

## ІДЕНТИФІКАЦІЯ АКТУАЛЬНИХ НАПРЯМІВ СТРАТЕГІЧНИХ ЗМІН ВІТЧИЗНЯНИХ ПІДПРИЄМСТВ

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### IDENTIFICATION OF PRIORITY AREAS OF STRATEGIC CHANGES OF DOMESTIC ENTERPRISES

*In the article the actual parameters of strategic changes that form the basic strategy of enterprise transformation are considered. Based on the author's economic and mathematical model the key parameters of change strategy are optimized. Methodical approach to calculating the economic value added as the objective function this model is improved. Identification of relevant parameters of strategic changes is implemented for 20 enterprises of Donetsk and Donetsk region.*

**Keywords.** *Priority areas of strategic changes, expected economic value added, basic strategy changes of enterprises.*

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*У статті обґрунтовано актуальні параметри стратегічних змін, які формують базову стратегію перетворень підприємства. На основі авторської економіко-математичної моделі проведено оптимізацію ключових параметрів базової стратегії змін підприємства. Удосконалено методичний підхід до розрахунку економічної доданої вартості як цільової функції зазначеної моделі. Здійснено ідентифікацію актуальних напрямів стратегічних змін для 20 підприємств м. Донецька та області.*

**Ключові слова:** *актуальні напрями стратегічних змін, очікувана економічна додана вартість, базова стратегія змін підприємства.*

**Форм. 2. Табл. 1. Літ. 10.**

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*В статье обоснованы актуальные параметры стратегических изменений, которые формируют базовую стратегию преобразований предприятия. На основе авторской экономико - математической модели проведена оптимизация ключевых параметров базовой стратегии изменений. Усовершенствован методический подход к расчету экономической добавленной стоимости как целевой функции указанной модели. Осуществлена идентификация актуальных направлений стратегических изменений для 20 предприятий г. Донецка и области.*

*Ключевые слова:* актуальные направления стратегических изменений, ожидаемая экономическая добавленная стоимость, базовая стратегия изменений предприятия.

**Introduction.** The conceptual understanding of strategic change management considers it appropriate to make the criterion of strategic stability. This strategic stability as integrative quality of enterprises, defined as the ability to maintain their integrity and function in conditions close to equilibrium for at least one cycle of the industry or market sector technology under conditions of constant destabilizing influence of the environment. Thus, justifying the basic strategy changes, and therefore the most relevant areas of reforms that should be introduced in the enterprise; the priority attention should be given to determining the summary measure that most fully reflects ensuring strategic stability.

**Analysis of recent research and publication.** Past researches in this area indicates almost complete agreement with the opinion of many scientists about the lack of use in today's net profit, sales revenue and derived indicators of profitability. The main explanation for this is that the defined performance indicators do not take into account the dynamic nature of the influence of important external macro and micro factors of strategic stability. In particular, it is impossible not to note and take into account the undeniable impact of the financial and stock markets in the strategic stability of the enterprise, as well as the existing level of riskiness and potential of industrial markets and technologies which interact with the enterprise. According to the majority of scientists, for instance

I. Ivashkovska (2012), evaluating the effectiveness of sales strategies, and thus the strategic changes, the criterion of economic value added is the cornerstone of modern financial analytical model of modern enterprise. Feasibility of using this index as a criterion of effectiveness of strategic management proved in the works of T. Copeland (2005), A. Damodaran (2004), K. Ferris (2003), N. Myhaylytskaya (2007), V. Neudachin (2011), V. Porohnya (2005), U. Sharp (2001) and others. Thus, the most thorough and comprehensive change management criteria, which reflect the level of enterprise support of strategic stability, is offered choose an economic value-added (EVA).

**Remaining part of the problem.** EVA has a complex internal structure, as in the formation of net operating income and in terms of weighted average cost of capital. Special variations of scientific discourse demonstrate methodological approaches to the calculation of the weighted average cost of capital. Justification tools calculate the weighted average cost of capital, which is taken into account in the calculation of economic value added, especially to be clarified invested components (involved) of capital.

**The aim** is to determine the relevant parameters of change for Ukraine enterprises, based on the methodical approach to calculating the EVA as the objective function of the model of changes strategy.

