

## Impact of the level of providing adaptability of an enterprise's on adaptation process of enterprise to innovation

V. Yachmeneva, Z. Osmanova

Management department,  
The National Academy of Environmental Protection and Resort Development,  
Simferopol, Kievskaya street, 181, aud. 311  
e-mail:k\_men@napks.edu.ua

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**Abstract.** The article was dedicated to ensuring the adaptability of the enterprise. As a means of providing adaptability of an enterprise's activity there was suggested resources and their reserves: basic production assets of the enterprise, financial resources, material resources, carriers of knowledge, information and intangible resources of the enterprise. I-level barriers related to unawareness of need to involve the accumulation of resources and reserves resources for the providing adaptability of an enterprise's activity at the level of enterprise management. II-level barriers are associated with resource constraints — lack of resources, resources absence, lack of ability to attract resources and accumulate reserves resources for various reasons III-level barriers are associated with psychological resistance from employees. In the article problems hindering to providing adaptability of an enterprise's activity as barriers of I, II and III levels were presented and characterized. Influence of the level of barriers to providing adaptability of an enterprise's activity is characterized. Effect of the provision level of providing adaptability of an enterprise's activity on such characteristics of adaptation as rate of adaptation, the cost of adaptation, the scope and depth of adaptation is proved and the nature of such effects is investigated.

**Key words:** adaptation, adaptability, enterprise's activity, providing.

### INTRODUCTION

In recent years the adaptation has become very popular in scientific literature. It is concerned not only adaptability of an enterprise's but also adaptation of individual workers of these enterprises. It is explained by the high level of competition on the market and high level of uncertainty of the environment, to the conditions of which the company should adapt systematically.

Taking into account that fact that adaptability is a prerequisite for enterprise adaptation to environmental conditions, it is necessary to study adaptability of an enterprise's activity at first.

Adaptability of an enterprise's activity as an economic category is close with other characteristics of an enterprise's activity, namely competitiveness, sustainability, innovation, reliability and integrity. Like these characteristics, adaptability is a characteristic that can ensure survival, sustainable operation and development of the company. This, as well as direct adaptation of enterprises to environmental conditions is possible only when you reach the desired level provision of the enterprise adaptability.

Questions about adaptability were examined by domestic and foreign scholars in different periods of time and concerning on different researching objects. Among the researchers who were involved in the issues of adaptability and adaptation there are domestic and foreign scholars, namely I.A. Pitaikina [16], O.A. Pastuhova [15], V.M. Yachmenyova [25, 26, 27], A.V. Kozachenko, V.P. Ponomarov, O.M. Liashenko [6], G.I. Hanaliev [4, 5], A.P. Maksimovich [11], D.Z. Chuiko [2], E.V. Chigenkova [1], V.P. Stasiuk [20], T.T. Lastsev and A.A. Caygorodsev [10], V.N. Samochkin [18], V.N. Fomin [3], J. Shumpeter, R. Nelson, R. Akoff, T. Veblen and others. Most of their works are devoted to separate consideration of each of these categories within the different subjects of the study. Issues of direct influence the level of providing adaptability of an enterprise's activity to adapt to the

analyzed company works have not been studied. Therefore, we believe research topic relevant and timely.

#### THE MAIN MATERIAL

Authors who have studied the issues of adaptability [2, 6, 7, 11, 12, 13, 25], this concept is defined as follows:

- property required for the criteria changes;
- response needed to establish the causes of the change;
- ability required for determining the nature of current developments and to ensure the economic sustainability of the enterprise

In our research, we should say the adaptability as a feature of the enterprise's activity, which reflect the potential enterprise's opportunity, ability and responsiveness to change, which is the necessary condition for enterprise's adaptation to changes [28].

Survival, setting activity goals of enterprise, performing functions, preservation and expending market share and etc. Are depend on adaptability. Adaptability of the enterprise determines how quickly the enterprise is able to respond to conditions, which are changing, how safely and invisibly held the process of adapting of the enterprise. It is first necessary to provide adaptability of the enterprise accordingly if we want it will be able to maintain its position in the market and continued its development.

