

ЕКОНОМІКА ТА УПРАВЛІННЯ НАЦІОНАЛЬНИМ ГОСПОДАРСТВОМ

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Strategy of survival and self-reproduction of complex self-managing social-economic systems in mesolevel

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Розглянуті питання теорії стратегічного самоуправління складними соціально-економічними системами: підприємство, фірма, корпорація, регіон. Визначено, що стратегія виживання і самовідтворення складних самоуправляємих соціально-економічних систем в визначному ступені залежить від сукупного її потенціалу. Доведено, що дієвим механізмом саморегулювання відтворення потенціалу таких систем є ефективна її організаційна структура.

Ключові слова: саморегульовані системи, організаційні структури, сукупний потенціал, виживання, відтворення, управління.

Voit S.N., Holod S.B. СТРАТЕГИЯ ВЫЖИВАНИЯ И САМОВОСПРОИЗВОДСТВО СЛОЖНЫХ САМОУПРАВЛЯЕМЫХ СОЦИАЛЬНО-ЭКОНОМИЧЕСКИХ СИСТЕМ МЕЗОУРОВНЯ

Рассмотрению подвергались вопросы теории стратегического самоуправления сложных социально-экономических систем: предприятие, фирма, корпорация, регион. Определено, что стратегия выживаемости и самовоспроизводства сложных самоуправляемых социально-экономических систем в определенной степени зависит от совокупного ее потенциала. Доказано, что действенным механизмом саморегулирования воспроизводства потенциала таких систем является эффективная ее организационная структура.

Ключевые слова: саморегулируемые системы, организационные структуры, совокупный потенциал, выживаемость, воспроизводство, управление.

Voit S.N., Holod S.B. STRATEGY OF SURVIVAL AND SELF-REPRODUCTION OF DIFFICULT SELF CONTROLLED SOCIAL AND ECONOMIC SYSTEMS OF MESOLEVEL

To the consideration were subjected problems of the theory of strategic self management in complex social-economic systems: enterprise, company, corporation, and region. It was determined that the strategy of survival and self-reproduction of complex self-managed social and economic systems to a certain extent depends on its total potential. It is proved that an effective mechanism of self-reproduction of potential of such systems is the efficiency of its organizational structure.

Keywords: self-regulated systems, organizational structures, total potential, survivability, reproduction, management.

Statement of a problem. The need to consider the enterprise (firm, corporation, region), and its work as a complicated, open social economic system, today cannot be questioned. Practically in every work of enterprise management on this thesis is focuses a special attention. Modern science about management looks through the enterprise as a classical system, so the enterprise itself and its activity corresponds to the majority the provisions of the general systems theory [1].

Without analyzing of various works and viewpoints, it should be noted that the enterprise as a

complex social-economic system in its composition has a social component and inherently more corresponds to biological, i.e. living systems. One of the key features of such systems is not just their desire for stability, as it is inherent to all systems, regardless of their nature, but also the ability to reproduce itself. However, the reproduction of the system in conditions of its openness and the presence of competition means not a simple reproduction but expanded.

It should be noted that the reproduction in the fullest sense should be understood not only as a

change of the quantitative parameters, but also as their qualitative state. On this basis, we can highlight the narrowed reproduction (reduction both quantitative and qualitative indicators), normal reproduction (maintenance of adopted level) and expanded reproduction (an increase of quantitative or qualitative indicators). If the quantitative parameters of the enterprise as a system are reduced or don't change (market share, sales volume), but are increased the qualitative features (profitability, profit, product quality), we can talk about the expanded reproduction. Moreover, the expanded reproduction of the system exactly due to the qualitative parameters, in our opinion, is a priority, because it gives stability to the enterprise as a system, not only in space but in time. The mechanism of such a self-reproduction is efficient organizational structure of complex social and economic systems.

Analysis of researches and publications.

Researches of many authors [2-4] confirm the need to bring the organizational structure of the company in accordance with the chosen strategy. In other words, the design of the structure should be based on the strategic plans of the organization. This approach was proposed by the famous manager A. Chandler, who found that changes in the strategy of the organization lead to the appearance of new administrative problems that requires improving the structure. A. Chandler formulated the famous principle: «The strategy defines the structure». In a practical level this means that the organizational structure should be such as to ensure the implementation of the chosen strategy of reproduction of the total system capacity.

