CONSTRUCTION OF ENTERPRISE VALUE-BASED MANAGEMENT FRAMEWORK ON THE BASIS OF SYSTEM METHODOLOGY

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Based on theoretical and methodological foundations of system methodology, basic elements of the value-based management system were identified in the article. The object, subject, goals, objectives, functions and principles of value-based management were singled out, that allowed to clearly reveal the contents and features of this type of management and its place in the enterprise management system. The processes of formation and using the capital of enterprise as its investment resource were determined as objects of value-based management. According to the position of value-based management target orientation, it has been found out that the purpose of value-based management is to ensure conditions for increasing enterprise value and obtaining a target profit in the long run.

Keywords: value-based management system, financial capital, human capital, organizational capital, interface capital, process of value-based management, business model, vector based hybrid value metric.

Introduction. In modern conditions effective functioning and development of the enterprise is determined by leadership ability to predict future consequences of managerial decisions. In order to occupy a dominant market position, managers should review basic principles of management, the subject of economic activity and be oriented at making decisions on a single target quantitative indicator – the growth of business value, which is the starting point of any enterprise activity and the
advisability of its development. The restructuring of administrative processes should begin with the question of where and how value is created or lost and how enterprise performance correlates with the interests of stakeholders. The problems of increasing enterprise value are reflected in the concept of Value-based Management, which came into wide practical application in the corporate sectors of advanced economies.

The fundamental basis of enterprise activity is to build an effective management system focused on achieving defined objectives. The key aspect of constructing value-based management system is the coordination of economic interests of value impact groups in the context of achieving the goal of generating enterprise value. The attempts to describe value-based management system have been made by many foreign researchers: Rappaport A. [1], Arnold G. [2], Payne A., Frow P. [3], Copeland T., Koller T., Murrin J. [4], Slatera S., Olsonb E. [5], Knight J. [6], Martin J., Petty W., Wallace J. [7]. Among Ukrainian scientists the investigations of Boyarko I., Samusevych J. [8] and Boiko M. [9]. are worth noting. While acknowledging the importance of scientific and practical outputs of these authors, it should be noted that despite the considerable amount of research in the field of value-based management, there is no unanimity of views of scientists on the list of elements that form value-based management system. In this connection the problem of isolating the main components of enterprise value-based management on the basis of system methodology and searching of appropriate methodological tools needed for the effective operation of this system is actualized.

The purpose of the article is a substantiation of theoretical positions of enterprise value-based management on the basis of a systematic approach by singling both functional component which includes object, subject, goals, functions, objectives and principles, and process component
which includes structural and logical sequence of steps for its implementation.

Achieving this goal involves the following tasks:

- clarifying the object of value-based management;
- disclosing certain managers’ tasks;
- studying the functions of value-based management,
- reviewing value-based management principles;
- clarifying the content of the individual stages of the administrative impact that will add enterprise value;
- searching the methodological tools of value-based management.

Research results. The complexity and dynamism of enterprises’ activities in modern conditions require application of a systematic approach to managing them. System approach as theoretical and methodological framework assumes that company as the integrity with special properties consist of specific components and subsystems, which remaining relatively isolated, enter into relationships with each other, and transformation in individual elements or subsystems cause chain changes in others [11, p. 42].

Scientists believe that the main elements that are inherent in any management system are the following ones: the object, the subject, goals and objectives, functions, methods, principles and management process [10, p. 32; 16, p. 51]. Based on the specified methodological approach, we have proposed a system of value-based management, which is shown in Fig. 1.

Since the aims and objectives of management are the starting point for determining the type and scope of management activities [12, p. 345], achieving the desired results is possible only in case of setting appropriate
target vector. Based on the position of value-based management target orientation, we can state that the purpose of value-based management is to ensure conditions for increasing enterprise value and obtaining a target profit in the long run. Achieving this objective needs a solution of a wide range of goals, among which the main are: determining the impact of factors on the formation of value; ensuring investment attractiveness of enterprise; developing motivation system for employees [13, c. 156]; identifying effective combinations of resources, capabilities and competencies of the enterprise; ensuring interconnection between elements of the enterprise potential in the process of value creation; forming of organizational culture focused on finding and implementing opportunities for enterprise development [14, p. 26]. Absolutely accepting given a list of goals, it is advisable, in our opinion, to extend the proposed list of goals by the following ones:

1) coordination of value impact groups’ expectations,

2) formation of new needs based on a deep study of consumer behavior,

3) minimizing the risks associated with the failure of partner agreements and obligations,

4) identification of the conditions under which it becomes possible to create “shared value” – the prospects for profits from solving pressing social problems.