**The statement of the main research matter.** Despite prevailing definition of this parameter as a key to assessing the effectiveness of policy changes, the researchers emphasize the ambiguity and imperfection of the theoretical and methodological tools for calculating the indicator EVA.

Total formalized logic for determining the economic value added is unique and is represented as follows :

$$EVA = NOPAT - WACC * CE, \quad (1)$$

where *NOPAT* - net operating profit after taxes;

*WACC* - weighted average cost of capital;

$CE$  - amount invested (involved) capital.

From the above formula shows that the rate of EVA has a complex internal structure, as in the formation of net operating income and in terms of weighted average cost of capital. Special variations of scientific discourse demonstrate methodological approaches to the calculation of the weighted average cost of capital.

Justification tools calculate the weighted average cost of capital, which is taken into account in the calculation of economic value added, especially to be clarified invested components (involved) of capital. In our view, the most correct in determining EVA is the use of the term "capital involved". It is determined as the sum of equity enterprises that invested in real functioning (involved in primary and secondary business processes) fixed and circulating assets of the enterprise and debt capital that is invested in a real functioning fixed and circulating assets for a fee. This mean that the portions of debt that is formed from sources that do not have a clearly defined fee for use (for example, payables to suppliers) when calculating the total capital involved is not included. In most amounts of cases involved capital value is calculated based only on the balance sheet indicators. Although prudent calculations of economic value added believe, should be available for additional analytical data that will set the volume is involved in the primary and secondary business processes capital.

Thus, the general approach to determining the weighted average cost of capital involved is clearly defined and has the following form:

$$WACC = \frac{(BK_3 * BBK_3 + (1 - r) * IK_3 * BIK_3)}{BK_3 + IK_3} \quad (2)$$

where  $BK_3$  - property involved asset;

$BBK_3$  - cost of equity;

$IK_3$  - debt involved capital;

$BIK_3$  - the cost of debt capital involved;

$r$  – effective income tax rate;

If the method of determining the value of paid debt is sufficiently standardized and generally accepted, method of determining the cost of equity does not provide a unified approach is more complex and has always attracted the attention of many scientists. S. Salostei (2011) notes, that in most cases, the cost of own capital involved or to equate the expected shareholder return or return on equity. However, consider the data approach quite correct is unfair if only because they do not include the market value of money and the main business risks. For this purpose, when calculating the cost of own capital involved propose to use the pricing model of long-term assets. According to these model, important elements of calculating the cost of equity is the risk-free rate of return and specific coefficient characterizing the risk of investment in this area of activity. Analysis of recent national studies I. Shkura (2010) have shown us that there are at least five benchmarks of determining risk-free rate of return on equity that lies in equating it to the interest rate on deposits of most solid banks in Ukraine; interest rates on bonds of external Ukrainian state loan; the interest rate on bonds of domestic Ukrainian government loan; the interest rate corresponding to the average return on stocks in the stock market; the interest rate of National Ukrainian bank. In our view, expressed approaches somehow related to conditional risk-free rate of return, as in the current economic trends, none of them completely can predict income that can be obtained with a minimum probability of default.

As the banking sector during the economic recession is not entirely reliable, and cost of equity calculations made in the national currency, conventionally risk-free rate of return on equity is selected the rate on domestic Ukrainian government loan. According to the forecasts of financial analysts in the 2014-2015 years, it will hold at 14.25 - 15.15% level.

Causes certain complication and the calculation of market return on equity is another indispensable element in the evaluation. Foreign practice identifies this figure as the average yield of stocks in the stock market. Since the state of development of the stock market does not give full reasons for the effective use of

indicator quoted domestic shares, the value of this index is equal to the average return on equity for the period of existence of the enterprise. Actual values calculated in this way may be less than the weighted average cost of debt and lower than average rates on deposits of domestic banks. In this situation, the expected market rate of return in this study made a bet equal to the average interest on bank loans used by the enterprises.

Based on previous studies, it was found that the choice of the basic strategies of change and appropriate identification of relevant parameters to make strategic changes proposed by the criterion of maximizing the strategic firmness of enterprise. In this case, as a key economic indicator that reflects the company's ability to provide stable operation and development of the strategic perspective, as already mentioned, the chosen economic value added (EVA). This parameter determines in how times net operating income exceeds the weighted average cost of capital involved.