Implementation of the strategy is linked with the implementation of a large number of different jobs, some of which are the most important for the successful implementation of the strategy, while others can be classified as routine administrative household works. For example, ensuring the safety of the firm, drawing staffing, preparation of applications for certain types of resources, tracking stocks of raw materials and others. Are distinguished also activities, called auxiliary (supporting, sponsoring). Among them are: information support public relations, market researches, training of personnel, legal practice and others. The above structurization of works shows how important it is to single out those activities that are of paramount importance for the realization of the strategy of survival and self-reproduction of the total potential as a mechanism for self managing with social and economic systems [5; 6].

Starting from listed below characteristics of the system, it should be noted that the stability of

the system, its survival and self-reproduction can be expressed by the concept of «capacity». If the system (the company) has this feature, it allows it to maintain a working state in a sufficiently long time interval. Potential is the specific composition and structure of variables system with certain quantitative and qualitative characteristics that allow to support the desired properties of the system and also provide it with the development in space and time.

The aim of the study.

The goal of the study is to analyze the theoretical and methodological foundations of the formation mechanism of the strategy of survival and self-reproduction of complex social and economic systems of mesolevel.

Statement of the basic material. To implement such an approach to the management of interconnected organizational units a firm can by using cross-functional and coordination commands, system of mutual accountability, an informal network of institutional relations (informal communication), cooperation between the different departments and services of the company. In many centralized organizations, most of strategic and operational decisions are made by senior management, which leads to the need for harmonization and approval at all levels of government. Ultimately, the decision making process is extended in time, that is not always rational, because the organization is often unable to timely respond to changes in the external environment. A completely different situation is typical for decentralized organizations where managers are able to make their own decisions within the framework of their powers. Therefore, for the timely execution of works relating to the realized strategy, senior management should define the scope of authority of managers of each organizational unit.

In the last decade, in Western management has been appeared a tendency to reduce the number of management levels, i.e. the trend of flattening of organizational structures and empowerment of employees. In this decision-making powers are transferred to those managers who do not only lead the process of developing of strategies at the level of individual organizational unit but guide the process of its implementation. Employees, that do not occupy leadership positions, should have the right to discuss and resolve issues related to their work.

Realization of the above principles allows the firm to use the intellectual potential of the employees, thereby increasing its competitiveness.

Thus, the potential of the system is provided by three components:

- 1) the presence or absence of these or those elements of the system;
- 2) adequate quantitative and qualitative characteristics of these elements;
- 3) specific combination (relationship) between the existing elements, which allows you to create additional efficiency.

As modern management science considers the company as an open system, the cumulative potential of the company includes:

- external component or an external potential (provided by external environment variables and the outer shell of the enterprise);
- internal components or internal potential (provided by the internal environment variables).

Potential allows the system to adequately respond to the changes and the impact of the external environment. The enterprise must be able not only to adequately respond to emerging threats, and to use the given opportunities.

Some auxiliary kinds of activity sometimes economically justified to transfer to other companies that perform them cheaper and often better. The company thus is able to concentrate all the energy and resources on the strategic tasks, can create unique values and increase competitive opportunities.

It should be noted that managing with the external component of the enterprise potential is a complex process. Classical management theory says that to manage by its external environment the company can not, it can only react to the impacts, adjust to them.

However, since we are talking about elements (variables) of the environment as an integral part of an open system, we are faced with the pressing need to control our environment. If we are talking about the effective management of potential, the company must purposefully form its environment. To do this, first of all, it is necessary to change our perception, philosophy, and understanding of the processes that are taking place. Readymade products, their value – are the most powerful tools of the external potential of the enterprise control. It is naturally that in the management of the external component of the total potential of the enterprise emphasis will be placed to the side of indirect methods of influence, but focused on the impact on its environment in order to give it the most favorable characteristics as a prerequisite of effective management potential. It should also be pointed out that one of the most important features of management of potential is not

the presence of certain elements, but the ability in the shortest time and at minimal cost to create the missing items and organize the relationship between them. On this basis, the combined potential of the enterprise can be divided into two components:

- 1) strategic potential;
- 2) operational potential.

As a part of the total potential of the enterprise must be the elements whose presence allows you to quickly and efficiently re-create the missing items. Such elements form the strategic potential of the enterprise, the rigidity of the frame, allowing the company to conduct sustained purposeful activity over the long term. Here can be included, for example, the image of the company, its brands, corporate culture, technology base, scientific developments, etc. This component is a conditional constant, because it can not be changed in the short term. The low level of the given component has a negative impact on the current activities of the company and leads to a waste of the current (operational) potential. Lack of strategic potential of the company can be offset with the operating potential (financial resources, giving up a part of the profits, etc.), but such compensation is inadequate as waste of operational capacity will increase exponentially.

