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Sustainable Economic Development and Advancing Education Excellence  
in the era of Global Pandemic

**Editor**

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## Evaluating the Effectiveness of Forming Enterprises Competitive Advantages

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### Abstract

It is proposed methodological approach to assessing the impact of the external environment on the implementation of this process, which is based on general and specific principles of the system, process, value-oriented approaches and involves the use of a sound system of indicators of factors characteristic of global, national, sectoral and regional levels and formal methods of valuation, which increases the objectivity and decisions validity level in the process of achieving and retaining competitive advantages of trade entities based on an integral approach to the formation of competitive advantages. It is made implementation of the proposed methodological instruments, which used the results of internal possibilities valuation, realized the influence valuation of external factors and set a favorable factors impact of all given levels, as well as negative impact some of them.

**Keywords:** competitive advantage, internal possibilities, business processes, international trade, external factors.

### Introduction

The formation of an effective system of enterprise competitive advantages of economic activity certain type requires concretization of the content and identification of features taking into account industry specifics. The significance of the study these issues in relation to trade activity can be explained by the fact that the competitive advantages of all participants in the reproduction process (suppliers, manufacturers, trade entities, etc) are considered if they are recognized as consumers, that is, at the final stage of commodity circulation, where retail trade operates. It is no coincidence that the emergence and formation of competitive advantages theory occurred in the context of the formation and development of international trade theory. Features of competitive advantages are also related to the ability of trade enterprises to form them due to the quality characteristics of goods. The absence of production processes does not allow trade enterprises to directly affect the quality of goods.

Retail entities exercise indirect influence on the quality characteristics of ware through purchasing, cooperation in creating and developing a trade mark, forming a range of products with high quality, etc.

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## Literature Survey

Significant number of scientists consider competitive advantages based on the competence approach (Trigeorgis, L., & Reuer, J. J. (2017)).

The essence of this category is highlighted through the following characteristics (Zhao, E. Y., Fisher, G., Lounsbury, M., & Miller, D. (2017)): degree of development and efficiency of using competitive potential; combination of existing potential with experience of using and image; the function of resources and competencies; the consequences of having key and distinctive competencies; the set of competencies with internal and external capabilities, etc.

Proponents of this approach (Durmanov, A., et al. (2019)) as sources of forming competitive advantages distinguish not only internal capabilities and competencies in different areas of activity, but also external; note such integral features as the comparative, dynamic, effective nature and strategic orientation.

The developments of Ogunsiji, A. S., & Ladanu, W. K. (2017), who consider competitive advantages from the point of view of competencies and capabilities, mainly refer to the carriers and sources of formation, which somewhat blurs the essence of this category at the same time.

Scientists interpret competitive advantages from the point of view of an innovative approach as:

scientific-technical potential, new technologies and knowledge, any innovations that create an advantage over competitors, thereby focusing on modern sources of the formation (Caurkubule, Zh. L., et al. (2020); Zeibote, Z., et al. (2019));

innovative approach to business strategy and tactics, which is more in line with approach to forming competitive advantages (Meyer, G. D., Neck, H. M., & Meeks, M. D. (2017)).

Thus, while emphasizing the leading role of innovative factors in creating competitive advantages, the authors do not, in our opinion, fully disclose the meaning and nature.

## Methods

Theoretical and applied aspects of the work were studied using the following methods: content analysis – for the development of conceptual and categorical apparatus; morphological analysis; scientific abstraction; analysis, synthesis, comparative analysis- to determine the features of competitive advantages of retail enterprises and the systematization, classification of influence factors the formation of competitive advantages; graphoanalytic, matrix- the effectiveness valuation of competitive advantages formation; graphic- for schematic display of a number of theoretical and practical provisions, etc.

## Results

The process of forming the competitive advantages of a retail company is proposed to be carried out in a number of successive stages based on the basic approaches, principles and components of the applied bases.

It is the formation of maximum possible set of ideas about competitive advantages in all types (operational, financial, investment), areas of activity of enterprise retail trading, and sources – external (favorable legal framework, geographical location, etc) and internal (internal business processes, management, resources, etc) at the first stage.

The second stage is devoted to creating information base for the formation of competitive advantages of retail enterprises based on the use of both external and internal sources.

There are determined internal enterprise capabilities to ensure the implementation of individual ideas from the first stage formed by evaluating the set of potential and realized competitive advantages of the trading company according to appropriate criteria at the third stage.

