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# АДАПТАЦІЯ Й АДАПТИВНЕ УПРАВЛІННЯ ПІДПРИЄМСТВОМ: ТЕОРЕТИЧНІ АСПЕКТИ

### І.Ю. Мелушова, М.А. Вівденко

Здійснено узагальнення, систематизацію існуючих підходів до суті поняття «адаптація підприємства». Наголошено на необхідності розгляду поняття «адаптація» з позиції комплексної системи, що включає в себе ключові компоненти. Розглянуто суть та значущість «адаптивного управління» з позицій розвитку теорій економіки підприємств і управління організаціями.

**Ключові слова:** адаптація, управління, підприємство, система, компоненти.

## АДАПТАЦИЯ И АДАПТИВНОЕ УПРАВЛЕНИЕ ПРЕДПРИЯТИЕМ: ТЕОРЕТИЧЕСКИЕ АСПЕКТЫ

### И.Ю. Мелушова, М.А. Вивденко

Осуществлено обобщение, систематизация существующих подходов к сути понятия «адаптация предприятия». Отмечено необходимость рассмотрения понятия «адаптация» с позиции комплексной системы, которая включает в себя ключевые компоненты. Рассмотрена суть и значимость «адаптивного управления» с позиций развития теории экономики предприятий и управления организациями.

**Ключевые слова:** адаптация, управление, предприятие, система, компоненты.

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## ADAPTATION AND ADAPTIVE ENTERPRISE MANAGEMENT: THEORETICAL ASPECTS

#### I. Melushova, M. Vivdenko

Economic management of modern enterprises occurs in the changing and unpredictable conditions. It requires constant monitoring of the changes in the economic environment that complicate the work, but on the other hand, make it possible to reveal the hidden potential of the company, opening up the prospects for its development.

Currently, a large part of the major domestic institutions is not able to adequately and consciously react to ever-changing conditions of the external and internal environment. This applies even to the companies with a well-oiled mechanism of management of production and economic activity. This problem is caused by a complete lack of flexible market-based instruments of adaptive management. Adaptation of enterprises to environmental conditions is a natural process of evolution of the economy.

Taking into account environmental changes, systematic updating of enterprise economic activity is necessary to survive and maintain the competitiveness of its functioning in modern conditions. In other words, management of organizational changes should be based on the adaptive approach that uses an existing enterprise potential and the identification of its reserves as a base of organizational change.

In the process of adaptation, system functions of management are particularly important, which are understood not only as the consistency between such functions as planning, organization, control and motivation, but also as a compliance of the operational implementation of these functions to the enterprise strategic development plan.

In the article, economic literature about the definition of "adaptation" and "adaptive management" is analyzed. Essential characteristics, evolution and areas of the dissemination of the notion of "adaptation" are disclosed. The approaches of the definition of the essence of adaptation are studied, three main approaches according to the authors are proposed. The key components of this basic concept are singled out. This paper highlights the essence of adaptive management from the positions of theories of business economics. The authors' interpretation of the concept of "adaptation" and "adaptive management" is given.

Keywords: adaptation, management, enterprise.

Formulation of the problem in general. In modern conditions of economic transformation in Ukraine, macroeconomic conditions have a significant impact on the economic efficiency of enterprises and effectiveness of their activities. In most cases, one of the important problems of insufficient competitiveness of domestic enterprises on the

arkets is the problem of timely opportunities to assess the market environment changes and adapt to them quickly. Therefore, a necessary condition for survival of enterprises and successful realization of the defined goals today is effective adaptation. Growth of adaptive capacity of enterprises is associated with the ability to promptly analyze changes in the parameters of the environment and with the creation of an elastic structure that can allow adequately respond to these changes. This emphasizes the need and importance of investigations in the field of adaptive management of enterprises at different stages of their development.

Analysis of recent research and publications. The issue of adaptation as a process of purposeful acclimatization of enterprises to the instability of the external and internal environment is not new to the scientists in economic sphere. Theoretical aspects of adaptation and development of the foundations of adaptive management were considered in the works of such renowned foreign and domestic scientists: I. Akimova, I. Aleksandrov, I. Ansoff, S. Biro, S. Brown, A. Voronkov, V. Heyetsya, M. Huzya, R. Dafta, V. Denisov, K. Eyzenhardta, K. Kovalchuk, K. Coyne, K. Levin, Y. Lysenko, K. Meyer, A. Nalyvayko, V. Ponomarenko, A. Rayevnyevoyi, L. Sergeeva, B. Trenev, S. Filonovicha, V. Yachmeneva and others.