There also exist elements that are more appropriate to form for the solution of certain range of tasks as needed. This is an operational capacity of the enterprise, which forms such variables as resources (excluding staff), equipment, buildings, as well as pricing, cost mechanism, etc. Thus, the total capacity control mechanism can be represented as follows. The company uses a strategic capacity and its components as a foundation. On this basis is forming the system of objectives of the enterprise. Next the operational potential is formed, which is in the process of implementation of the goals is completely consumed. An effective mechanism should be considered a management of potential that allows on the basis of strategic potential to form the adequate operational potential, which allows to deal with current and the most perspective tasks, and then convert it into a strategic potential.

After the analysis of general recommendations let us consider the alternative approaches to formation of organizational structures in general, their advantages and disadvantages in terms of the effectiveness of strategy implementation. There are five types of structures: functional, management structure on a geographic basis (regional structure), decentralized busi-

ness units, strategic business groups, matrix structure [4; 6].

The functional structure of the organization assumes the allocation of individual units, each of which has clearly defined tasks and responsibilities. The characteristics and features of activity of each unit correspond to certain spheres of the organization. The essence of the functional approach is to take maximum advantage of specialization. This structure is most frequently used in companies with one activity that allows linking relatively clearly the strategy and the structure. But functionally oriented structures are acceptable for the organization as long as the strategically important spheres of activity are directly related to the functional division and the need for coordinate the activities of units insignificant.

Strategic advantages:

- top management has the opportunity to focus on strategic issues and to monitor the strategic results;
- in the organization is achieved high efficiency of work through specialization.

Strategic disadvantages:

- complexity of cross-functional coordination;
- responsibility for the activities of the organization is entrusted to the top management;

Managers are formed as specialists in one functional area and few gain experience in solving the problems of strategic management at the organizational level.

The management structure on a geographic basis (regional structure) is most frequently used

in organizations operating in different geographical areas, or areas that are forced to adapt to the specifics of particular regions (local laws, customs and needs of consumers, etc.). Territorial structure is especially good for the companies that in different regions implement different strategies.

Strategic advantages:

- created the possibility to adapt the company's strategy to the specific conditions of each region;
- managers working in the regional offices are well trained and can grow up to managers of the highest level.

Strategic disadvantages:

- may occur duplication of works, which leads to increased costs of the organization;
- difficult to maintain a consistent corporate image in different regions.

To disclose advantages and disadvantages of other types of organizational structures in this work is not advisable. They are less effective in their characteristics.

In the management of potential it is necessary also to select two more approaches: proactive management of potential and reactive management. Proactive management is aimed at potential building in space and time. Reactive – is the maintenance of the current potential level. We should not equate proactive management with strategic management potential, but represent a reactive as an operational management.

In theory and practice management potential enterprise is necessary to allocate another

