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## DEVELOPMENT OF ENTERPRISE VALUE DRIVERS SYSTEM

### Abstract

**Purpose.** The purpose of this article is to develop the conceptual foundations of drivers system that affect the value of an enterprise, creating a sound basis for the organization of value management on the modern enterprise under the conditions of uncertainty and risk.

**Methods.** The study used a broad toolkit of scientific research methods, as follows: the historical method (in the process of study of approaches to company's value drivers development); the abstract-logical method (with theoretical generalizations, while revealing the essence of concepts and formulation of conclusions); the method of analysis and synthesis (to clarify the meaning of "value drivers" and justify roles, principles and approaches to the formation of factors that affect company's value); clustering and classification techniques (for systemization of value drivers); statistical, graphical, tabular analysis (to study, group, and visually display empirical data that reflects the trends of value drivers development), others.

**Results.** Based on the research, the role, the principles and approaches to the formation of factors that affect value of an enterprise in the modern business environment are justified. According to the identified features of enterprise's value drivers formation the authors improved theoretical and methodological approaches to their classification.

**Scientific novelty.** Based on system, process, situational approach, the highlighted principles of enterprise's value formation, value theory, capital circulation theory in general, the authors improved the approach to the development of enterprise's market value drivers classification criteria. It has been suggested to complete the existing value drivers classification by adding such positions as: 1) regulatedness degree considering the direction of influence (regulated and unregulated factors); 2) direction of enterprise's potential development (with distinguished activity areas); 3) period of impact (short- and long-term factors); 4) nature of impact (actual and stand-by); 5) intensity of exposure (primarily depends on the objectives of the stakeholders of enterprise valuation); 6) the area of origin (factors of micro-, macro-, meso-, mega level).

**Practical implications.** The results are aimed at optimizing the mechanism of value management of a modern enterprise under conditions of uncertainty and risk.

**Keywords:** enterprise value, value-based management, factor, value drivers, enterprise value driver system.

**Problem statement in general and it's relation to the most important scientific and practical tasks.** The content-richness of the conducted research shows great scientific interest in value-based management. Effective value management of an enterprise in modern business environment is impossible without distinguishing drivers of value, which should be considered in conjunction and cause-effect relationship, in order to determine their subordination, direction of action and impact on value for decision making, oriented on its boost.

**Analysis of recent research and publications, which lay foundations of solving the given problem and on which the author relies upon, segregation of previously unsolved aspects of the general problem that are the subject matter of the article.** Many domestic and foreign scientists are involved in the development of above-described problems. Particular, the basis of local research on value-oriented management are the works of Tugan-Baranovsky M.I. The mentioned themes are also reflected in the works of Ukrainian scientists such as Boyko M., Gerasymchuk V., Mnich O., Mendrul O., Ostrovsky G., Krush, P., Starostin S., Yaremko S. et al. Notable in this context are the works of foreign scientists Copeland T., Koller T., Kotler P., Modigliani F., Miller M., Rappaport A., Stuart et al.

Despite a large number of research publications, it should be noted on the fragmentative and discussive character of theoretical and methodological developments for the use of their results in the practice of business management. In scientific literature no theoretical construction has been formed that would justify a holistic value-based management concept. This complicates the development and usage of driver system that affects value of an enterprise, and restricts their utility opportunities to achieve social and economic goals of functioning enterprises. Therefore systematic studies of drivers that lead to value growth currently remain very relevant.

**Definition of the research goal (problem statement).** The purpose of the following research is to clarify the role, the principles and approaches to formation of enterprise value drivers system and the development of a structural classification of the identified factors that creates reasonable grounds for the organization of value management on a modern enterprise under conditions of uncertainty and risk.

**Statement of main research material with full argumentation of scientific results.** Generalization of the economic substance of the value paradigm in studied scientific writings and analytical reviews allowed us to make a conclusion about meaningful and essential content of the definition of "value-based management" as an ordered set of measures for effective managerial decision making, aimed at the increase of enterprise value, that ensure the consistency of economic interests of stakeholders and are coordinated as well as implemented on the basis of financial information obtained by calculating value-oriented indicators. Enterprise value management generally combines company's development strategy with its financial results under the influence of certain factors.

Factor is a significant objective causal occurrence or a process in production under which influence its efficiency level changes [1, p. 781]. This definition also directly applies to value drivers. Meaning that we offer drivers of value creation to be

further regarded as a complex of interrelated components that eventually form a certain amount of economic value added.