Parameters that are optimized for the task of selecting basic strategy changes, it is proposed to establish in two areas: substantive and process. Substantive context of changes will be presented in three crucial ways: 1. The coverage level of business processes that will be transformed (low, medium and high); 2. Level of fundamental transformation of business processes (low, medium and high) 3. The level of innovation policy changes (low, semi radical and radical). Process context changes are proposed to define the following three parameters: 1. The response time on changes in the external and (or) internal environment (reactive, synchronous, proactive) 2. The way of changes realization (evolutional, reasonable, revolution). 3. The urgency to implement change (term, mid-term, non-urgent).

Economic-mathematical model of optimization of key parameters change basic strategy has the objective function, which reflects the expected economic value added, depending on the options outlined above six transformations.








This model implies that the system of constraints, which allow the possible states of the system and options corresponding to each state of the system. To

ensure the stability of strategic indicators that form part of the model constraints are grouped with 5 blocks : - a block that characterizes the financial indicators of strategic stability under conditions of global access to resources; - power that characterizes technological indicators of strategic firmness under conditions to reduce the life cycle of production and promoting technologies; - power that characterizes the social indicators of strategic firmness under conditions of increasing importance of intellectual assets in the total assets; - block, which characterizes the client strategic indicators of firmness under conditions of increasing individual customer requirements for products; - block, which characterizing business process indicators of strategic firmness under conditions of integration processes. Due to the large number of output parameters and the optimized parameters, is considered in the temporal dynamics study, basic strategy changes in the enterprise is a combinatorial problem of large dimension. To reduce the dimensionality of the problem, its solution process applies at the stage of initial data and the formalization of tasks and as a result, reduced to the problem of dynamic programming. Identification of relevant parameters of strategic changes, based on the proposed methodology, implemented for 20 enterprises of Donetsk and Donetsk region. Note that the selected enterprises within key business processes must have a commercial activity.

Enterprises were grouped into clusters by factors such as the stage of the life cycle (growth, maturity including institutional stabilization, management improvements, knowledge management, including degradation of falling into the trap organizational) and the level of integration processes (number of structural units that are in the enterprise through vertical or horizontal integration).

In the deepening conditions of globalization, mergers of industries and reduce of industries life cycle and enterprises themselves following features should be considered the most appropriate. Among the researched firms were found 7 topical clusters (Table 1).

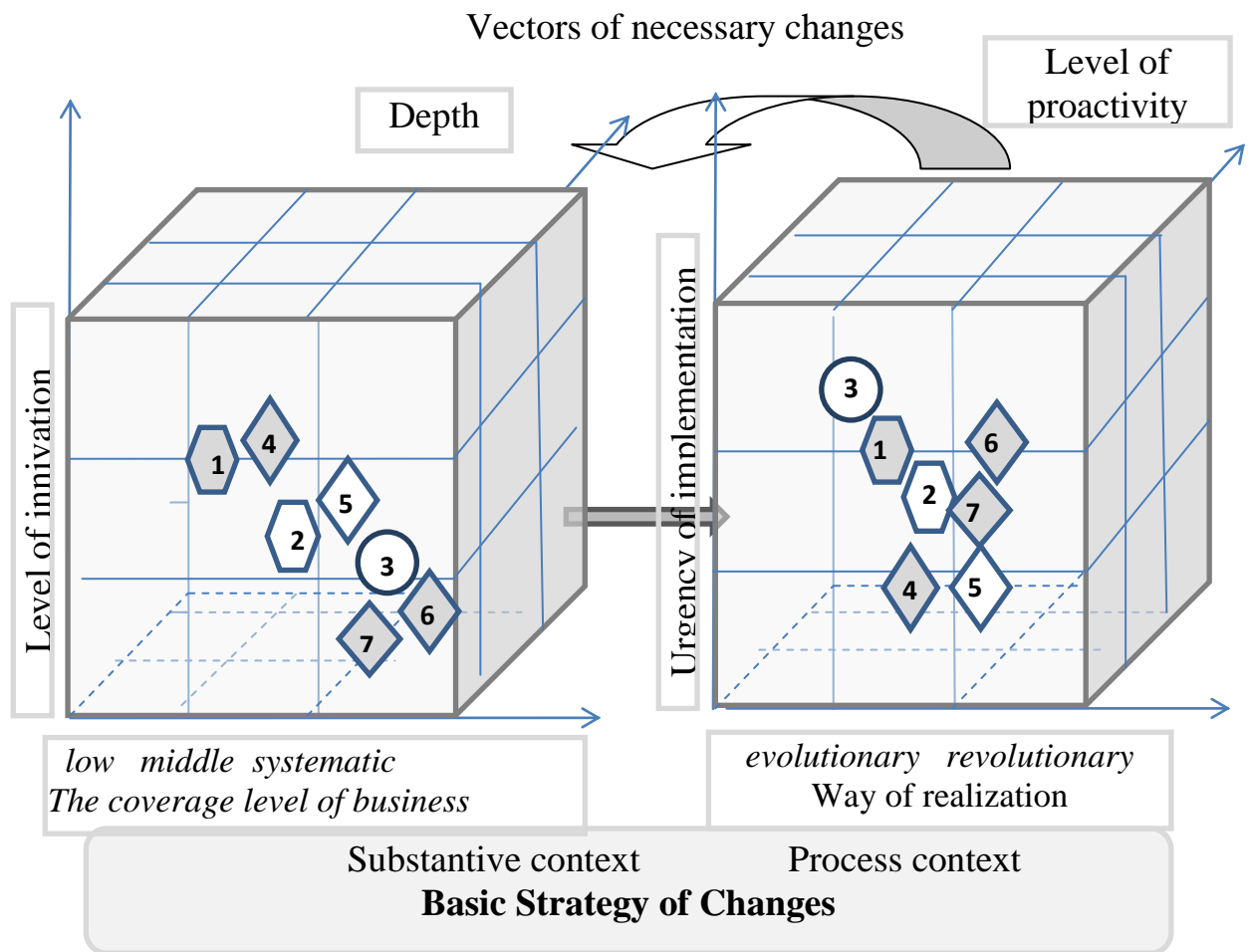
***Table 1. The structure of the investigated enterprises by the defined clusters, by authors***