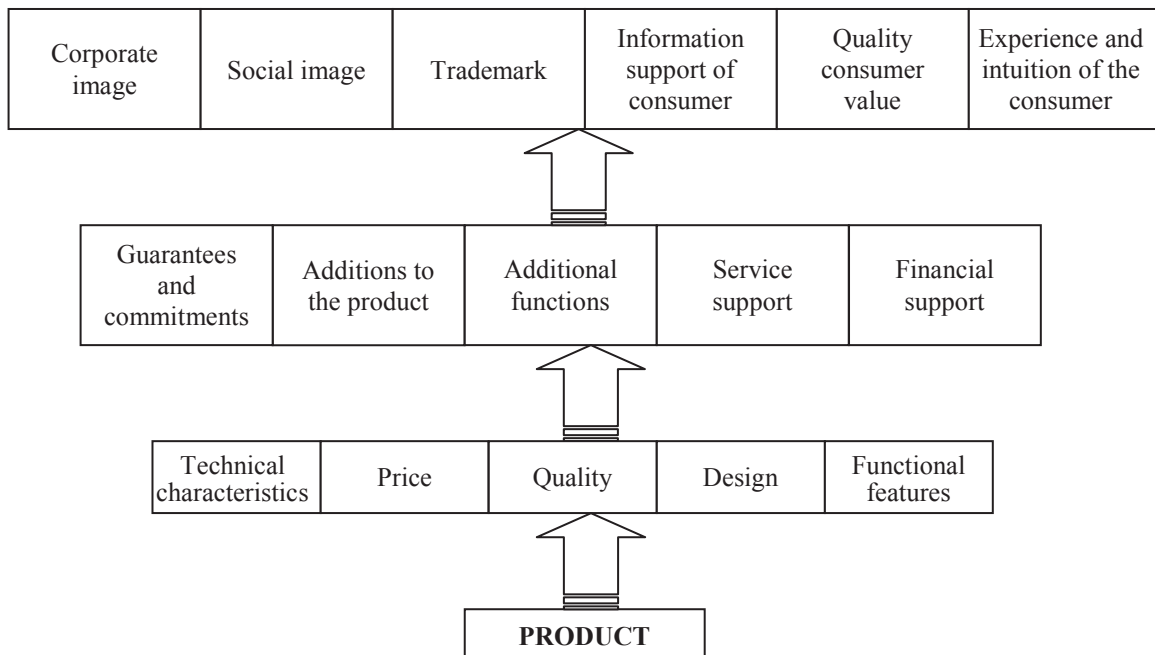


Fig. 1. Product and its value

important task – a measurement of the potential. In other words, for building an effective management system is needed management criteria, which could inform the company management about the state of the enterprise potential and trends. The complexity of given problem lies in the fact that the concept of potential, as we have already identified, is rather complicated and includes several components. Moreover, it should also be noted that these components are different from each other in nature, i.e. in its composition and structure, they have variables that operate and develop in a fundamentally different laws and have no common denominator.

As for the internal potential of the enterprise, today there are techniques to assess it. The essence of all the methods of assessment internal potential can be described as follows: an assessment of the quality of all production assets of the enterprise and the total cost of functioning of operating subsystem of the company. On the basis of this approach lays the assertion that the company must build up those assets, which really allow creating added value (fixed production assets, human resources, etc.). Other assets are necessary for normal functioning of the enterprise, but not creating added value (raw materials, semi-finished products, work in progress, and others.), must have minimum investments, their composition and structure should be highly liquid, and the period of transformation – minimum possible. However, using of the given approach, through a certain integrated indicator,

we can only estimate the inner potential of the company as a whole. This approach does not allow us to assess the internal element and the inner connection potential separately, as well as to establish causal relationships.

To evaluate separately the external component of the potential of the enterprise is almost impossible. Corporate image, social image, brand image, the degree of customer loyalty, stability in relations with suppliers, etc. – these are the criteria that indirectly assess the external potential of the company. However, even here there are some difficulties. All of these estimates give only a fragmented and indirect assessment. In addition, if we talk about the relationship with suppliers as one of the criteria for assessing the external potential of the enterprise, it is necessary to examine separately the suppliers, as part of the environment in which they operate.

In general, it should be noted that modern science and practice in dire need of such a procedure, which would allow to evaluate the external potential of a company. For a basis of formation of this technique in the future, you can choose the model of competitive forces in the branch of M. Porter. One should not equate the concept of «potential of the enterprise» and «competitiveness». Competitiveness – the ability of the object to withstand the competition with the same objects in a set of temporal and spatial framework. Potential – a broader concept, it is focused not only on the current competitive situation, but also on the future development of competition,