In our opinion, the definition of value drivers is important for two reasons: Firstly, an enterprise cannot work directly with value, and secondly, these drivers help upper echelon managers understand what is happening on all the other levels of governance, and to inform them about their plans and intentions.

As noted by H.Ostrovskaya [2], the process of identifying value drivers is not as simple as it seems at the first glance, since in the last decades the gap between the value of an enterprise, fixed in their financial statements and the estimates of this value by investors has broadened. The study of U.S. enterprises has showed that 40% of the market value is not reflected in the accounts - investors do not pay either for current assets, or for current period income, but for the possibility of the created system to generate cash flows and profits in future.

According to the recommendations of leading scientists [3] in order to assess the overall picture of enterprise's activity and the underlying causes of problems, it is enough to define 5-10 key value drivers, their upper limit can reach 20. When using more than 20 value drivers the enterprise may face difficulties selecting the most important of them.

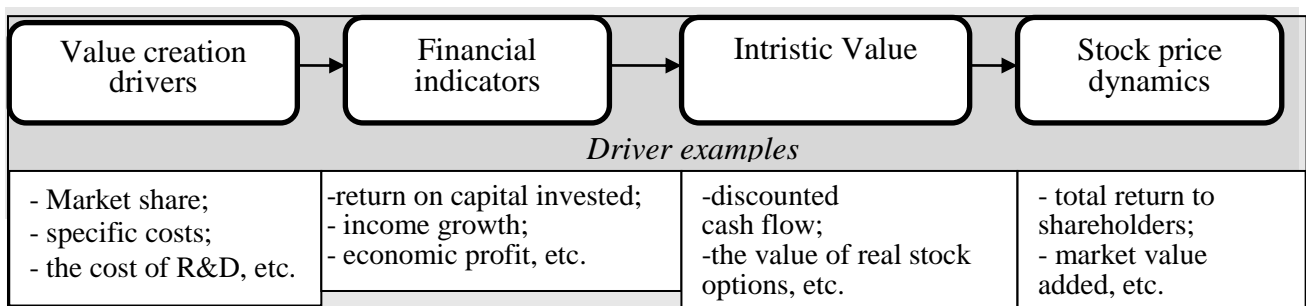
The process of defining value drivers [3] is divided by T. Copeland into three stages:

- Recognition - a scheme of value parameters, which reveals a systematic relationship between elements of an enterprise and value creation process, is composed at this stage;
- Prioritizing - involves identifying key factors that have the highest impact on value;
- Institutionalization - installation of value drivers into the value measurement system occurs. Units of value drivers become performance indicators.

The conducted analysis of scientific sources (Table 1) showed the absence of a single approach to determining value drivers.

For example, T. Copeland, T. Koller and J. Murin proposed a value creation scheme [3], which reflects endogenous business processes which create value of the enterprise and does not take into account the impact of market and other external factors on the enterprise value. They believe that for practical purposes it is expedient to use a value drivers system that describe various aspects of the company's activity.

Such a system uncovers which group of indicators represents any aspect of the activity better and how these indicators correlate to each other (fig.1).



**Figure 1. Complex driver system [3]**

**Table 1 - Approaches to the formation of enterprise value drivers system**

Source	Factors of influence on enterprise value
Copeland T. [3]	Takes into account both financial and non-financial performance indicators
Rappaport A. [5]	Enterprise value is created by cash flows from operating and investing activities adjusted for discount rate, which is formed as a desired cost of capital value and subtraction of short-term (operational) and long term (investment) liabilities
Mendrul O. [6]	Value drivers are divided by the following criteria: the nature of impact on value, the way of creating value, possibility of influence by management, direction and duration of action, local of manifestation of drivers, character of innovation, that form value and appraisal by the market
Grynkevich S. [7]	The value of cash flows, risk and opportunity cost of capital, forecasted growth rate of business (cash flow growth) in post-forecast period, the value of invested capital
Krush P., Polishchuk S. [8]	Account for both drivers of micro and macro environment, dividing them into groups: demand, income that can be obtained by the owner, time of income acquisition, risk as a probability of acquisition of expected future income, the level of control that a new owner receives, the level of assets liquidity, limitations that a business has, supply and demand interrelation
Marenkov V. Demshin V. [9]	Drivers are divided into internal and external. The external drivers include the level of competition in the industry, the reliability of suppliers, regulations issued by the government, the overall economic situation in the country. Internal factors: pricing policy of the enterprise, state of production facilities and others
Boyko M. [10]	Distinguishes: multi-determinants (determinants with the highest rating) are designated based on the grouping of internal and external determinants, which, depending on the nature of their actions in a particular business environment and specific period of time cause potential of maximizing enterprise value for the socioeconomic system; defining determinants of lay functional potential for creating (increase) value of an enterprise; determinants-optimizers are the most effective driving force for creating (increase) enterprise value based on the results of certain management concept in a particular economic environment; determinants-complements are those that do not have any clearly defined impact on (increasing) enterprise value creation, but have a clear functional orientation and accordingly, impact on the process

