share:

$$MS = R / D, \quad (1)$$

where R – revenue of the integrated structure of companies from the sale of products;

D – demand for the products of the integrated structure of the company in the selected market analysis (can be defined as the total consumption of products in the market).

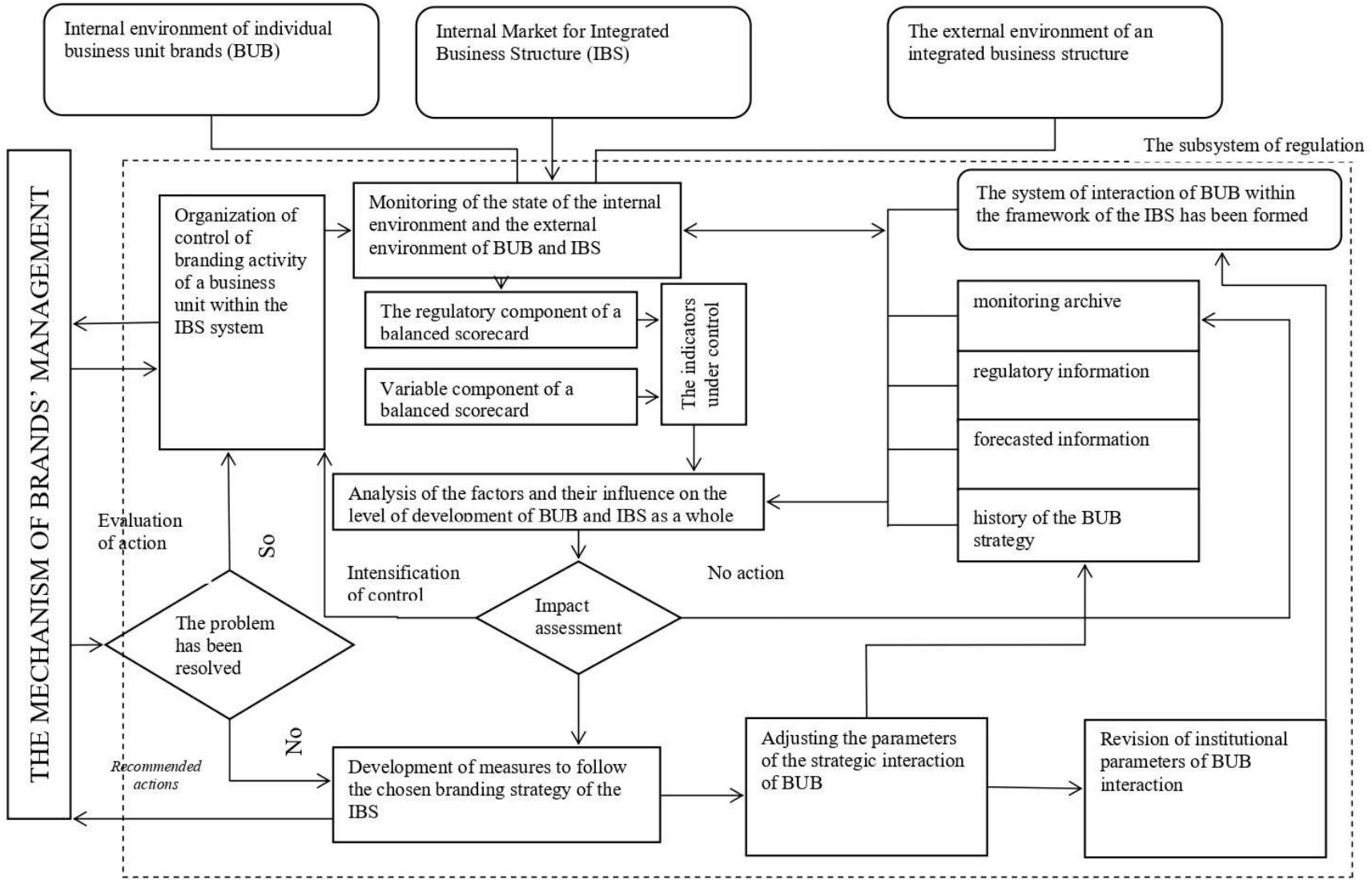


Figure 3. Scheme of organization of control over the integrated branding formation within a balanced scorecard

The degree of backward integration shows how much of the value chain in the main manufacturing process is controlled by the integrated structure:

$$BIR = IG \text{ cost} / (C - w - t - d), \quad (2)$$

where $IG \text{ cost}$ – volume of purchases (in terms of value) made by controlled companies;

C – the total cost of production of products of the integrated structure;

w – wages, which are included in the costs of production of the integrated structure;

t – tax payments included in the cost of production of the integrated structure;

d – the amount of depreciation that is included in the cost of production of the integrated structure.