Number of cluster and pictogram	Name of the cluster	Enterprise name	The share of enterprises cluster in the total number of enterprises, %
1 	Mature enterprises with high levels of integration processes	1. CJSC «Konti» 2. CJSC «APK-Invest»	10 %
2 	Mature enterprises with an average level of integration processes	3. CJSC «DBKK» 4. Ltd. «HTZ» 5. CJSC «Herkyles» 6. CJSC «AVK»	20 %
3 	Mature enterprises with low levels of integration processes	7. Ltd. «Fito» 8. CJSC «Vinter» 9. Ltd. «Harvest» 10. NPO «Doniks» 11. Ltd. «Intpro»	25 %
4 	Growing enterprises with high levels of integration processes	12. LTD. «Donetsk Industrial and Construction Company»	5 %
5 	Growing enterprises with an average level of integration processes	13. Ltd. «DPA» 14. Ltd. «Sarepra-Alfa» 15. Ltd. «DIK»	15 %
6 	Enterprises that are in the process of degradation or organizational traps and have an average level of integration processes (hereinafter - the enterprise degraded with an average level of integration processes)	16. Ltd. VKF «Oniks»	5 %
7 	Enterprises that are in the process of degradation or organizational traps and have a low level of integration processes (hereinafter - the enterprise degraded with an average level of integration processes)	17. Ltd. «Bliss» 18. CJSC «Azot» 19. Ltd. «Strim» 20. Ltd. «Tehprom»	20 %



	processes)		
Total	7 clusters	20 enterprises	100 %

The results showed that the most innovative changes that require system reconfiguration basic business processes that can and should establish only mature and growing enterprises with a high level of integration processes (Fig. 1).



**Figure. 1. Identification of priority areas of strategic changes clustered enterprises according to the conceptual schema of definition of basic strategy changes [authoring]**

**Conclusions.** The most systematic and in-depth transformations require mature enterprises with low levels of integration and degraded enterprise. However, only mature companies will be able to implement urgent proactive elements in the coming transformation in the near future. Degrading enterprise,

regardless of the current integration practices, should also implement urgent changes quite revolutionary, but taking into account existing constraints they will be implemented by the reactive way.

The study shows that the least urgent strategic changes need growing enterprise with high and medium levels of integration. This is because the general and competitive strategy of enterprises is flexible and well decomposes for the next period of operation. So, urgent transformation, which transforming the selected activities and financial flows, the aforementioned enterprises is not required.

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