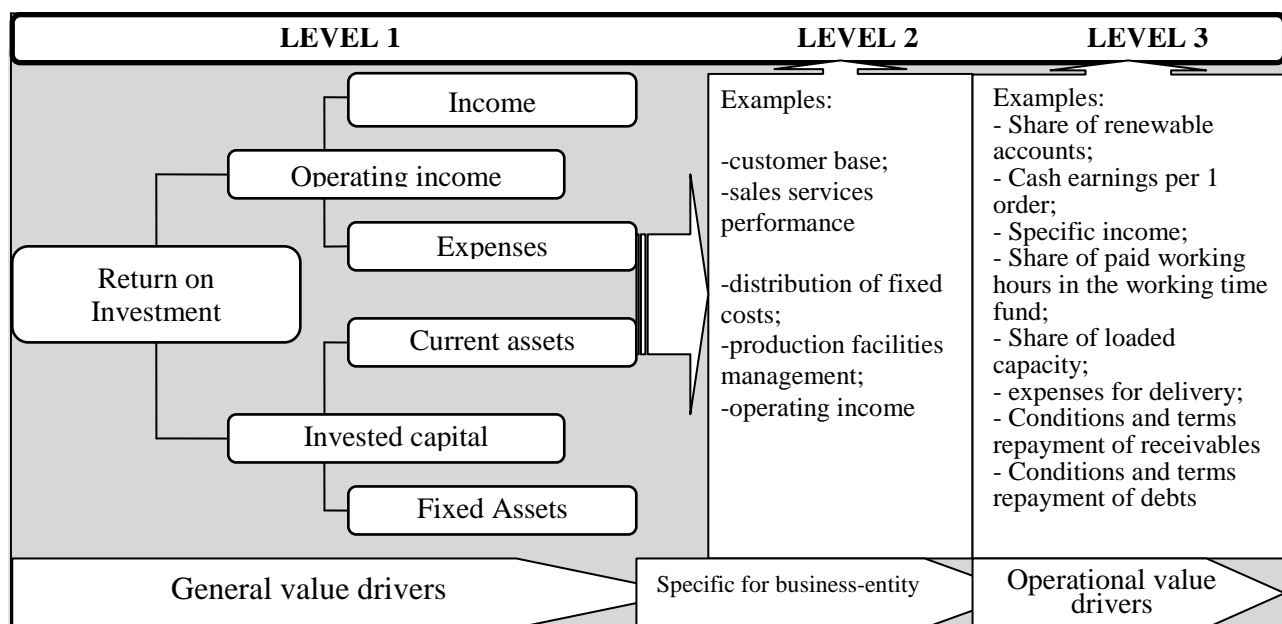
\*Source: grouped by the authors on the basis of [ 3; 5; 6; 7; 8; 9; 10]

American financial analyst A. Rappaport asserts that value of an enterprise is created due to cash flows from operating and investing activity adjusted on discount factor formulated as a desired capital value deducting short-term (operating) and long-term (investment) liabilities.

In general in scientific literature all enterprise value drivers are suggested to be used on three different levels (Fig.2) [11]:

- on the general level, where profit from primary activity in conjunction with invested capital build the basis for the calculation of return on investment;
- on the business-entity level, where such parameters as customer base are particularly appropriate;
- on the lower level where boundary detailization is needed in order to connect value drivers to concrete decisions, that are in the competence of operating managers.

A classification of value drivers by the character of definition is widespread in specialized scientific literature, in the framework of which such drivers are distinguished: quantitative (financial) drivers of enterprise value formation, the impact of which can be determined by quantitative assessment (financial-economical state and proprietorial state, level of technical equipment, part of the market etc); qualitative drivers (non-financial) - drivers that are beyond formalization and the level of their influence on enterprise value formation is assessed with the help of expert methods (analytics appraisal, rating grades, enterprise's reputation on a market, recognition of a brand, existence of intellectual capital etc).