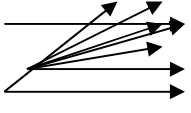
Competitive advantages are identified depending on the stage of the life cycle or stated the absence based on the results of the evaluation. Accordingly, there are formulated targets regarding the nature of actions to form competitive advantages (Fig.1).

Identification conditions	Competitive advantages	Goals
$N_i K_j \rightarrow 1$	Generated and implemented	Support and development
$N_i \rightarrow 1, K_j \rightarrow 0$	Generated but not implemented	The maintenance, improvement and implementation
$N_i K_j \rightarrow 0$	Absent	Generation of new

**Figure1: Identification conditions and goals of forming competitive advantages of retail trading enterprise (author's development)**

Note.  $N_i$  - areas of competitive advantages;  $K_j$  - positions of competitive advantages.

It is carried out the valuation of the favorable conditions and environmental factors of retail trading enterprises for the implementation of competitive advantages with the set of ideas and behavior's type formed at the first stage (Fig. 2) at the fourth stage.

Impact nature of external environment	Absolutely favorable		Innovative	The type of the enterprise behavior
	Favorable		Reproductive	
	Unfavorable		Adaptive	
	Dangerous		Protective	

**Figure 2. Type of behavior of retail trading enterprise depending on the impact nature of the external environment (author's development)**

The fifth stage involves the creation of a set of relevant ideas of competitive advantages in various types\directions and sources of formation, which can be implemented by a retail trading enterprise due to internal opportunities and favorable factors of the external environment.

It is done by establishing the correlation of capabilities of the existing competitive potential and conditions of the external environment correspond to the implementation of certain ideas. Work is being carried out to form the competitive advantages of a retail company based on a set of current ideas identified at a previous stage, at the sixth stage.

## Discussion

The issues of forming internal information, the competitive potential valuation and efficiency of forming competitive advantages are discussed in the previous sections. The next stages are related to the study of determinants of creating competitive advantages by retail trading enterprises and the influence of external environment on the process of the formation.

In our opinion, this approach is debatable, since the proponents identify the sources of competitive advantages with the factors of production, i.e. the resources necessary for the production of goods or services.

But we believe that the formation of competitive advantages is determined not only by sources, but also by the complex influence of numerous multidirectional factors that can both strengthen and weaken certain advantages. Enterprises can be provided with the same factors of production, but do not have competitive advantages.

This position is based on the generally accepted interpretation of terms. Thus, the source is defined as the basis, the initial beginning, that which gives rise to something, on which something is based, while the factor is the cause, the driving force of any process.

Our research, accordingly, is aimed at studying, identifying and systematizing factors that influence the formation of competitive advantages. Factors of competitive advantages are characterized not only by a significant number, but also are different depending on the scope of manifestation, attitude to the company, the nature and strength of the action, etc. Wide range of factors is due to the scale, multi-level, complex environment of business entities, as well as versatility of the competitive advantages and the specifics of the formation, implementation and development processes. Under such conditions the effective implementation of these processes on the basis of various factors requires the classification according to the directions and signs.

It is recommended type of behavior of the enterprise depending on the favorability of the external environment based on the influence valuation of external factors that occurred at the 4th stage.

It was revealed the adverse impact of information technologies development as a part of the innovation environment and the reduction in the number of market participants due to the overall positive influence of all levels of the external environment.

Adaptive behavior to the actions of competitors and decrease in the level of information technologies development was chosen to be adequate in the formation of competitive advantages in relation to these factors. The enterprise is recommended innovative and reproductive types of behavior in relation to the favorable influence of other factors.

Coordination of goals, directions, type of behavior, and measures for creating competitive advantages are shown in Fig. 3.

Competitive advantages Formation recommendations	Generated and implemented	Generated but not implemented	Absent
Goals	Support and development	The maintenance, improvement, implementation	The generation of new
Directions	The skill level of staff	The level of management competencies	Availability of commodity resources and capital
Type of behavior depending on the influence factors of external environment	Innovative. Reproductive. Adaptive to the competitors behavior in the industry and regional markets, to reduce the level of information technologies development	Reproductive on an innovative basis. Adaptive to the competitors behavior in the industry and regional markets, to reduce the level of information technologies development	Innovative (search and implementation of favorable opportunities). Adaptive to the competitors behavior in the industry and regional markets, to reduce the level of information technologies development
Formation activities	Increasing the level of staff abilities. Encouraging lower circulation costs. Creating conditions to optimize of circulation costs	Introduction of modern technologies in the trading process and customer service. Expanding additional services and price incentives for consumers	Expansion and revision of the assortment in the direction of forming assortment varieties of different price segments, improved quality and environmental characteristics, introduction of innovative products . Stimulation of consumers. Customization of the loyalty programs. Merchandising. The expansion and differentiation of the trade marks