In previous publications on research, it was determined that the way to providing adaptability of an enterprise's activity is the resources of enterprise and cash reserves. Among these resources are basic production assets of the enterprise, financial resources, material resources, carriers of knowledge, information and intangible resources of the enterprise. Listed resources are a means of providing adaptability of an enterprise's activity only in the condition of an effective management on the level of the enterprise's management.

Providing adaptability of an enterprise's activity is a set of actions, measures and management decisions by management of the enterprise's activity to attract resources appropriate quantity and quality, the accumulation of reserves and resources of their intended use.

Like any other process, providing adaptability of an enterprise's activity associated with a number of problems [15, 21, 23, 25]. Such problems are presented in the form of barriers I, II and III levels, which interfere toproviding adaptability of an enterprise's activity.

I-level barriers — barriers related to unawareness of need to involve the accumulation of resources and reserves resources for the providing adaptability of an enterprise's activity at the level of enterprise management. Barriers of the first level are basic. It is not accidental, because without awareness of need to introduce measures to attract resources and the accumulation of reserves resources at the level of enterprise management, providing adaptability of an

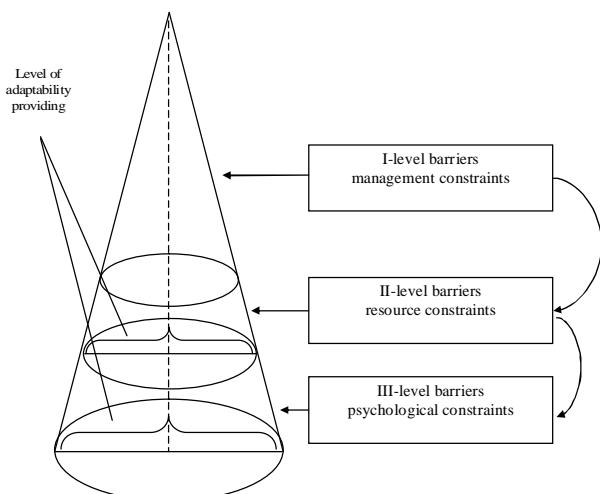
enterprise's activity is impossible. In addition overcoming of the Level I barriers is a prerequisite for overcoming the barriers these levels.

II-level barriers are associated with resource constraints — lack of resources, resources absence, lack of ability to attract resources and accumulate reserves resources for various reasons. Among these reasons are management incompetence, lack of financial resources and so on. For the adaptability of an enterprise's activity barriers overcoming related to resource constraints took the second place taking into account the importance. Without overcoming of II level barriers stable functioning and development of the enterprise is impossible, as it is a means of providing resources adaptability of the enterprise. That overcoming of II level barriers is the main objective to providing adaptability of an enterprise's activity.

III-level barriers are associated with psychological resistance from employees. Singling out psychological resistance from employees is a barrier because workers directly involved in ensuring the adaptability. First, the employees of the company serve as bearers of knowledge as a means of adaptive enterprise, and secondly, the whole process of adaptive enterprise happens by their direct participation.

Providing adaptability of an enterprise's activity should be a continuous process as the environmental conditions the company must adapt are constantly changing. This, in its turn, requires bringing new resources and the accumulation of reserves of resources. Changes in the environment which the company must adapt can be caused by various reasons. As for employees it may appear such a necessity to be involved with senior staff, with presently existing in the enterprise, skill level or improve the skills of their employees. Moreover, according to changes in the environment, it may be necessary to provide obligatory technological re-equipment of production and non-production activities of the enterprise. This can result in dismissal of workers from specific positions. In such conditions the psychological resistance from employees is related with fear of non-compliance with the new requirements for workers, the need to adapt to new working conditions and possible job loss and so on. Psychological resistance from employees may adversely affect the providing adaptability of an enterprise's activity. Therefore, to prevent such situations the company's management should systematically contact with their employees about need and importance of implementing measures to providing adaptability of an enterprise's activity. Taking into account the uncertainty of the environment, the situations different by nature and character, which forced the company to adapt are systematic.