**Figure 2 - Determination of value drivers on different levels [11]**

O. Mendrul [6] emphasises only the financial aspects of enterprise value in his works. S. Grynkevich claims that market value of an enterprise is influenced by some other factors: quantity of cash flows; risks and alternative cost of capital, forecasted growth rate of business (growth of cash flows) in a post-forecast period; value of capital invested in the enterprise [7]. That is the authors while analyzing the drivers of enterprise value confine strictly to drivers of micro environment, taking no notice of macroeconomic drivers that impact business evaluation.

The necessity of consideration of both micro- and macroenvironment drivers is insisted by P. Krush and S. Polishchuk [8], deviding them into such two groups: demand; income, which a property owner can obtain; the time of income acquisition; the level of control, that a new owner receives; capital liquidity ratio; limitations of the enterprise.

In the actual scientific literature some authors [9] divide value drivers on external, that occure despite management's will and internal, that are associated with management's actions and specific of the enterprise's branch itself. The external drivers include the competition level in an industry, reliability of suppliers, regulatory acts issued by the government, the overall country's economic situation. Internal drivers include, in particular, enterprise's pricing policy, condition of production capacities and others.

Thus, our review of domestic and foreign literature sources about the enterprise value formation allows to conclude that none of the considered approaches reflects the full depth of enterprise value formation because it does not allow to take account of entire set of factors that form it. At the same time all the above mentioned drivers of value formation have different classifications, and their qualitative and quantitative composition varies depending on the task of research, in other words carries a subjective character, which greatly complicates the assessment of their impact.

Based on the system, process, situational approaches, value theory, capital turnover theory in general, we offer the approach to system factors of enterprise value to be based on the following principles:

- the drivers should be directly linked to value creation with necessary detailed elaboration communicated to all levels of management in the enterprise;
- set of enterprise value drivers should include both internal and external factors;
- formed driver system should reflect not only features of the enterprise, but also of the sector and the region within which it operates;
- factors that are included in the set should be subjected to formalization, providing the opportunity to determine the direction of driver's impact (positive or negative) on the value of the enterprise;
- value creation drivers should reflect both currently achieved level of efficiency and long-term growth prospects.

The implementation of the above-mentioned principles allows to draw conclusions about necessity of critical reflection and creation of a comprehensive classification of enterprise value drivers for their detailed study, first of all from the perspective of impact effectiveness on value management system that should serve as a basis for improving enterprise management as a whole. Therefore, we consider it appropriate to supplement the current classification of of enterprise value drivers with items such as:

1) The degree of regulatedness considering the direction of impact:

a) adjustable drivers (factors that managers can directly affect in the management value process, etc.):

- stimulating drivers (sales, cost of sales, risk premium, the premium for quality management, risk premium for the financial capital structure, sales and administrative expenses, capital investments, etc.);

- disincentive (restrictive) regulatory drivers (returns on assets, current liabilities on loans and credits, accounts payable, inventories, short-term investments, accounts receivable, long-term investments);

b) non-adjustable drivers (drivers beyond the control of management) enterprise's - the impact of such drivers is advisable to forecast depending on the correction of management strategy and tactics.

2) The direction of enterprise capacity buildup (with distinguishing fields of activity): production capacity, financial and investment potential, innovation potential, marketing potential, the potential of establishing business relations. As a result, an immense multitude of drivers is formed which overall connection to the enterprise value can be either functional or incomplete, probable and correlative.

3) The period of action:

- short-term drivers - various conditions, causes, circumstances, influence which is ad hoc and does not exceed 1 year, but can significantly increase (decrease) estimated enterprise value at a given time;