**Figure 3: Formation of competitive advantages based on the “internal business processes” projection (author’s development)**

Therefore, the proposed methodological instruments for the formation of competitive advantages of retail trading enterprises allowed to solving complex this problem, identify narrow spaces and critical conditions in comparison with the subjects of strategic group, as well as to determine measures for further actions to form competitive advantages and improve the competitive position in the strategic group and in the market.

## Conclusion

Comprehensive methodological support for the formation has been developed, takes into account industry specifics, based on general and special principles of system, process and strategic-oriented approaches, the results of internal capabilities valuation and the pressure of external environment and provides for the sequential implementation of stages based on the conceptual provisions of creating competitive advantages of retail trading enterprises.

Scientific views on the allocation of environmental factors of retail trading enterprises are systematized and the classification is improved by: identifying features – directions and sources of competitive advantages, the role in providing competitive advantages; the company’s response to changes in the external environment and directions of the development; details of specific factors in relation to retail enterprises by attributes- specialization of retail enterprises and the functional purpose of the range, organizational forms of trade and formats, components of business activity of retail enterprises based on the study of modern approaches to the classification of factors for the formation of competitive advantages.

It is developed a scientific-methodological approach to assessing the impact of the external environment on the implementation of this process, which unlike existing, based on a set of general and specific principles of the system, process and value approaches; involves the use of an integrated system of indicators characterizing the external environment of retail enterprises of world, national, sectoral and regional levels; focuses on the specifics of retail trading enterprises based on the conceptual foundations of competitive advantages formation.

As indicators, we selected indexes that are integral characteristics of factors in the relationship and calculated by authoritative international and national organizations, which increases the objectivity of the evaluation results and allows the use of formalized evaluation methods.

## References

- Caurkubule, Zh. L., Kenzhin, Zh. B. Bekniyazova, D.S., Bayandina, G.D., Dyussebekova, G. S. (2020). Assessment of competitiveness of regions of the Republic of Kazakhstan. *Insights into Regional Development*, 2(1), 469-479. [http://doi.org/10.9770/IRD.2020.2.1\(6\)](http://doi.org/10.9770/IRD.2020.2.1(6))
- Durmanov, A., Bartosova, V., Drobyazko, S., Melnyk, O., Fillipov, V. (2019). Mechanism to ensure sustainable development of enterprises in the information space. *Entrepreneurship and Sustainability Issues*, 7(2), 1377-1386. [http://doi.org/10.9770/jesi.2019.7.2\(40\)](http://doi.org/10.9770/jesi.2019.7.2(40))
- Meyer, G. D., Neck, H. M., & Meeks, M. D. (2017). The entrepreneurship-strategic management interface. *Strategic entrepreneurship: Creating a new mindset*, 17-44. URL: <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781405164085.ch2>
- Ogunsiji, A. S., & Ladanu, W. K. (2017). A theoretical study of performance measures in the strategic and corporate entrepreneurship of firms. *International journal of physical sciences and engineering*, 1(1), 72-80. URL: <https://www.sciencescholar.us/journal/index.php/ijpse/article/view/15>
- Trigeorgis, L., & Reuer, J. J. (2017). Real options theory in strategic management. *Strategic Management Journal*, 38(1), 42-63. URL: <https://onlinelibrary.wiley.com/doi/abs/10.1002/smj.2593>
- Zeibote, Z., Volkova, T., Todorov, K. (2019). The impact of globalization on regional development and competitiveness: cases of selected regions, *Insights into Regional Development*, 1(1), 33-47. [https://doi.org/10.9770/ird.2019.1.1\(3\)](https://doi.org/10.9770/ird.2019.1.1(3))
- Zhao, E. Y., Fisher, G., Lounsbury, M., & Miller, D. (2017). Optimal distinctiveness: Broadening the interface between institutional theory and strategic management. *Strategic Management Journal*, 38(1), 93-113. URL: <https://onlinelibrary.wiley.com/doi/abs/10.1002/smj.2589>