Nevertheless, despite the existing rich scientific heritage, some chaos of views on the issues of adaptation and adaptability of enterprises is reigning in economic science today, there are no general theoretical developments and practical recommendations that can help timely respond and adequate adapt to the conditions of activity of enterprises dynamic environment. In our view, in modern conditions of rapid changes in the parameters of the environment features of the manifestation of these categories require further study.

The purpose of the article is theoretical understanding of the essence of adaptation and adaptive management concept, based on modern theories and concepts of their development.

Presentation of the main material. The review of the current literature concerning the research of the essence of adaptation concept showed that at first it was used by biologists to express the process of living organisms' adaptation to changing conditions of the external environment. Charles Darwin was the first who scientifically explained adaptation. The selection is the main cause of various adaptations of living organisms to the environment, this follows from the theory of natural selection as a process of survival and reproduction of the fittest. In his book "The Origin of Species by Means of Natural Selection" he said that adaptation is the device in the evolution of the structure, functions and behavior of organisms to

certain conditions of existence [1, p. 76]. Over time, this concept was borrowed by the other sciences, and today is widely used in the fields of natural, humanitarian, economic, technical sciences, and in management, due to the introduction of system management in a market economy.

The concept of adaptation gained a general status, but despite all the diversity of views on this category, there is not any universally accepted and precise definition of it. Among the main theoretical and methodological issues that have a controversial, polemical nature and a wide range of approaches by modern scientists, is the interpretation of the essence of the concept of enterprises adaptation, its direction and certain principles that are continuously operating main provisions which it is based on.

There are three main areas of differentiation approaches to the definition of "the enterprise adaptation".

Thus, some authors define adaptation of enterprise as a process of adaptation of the parameters of business entities to new, uncertain environmental conditions, namely as a totality of the number of successive actions which are directed to the achievement of certain result [2–4].

Within the second direction, the approaches to the definition of enterprises adaptation are associated with the dynamic abilities of a company based on the ability of reaction [5–7]. We agree with V. Burr [8], who emphasizes that the enterprise dynamic capabilities are expressed in the flexibility of adapting the existing resource potential to the new issues and external situations, and in the innovative features through the creation of absolutely new resource potential and production of innovative products and services.

The third group of economists determines the nature of adaptation of the enterprise as a property of the system [9–10], focusing attention on the property of the system by its quality and main characteristics.

This definition describes the adaptation of the company both as a process and as a definition of its position: the integrity of the system (plus the conditionality), commonality or difference with other systems, stability (resistance feedback), training, capacity for self-improvement, evolution (variability over time).

In our opinion, this approach more significantly and fully reveals the content of enterprise adaptation and corresponds to management concept, based on the study of relationships that can be described by a system of "environment – enterprise".

Within the framework of this approach, formed on the basis of various theories of management, the company is shown as an open system that constantly interacts with the individual elements of the environment. According to A. Gradov, "... any production system does not operate in a

vacuum, it is surrounded or it is located in a highly differentiated environment.

The environment is never stable. And every enterprise should know not only their environment of existence and the nature of it changes, but also to be able to respond to these changes, failure in the adaptation to the environment will result to a failed business in general" [11, p. 32].

Table The definition of "enterprises adaptation" in literature

Author	Given definition
Adaptation of the enterprise as a process	
V. Goncharov	The process of purposeful changes of the structure parameters, properties, organization, and management of the production to offset the impact of external conditions and factors disturbing to preserve or improve the performance of industrial and economic activity
V. Kozlovsky,	The process of purposeful adaptation to a diversity
V. Kobzev,	conditions of their functioning both external and
N. Savrukov	internal (to the system) to the survival
S. Nakonechny,	The process of efficient production by using the
S. Savin	prediction
Definition adaptation based on the ability to respond	
R. Ackoff,	The ability of any system to obtain new information
F. Emerli	to approximate their behavior and structure to optimal ones
V. Radionova	The ability of companies to recognize changes in the external environment, which are essential for the implementation of the strategy selected by the company and adapt to these changes
R. Holl	The ability to quickly implement changes and respond to the demands of consumers
Adaptation as a property of the system	
H. Hanaliyev	The mechanism that allows a person (group), the system to operate successfully, save (change) direction and pace of development, regardless of external factors
L. Bazylevych,	Scientifically based detailed methodological toolkit
D. Sokolov,	that updates the structure of the company according
L. Franeva	to the environmental changes

A number of interpretations of the concept of enterprise adaptation presented in table shows the versatility of their use (grouped according to three selected directions).