Schematically barriers to providing adaptability of an enterprise's activity are presented in Fig. 1.



**Fig. 1.** Barriers that hinder providing adaptability of the enterprise

The scheme adopts the following notations:

I-level barriers — barriers related to unawareness of need to involve the accumulation of resources and reserves resources for the providing adaptability of an enterprise's activity management, they are marked as management constraints;

II-level barriers are associated with resource constraints — lack of resources, resources absence, lack of ability to attract resources and accumulate reserves resources, marked as resource constraints;

III-level barriers are associated with psychological resistance from employees of the company in measures to ensure the providing adaptability of an enterprise's activity, marked as psychological constraints.

The gap between the highest peak and the first base of the cone is the largest. Schematically, this reflects the importance and complexity comparable to overcome the I-level barriers. Applied schematic display of the I-level barriers as a larger gap between the barriers of other levels, confirms that without overcoming of the I-level barriers, overcoming of the following barriers is impossible. The intervals between II and III levels are practically identical, confirming their equivalence to providing adaptability of an enterprise's activity.

According to the scheme, the overcoming of the II and III levels barriers is the basis for achieving the appropriate level of providing adaptability of an enterprise's activity. After overcoming of I-level barriers the achieving of this or that level of providing adaptability of an enterprise's activity is not provided, as overcoming of I-level barriers is only the basis for overcoming these barriers of the following levels and condition for the implementation of measures to providing adaptability of an enterprise's activity (fundraising accumulation of reserves and resources).

Thus, it is clear that without awareness measures necessary to providing adaptability of an enterprise's activity on the level of enterprise management system, without attracting the necessary resources, the

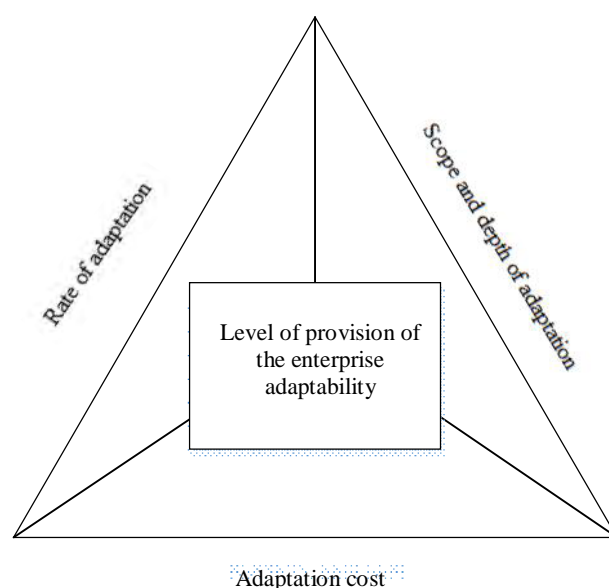
accumulation of reserves and resources, overcoming resistance from employees, i.e. overcoming of I, II and III levels barriers providing adaptability of an enterprise's activity.

Equally important is the level of barriers, because the higher the level of barriers, the more time, effort and financial costs is required to overcome them. For the company, given that adaptability is a condition of the adaptation of the enterprise to the environment that is constantly changing, overcoming operational barriers that hinder providing adaptability of an enterprise's activity is the primary condition for survival, sustainable operation and development. Therefore, to the extent of barriers that prevent the provision of adaptability of the company, for them not to be "unattainable" for overcoming, measures to ensure the adaptability of enterprises should be carried out systematically.

Among the measures that will predict the occurrence of barriers that prevent the providing adaptability of an enterprise's activity may be relevant courses, training for management and employees; gradual (as needed) attraction of resources and the accumulation of reserve resources. Systematic holding of such events provide absence / low level of barriers that hinder the providing adaptability of an enterprise's activity. As a result, in case of subsequent changes in the environment to which the company will be forced to adapt, spending time, effort and finances will be minimal.