The degree of direct integration shows how much of the value chain after the main production process is controlled by the integrated structure:

$$FIR = IG \text{ rev} / (R - R^{fin}), \quad (3)$$

where $IG \text{ rev}$ – sale of products of controlled companies within the IBS (in terms of value);

R – total value of sales of products / works / services;

R^{fin} – the realization of products / works / services to the end consumers.

The "Strategic Consolidation Cube" allows you to organize the indicators in annex to the divisions where the IBS operates (Figure 4). Division refers to a set of business units of one type of activity operating in a specific market.

The total number of divisions is indicated by an index e .

Point 0 on Figure 4 shows the lack of market control by the IBS. Point S reflects the limits of development of the integrated structure as far as possible in this market. At this point, the consolidated group is a monopoly on the implementation and controls the complete value chain from the main factors of production to the end consumer. Similar cubes are built on other divisions where the IBS operates, to evaluate the adjacent indicator – the degree of diversification – as a ratio between the criteria.

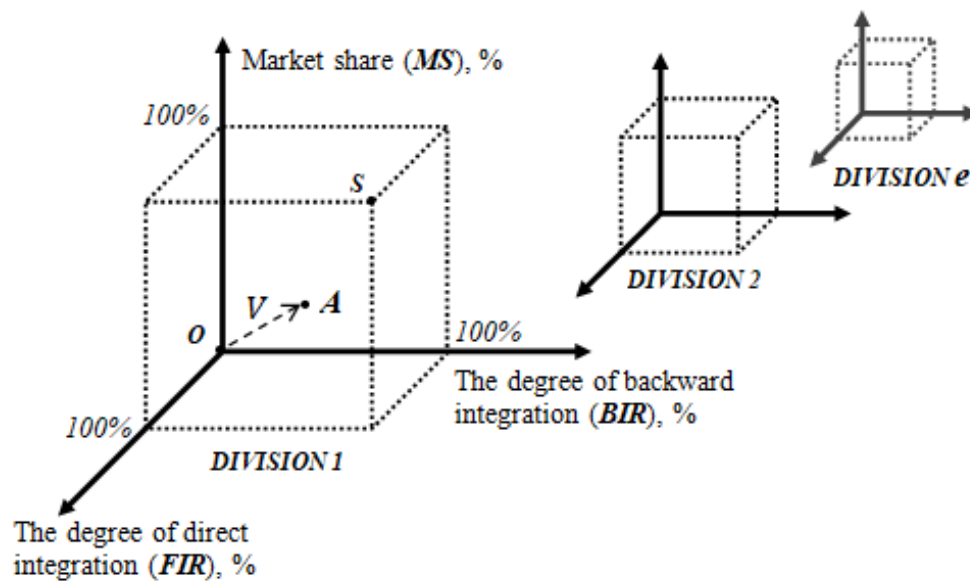


Figure 4. Strategical cube of consolidation

The company under analysis occupies some state inside the cube (point A). To summarize the three indicators, a metric called the “strategic vector” was proposed. Its calculation is made by the formula of the length of the vector:

$$V = \sqrt{[(MS)^2 + (FIR)^2 + (BIR)^2]}. \quad (4)$$

In order to increase the efficiency of managing business units on the basis of branding, it is necessary to assess the points of interaction of business units at the planning stage as accurately as possible, forecast future results and evaluate their economic efficiency. Any economic forecast should be based on the model of functioning of the IBS in future periods. At the same time it is necessary to focus on the systematic approach in the analysis, namely – it is necessary to evaluate changes in financial and production indicators of the integrated structure as a system, and not just two entities – the consolidator and the goal.

Conclusions and suggestions for further research.

The developed tools and techniques for practical application can be implemented in industrial corporate structures for:

- forecasting and systematic analysis of the impact of consolidation: on individual business units and on the group as a whole – which ensures greater accuracy in assessing the effectiveness of the integration process;
- implementation of the choice of integration process from the standpoint of increasing competitive advantages and achieving economic efficiency in the conditions of uncertainty of the market environment – which differs from the existing methods by the complexity and objectivity of the analysis;

- comparison of alternative consolidation projects and compilation of the most useful combinations of them – which allows to execute a broader analysis than the currently widely used tools.

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