These definitions are not contradictory, based on the provisions of existing economic theories and characterize the different aspects and areas of specific research about the nature of this concept.

A review of scientific literature of adaptation and adaptive management and other authors, thematic publications in the press allowed emphasizing coexisting basic key components of the concept of adaptation, namely:

- update as a set of methodological and methodical principles of planning and forecasting in the market conditions;
- correction that displayed in management decisions considering environmental conditions and market factors;
- reaction, in terms of changing the conditions of the system to the threats and opportunities of the internal and external environment;
- ability, in the context of operative reacting on changes and the installation some harmony of a system, external environment and internal environment;
- process as a set of number of successive actions aimed at the achievement of certain result by using the forecasting and changes of organizational and economic mechanism of business structures;
- adaptation of the system to the external environment, such as setting goals, developing strategies and organizational structure of the system to the new socio-economic conditions.

Therefore, we propose to consider adaptation not as isolated individual concept, but as a complex system, that includes all of above components. Adaptation enterprises should be understood as the ability of fast system response to various changes in the parameters of the external environment through a series of adequate, targeted actions aimed to maximizing the efficiency of businesses.

It is necessary to note that the key purpose of adaptation is not just an output of enterprise on a desired level of competitiveness and a stable position on the market, but also maintenance of this level for a long term. Therefore, the operation and growth of each company requires the development and implementation of effective adaptation mechanism, formed in the process of adaptive management and has all the properties of the system.

Definition of the essence of the concept of "adaptive management" must be considered from the standpoint of development of theories of business economics and management organizations.

The necessity of adaptive management arises in connection with the shortage of methods and approaches in management of an enterprise operating in such conditions as an instability of internal and external environment, the set of complex production processes, lack of full amount of primary information and inaccuracy.

Various interpretations of the concept of "adaptive management" issued by Russian scientists and practitioners. For example, according to A. Borisov, an adaptive management should be understood as "... a form of enterprise management, which allows it the flexible changes, to have the ability of quickly and promptly adapt to the processes of the external economic environment, adequately updating the goals, objectives and functions of the enterprise" [12, p. 38].

T. Varlamova presents adaptive management in terms of adapting to the requirements of the environment. She says that "... adaptive management – is environmental monitoring, adapting its internal reserves and activities in general both to the requirements of the environment and the demands of consumers" [13, p. 128].

In the work of S. Alekseev, the concept of adaptive management based on the control of the actual level of adaptation regarding normative, adequate and rapid changes in enterprise activity for its survival and realization of the main goal [14].

From these approaches to defining of the researched concept follows that the adaptive management is the management of an economic entity which aims to study its adaptability that can be traced to the rapid achievement of the optimal level of functioning in a dynamic environment while spending minimum amount of resources. The mechanism of adaptive management at the enterprise includes a specific set of actions, approaches, strategies and complex ways and measures for its implementation. Because of the existence of direct two-way communication between the company and the environment in which it operates, the implementation of adaptive management happens in the following situation. The company is located in comfortable effectively conditions for a certain period. When the external environment changes its conditions that affect the state of the company, this information comes through a communication channel to the latest. As a result, this situation usually knocks the company out from its optimal state. The presence of the formed adaptive system of management activates the mechanism of adaptation that helps businesses adequately react to these changes, discover its hidden possibilities, log back in its optimal state and continue effective operations.

Based on the theoretical concepts discussed above, we can define adaptive enterprise management as a complex and multifaceted process of

the management with the feedback in which even before receiving the final results of economic subject happening the monitoring and the analysis of the environment in which it operates. Forecasting allows the block of management process to obtain data concerning the dynamics of the external environment beforehand, to take timely measures to minimize negative impact of its factors, shape and implement the most effective principles of efficiency of enterprises in order to achieve its development goals.

**Conclusions.** Thus, the definition of the main key components characteristic for the concept of enterprise adaptation, and the review of the existing concepts of the theory of the firm, allowed emphasizing the process of adaptive management, clarifying its meaning and purpose.

The understanding of the essence of the concept of adaptation and enterprise adaptive management is a guarantor of successful development and implementation of adaptive management in enterprises, for their development and achievement of strategic goals, the capacity of the sustainable conservation of its position on the market.

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