Level of the providing adaptability of an enterprise's activity determines the efficiency of enterprise adaptation to environmental conditions. Such characteristics of adaptability depend on the level of provision of providing adaptability of an enterprise's activity:

- the rate of adaptation,
- the scope and depth of adaptation,
- the cost of adaptation.



**Fig. 2.** The relationship of the level providing adaptability of an enterprise's activity and the characteristics of enterprise adaptation

**Table 1.** Impact of the provision level of the company adaptability on the characteristics of enterprise adaptation

Characteristics of adaptation process	Objects of impact	Direction of dependence	Note
Rate of adaptation	1) adaptation cost	Reverse dependence	This implies that rapid adaptation is possible with a high level of providing adaptability of an enterprise's activity. Therefore, the cost of adaptation by increasing its rate will decrease
	2) market share occupied by the company	Direct dependence	To save the market share occupied by the company or entering new markets, including international, some environmental conditions the company should react operatively
	3) company profit	Direct dependence	Rapid response and fast adaptation to specific changes in the external environment may cause an increase in profits and vice versa
Scope and depth of adaptation	1) market share occupied by the company	Direct dependence	The scope and depth of the adaptation process, including determining the stability of the position on the market and market share, which it occupies
	2) company profit	Direct dependence	Sustainability position on sales market, that the scope and depth of the adaptation process determine, has a positive impact on company profit
Cost of adaptation	1) financial condition of the company	Reverse dependence	The cost of adaptation increases with low level of providing adaptability of an enterprise's activity. The higher the value of the adaptation process, the more negatively it affects the financial position of the enterprise

If a company has a high level of adaptability provision, then:

firstly, the adaptation process will pass quickly so they do not need to engage in finding and attracting new resources;

secondly, the adaptation process will be characterized by the scale and depth of adaptation to new conditions;

thirdly, the cost of adaptation will be minimal, as the company will have the necessary resources for adaptation at its disposal.

The relationship of the level of providing adaptability of an enterprise's activity and the characteristics of enterprise adaptation is schematically shown in Fig. 2.

Analysis of the impact of providing adaptability of an enterprise's activity on the characteristics of enterprise adaptation is presented in Table 1.

Thus, the speed of adaptation affects the cost of adaptation; market share occupied by the company and the profits. It was determined that reverse dependence presents between the rate of adaptation and cost of adaptation, direct dependence — between the adaptation rate and the market share occupied by the company and the profit of the company. The scope and depth of adaptation affect the market share occupied by the company and the profits. It was determined that between them there is direct dependence. The cost of adaptation influences the financial position of the company with reverse dependence.

#### CONCLUSIONS

1. In our research, we should say the adaptability as a feature of the enterprise's activity, which reflect the potential enterprise's opportunity, ability and responsiveness to change, which is the necessary condition for enterprise's adaptation to changes.

2. Basis of adaptability of an enterprise's activity are its resources (basic production assets of the enterprise, financial resources, material resources, media knowledge, information and intangible resources companies) and their reserves provided effective management.

3. Problems that arise during process of providing adaptability of an enterprise's activity may be represented as the barriers of I, II and III levels. Barriers of I level are identified as administrative constraints and related unawareness of need to involve the accumulation of resources and reserves resources for the adaptive enterprise at the level of enterprise management. barriers of II-level are associated with resource constraints – lack of resources, resources absence, lack of ability to attract resources and accumulate reserves resources. Barriers of III-level are defined as psychological limitations and associated psychological resistance from employees regarding measures in order to providing adaptability of an enterprise's activity. The degree of these barriers overcoming determines the level of provision of the company adaptability.

4. Level of providing adaptability of an enterprise's activity determines the efficiency of enterprise adaptation to external changes, such as rate adaptation, the scope and depth of adaptation, the cost of adaptation.

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