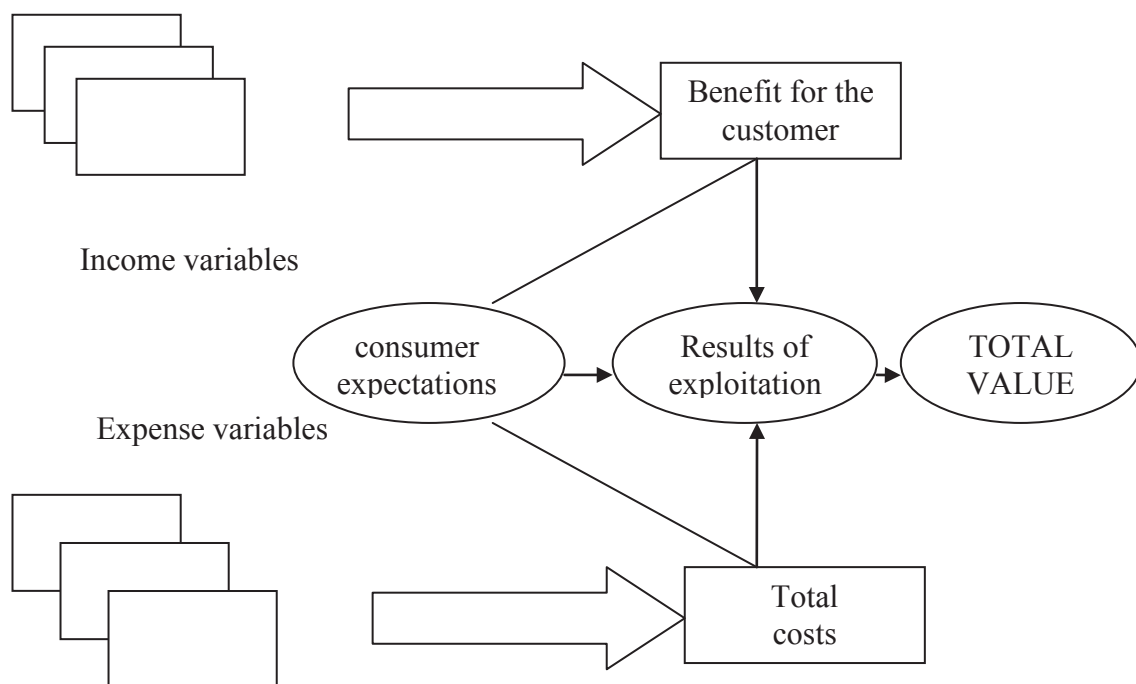


Fig. 2. The mechanism of formation of goods value for the consumer

the needs of consumers, industry trends, as well as the entire sphere of interest of the enterprise.

The more favorable assessment of the environment in which the company operates, the higher the external potential of the enterprise. Thus, it is specifically mentioned that this evaluation will be relative. For this reason, even the seemingly weak enterprise can have a sufficiently high external potential that is quite natural. It should be noted that today there are some attempts to create such a methodology, but the vast majority of them in its basis contains the method of expert evaluations. The main disadvantage of this approach – is a quite subjectivity of final assessment, in this situation objective assessment of the external potential of the enterprise would be much more useful. In addition, the obtained in this way evaluation can not be integrated neither methodological, nor on mathematical level with the evaluation of the internal potential of the enterprise. As a result, we will not get an overall assessment of the potential. Similar situation exists with the assessment of total potential of the enterprise. Today, there is only a criterion that could eventually give the necessary assessments, but there is no method of calculation itself. As an integrative assessment of total potential of the enterprise may be a value, produced by the enterprise. In the classical theory of marketing value is considered as the ability of goods to satisfy certain requirements. However, the modern interpretation of the given term is much broader. Most fully value of the goods can be represented as follows (fig. 1).

This is a four-level concept of goods value, which includes all of the variables that form the

final value for the consumer. The very same mechanism of the value of certain goods for the consumer is shown in fig. 2.

Thus, the value of the goods can be considered as final integrated indicator of the assessment of total potential of the enterprise, since it is here that all the criteria are laid down, which directly or indirectly evaluate both selected elements and the relationship between them.

It is natural that this evaluation criterion has a number of negative features. We get quite an isolated overall assessment of the totality of a set of extended processes in space and time, from here we can not distinguish the individual components and evaluate them. However, despite this, it should be noted that the value of the goods is still a fairly rigid, uncompromising and critical assessment of the enterprise potential.

Conclusions. Based on the above, it can be concluded that management of the enterprise potential as a complex social – economic system, is one of the most perspective directions of control theory development. Management of potential – a complex and system approach to the problem of survival of the enterprise in a long term period. This direction is much broader than currently popular strategic management. Management of potential – is a whole concept of enterprise management, as a complex social and economic system based on the system, complex and process approaches. Given concept has initially a certain criterion, index of effectiveness – the purpose to be pursued – it is a potential of the system (enterprise). Strategic management in this case should be considered only as a tool in the framework of this concept.

REFERENCES:

1. Аакер Д. Стратегическое рыночное управление / Д. Аакер // Пер. с англ.; Под ред. Ю.Н. Каптуревского. – СПб. : Питер, 2002. – 544 с.
2. Ансофф И. Стратегическое управление : Сокр. пер. с англ. / И. Ансофф / Научн. ред. и авт. предисл. Л.И. Евенко. – М. : Экономика, 1989. – 519 с.
3. Ефремов В.С. Стратегическое планирование в бизнес-системах / В.С. Ефремов. – М. : Финпресс, 2001. – 240 с.
4. Мищенко А.П. Стратегическое управление : учебное пособие / А.П. Мищенко. – Днепропетровск : Изд-во ДУЭП, 2007. – 332 с.
5. Мищенко А.П. Состояние и новые подходы к разработке стратегии предприятия / А.П. Мищенко // Науковий вісник Національного гірничого університету. – Дніпропетровськ, 2003 – № 3. – С. 59-63.
6. Томпсон А.А. Стратегический менеджмент. Искусство разработки и реализации стратегии : учебник для вузов / А.А. Томпсон, А.Дж. Стрикленд / Пер. с англ., под ред. Л.Г. Зайцева, М.И. Соколовой. – М. : Банки и биржи, ЮНИТИ, 1998. – 570 с.