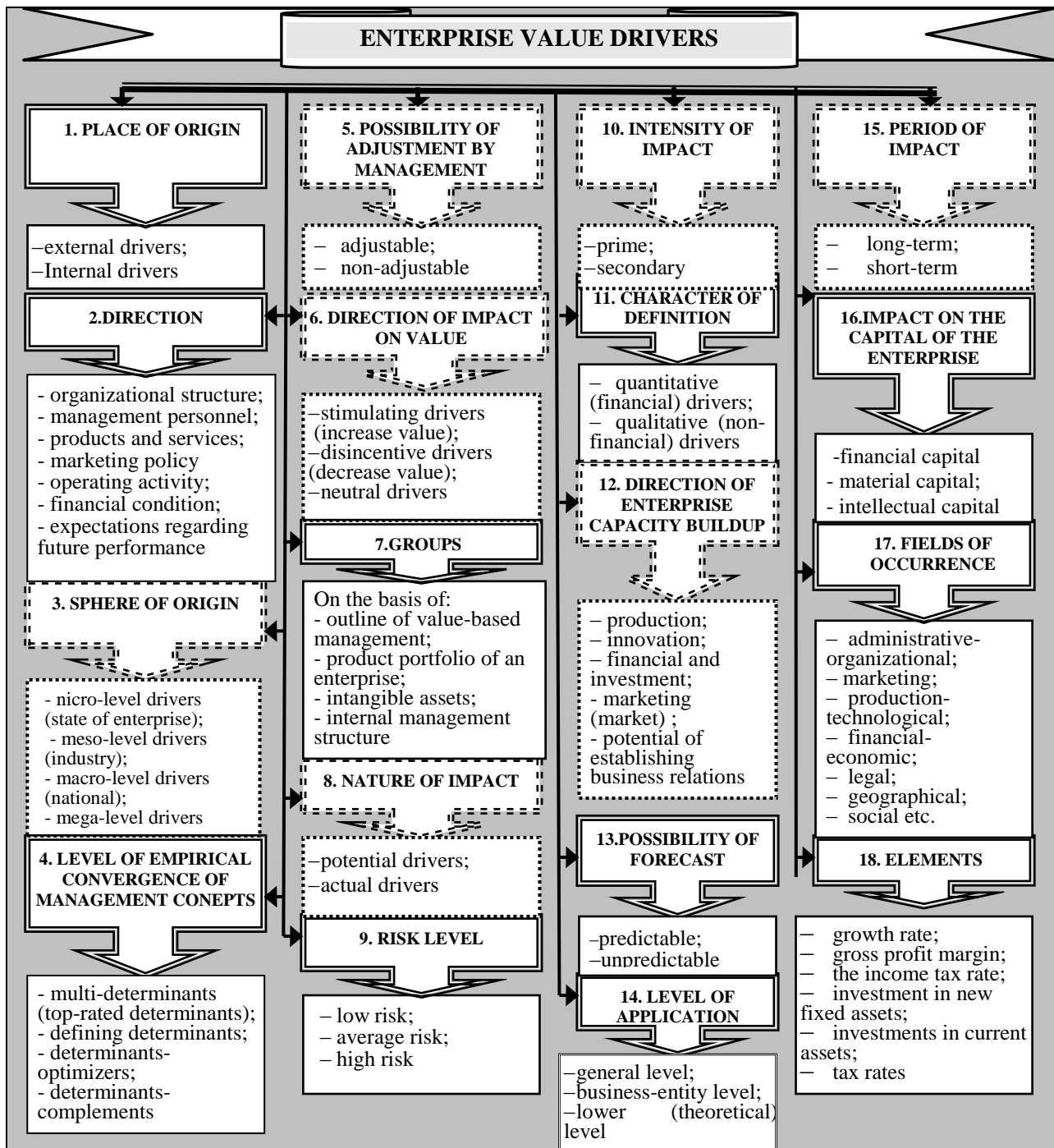
- long-term drivers - with the length of impact more than 1 year (governmental and regional programs to attract investment resources, investment climate, etc.);

4) The nature of impact: actual drivers - already identified drivers that have an impact on the value of the enterprise; reserve (potential) drivers - can represent opportunities (or threats) for the enterprise in future;

5) The intensity of impact (primarily depends on the purpose of stakeholders enterprise evaluation): prime, secondary.

6) According to the sphere of origin of all the variety of drivers that influence the formation of enterprise value, we propose to detalize further,dividing them into four levels: drivers of micro-, meso-, macro-, mega-level.

Based on the above, we propose a systematic classification of drivers influencing the formation of enterprise value, taking into account the new classification positions (Fig. 3).



\*Source: proposed by the authors

**Figure 3 - Classification of enterprise value drivers [justified, systematized and supplemented by the authors]**

**The conclusions of the mentioned problems and the prospects for further research in the presented direction.** Thus we consider that an advantage of the proposed classification is its flexibility to any object of evaluation. In addition, it can become the basis for a comprehensive study of the formation and determination processes of enterprise value, as it allows to organize and systematize the drivers influencing its formation; them clearly to structure according to various criteria, selecting prime drivers.

Considered and suggested classification attributes do not exhaust the variety of of enterprise value drivers. They more fully take into account the essential features of enterprise value drivers, versatility of its types and forms, revealing the motives, goals and motivations of the owners. accordingly the prospect of our future research is to justify the optimal approaches to enterprise evaluation considering the identified value drivers.

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