Based on the defined objectives, the object of value-based management is the accumulated value in monetary, material and immaterial forms, i.e. the capital of an enterprise as a tool for achieving its objectives in the long run. In modern studies scholars do not pay sufficient attention to the refinement of value-based management objects. Only Boyko M. G. [9, p. 29] has singled out the following objects of value-based management: products / services, business, human, client, process and innovative capital.
**Objective:** to provide conditions for increasing enterprise value and obtaining a target profit in the long run

**Goals:**
- determining the impact of factors on the formation of value,
- ensuring investment attractiveness of enterprise,
- developing motivation system for employees,
- coordination of value impact groups’ expectations,
- formation of new needs based on a deep study of consumer behavior

**Subjects:** heads of institutional, administrative and technical management levels

**Principles:**
- achieving a balance of value impact groups’ interests,
- development,
- reliability etc.

**Functions:**
- planning,
- organizing,
- motivation,
- control

**Methods:**
- MVA, EVA, CVA, SVA, STVA,
- vector based hybrid value metric

**Objects:**
- financial capital,
- tangible capital,
- intellectual capital (human, organizational, interface)

**The process of value-based management:**
Stage 1 – strategic planning of value
Stage 2 – identification of key values impact groups
Stage 3 – creating a system of measure indicators
Stage 4 – monitoring of key value drivers
Stage 5 – forming a system of rewards
Stage 6 – evaluating the effectiveness and efficiency of value-based management
Stage 7 – measurement, analysis and correction of the results of the strategic plans

**Value thinking**

*Fig. 1. The system of value-based management [Author’s formulation]*
This list, in our opinion, is not complete because it covers only products of the enterprise and intangible (intellectual) capital without taking into account such important components as the financial and material support of the enterprise.

Also, we believe it is necessary to emphasize that the consideration of value-based management target orientation on the needs of value impact groups necessitates singling out as one of the management objects not only client capital, but also such type of capital that represents economic relations with partners (suppliers, customers, resellers, etc.) and image of the enterprise. Solving this problem becomes possible on the condition of including interface capital to the list of value-based management objects [15, p. 17]. Thus, we believe that value-based management objects are all kinds of enterprise capital as an investment resource that provides enterprise value growth (Fig. 2).

**Fig. 2. The structure of enterprise capital as an object of value-based management**

[Developed by the author based on 276, p. 17; 277, c. 214]
In this context the content of value-based management consists in implementing managing actions on objects of value-based management in order to adjust their status in accordance with the requirements of creating enterprise value. Formation of such managing actions takes place through preparation, adoption and implementation of appropriate management decisions.

The subjects of value-based management are structurally defined as the unification of people and leaders on a personal level, endowed with administrative authority and performing management activities aimed at increasing enterprise value. The subject creates appropriate economic, organizational, methodological and informational conditions of achieving value-based management objective, which is specified depending on the system characteristics of subject and object [9, p. 29].

The system of value-based management is functioning because an administrative management exercises targeted influence on the object. Such influence is a complex of actions, techniques and methods by which changes in value-based management object are achieved. Management influence contains a set of control commands that subject produces, creates and publishes. The object perceives, interprets and implements these commands in practice. For generating control commands, the subject requires an information about understanding of his previous commands. Therefore, the subject diagnoses, explores, examines the state of the object, i.e. establishes and supports the so-called backward linkages. The information that is the result of backward linkages is the basis for assessment object state by the subject, making new commands, forming the next impulse of managerial influence on the object. The hierarchy levels of value-based management and subjects that correspond to each of these levels are given in Tab. 1.
Table 1

The hierarchy levels of value-based management

[Author’s formulation]

<table>
<thead>
<tr>
<th>The level of management</th>
<th>The subjects of management</th>
<th>The conceptual task of managing value creation process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional</td>
<td>Top managers, owners of the enterprise</td>
<td>Ensuring the interests and needs of owners, the strategic and general management, creation of the enterprise value managing policy</td>
</tr>
<tr>
<td>Administrative</td>
<td>Managers of mid-level</td>
<td>Ensuring the implementation of the enterprise value managing policy, which is developed by top management, and responsibility for bringing more detailed tasks to departments</td>
</tr>
<tr>
<td>Technical</td>
<td>Lower-ranking managers</td>
<td>Responsibility for delivering the objectives on implementation of the enterprise value managing policy to direct perpetrators and control of effectiveness of its implementation</td>
</tr>
</tbody>
</table>

Value-based management involves many kinds of widely differing efforts which are identified by the concept of "management functions". The list and features of general value-based management functions are shown in Tab. 2.

An important tool that enables synthesizing and coordinating the activities of the individual components of value-based management system are the principles of management. The principles of value-based management are sufficiently represented in the works of modern scholars. In particular, Bezhin K. S. in his scientific work [16, p. 127-148] describes the following architecture of value creation principles: methodological management principles (objectivity, self-complementarity, feedback), methodological principles of synergy (structural coupling, nonlinearity of managerial influence), methodological principles of innovative environment organization (harmonization of innovation and value in the created object, interaction while creating value, axiological marking, variability of leading level, integrating of production and consumption, half-decay of value, innovative value) and methodological principles of subjectivity (collection of the
subject, convergence). Boyko M. G. [9, c. 30] focuses attention on the following principles of value-based management: the priority of the human factor, minimizing the social and psychological resistance, reliability, applicability. Novikova I. V. in her research [17, p. 111] has generated the following list of value-based management principles: priority of value creation, value coordination, continuity of investment decisions, flexibility, alternative, efficiency.

Table 2

The content of the general value-based management functions
[Author’s formulation]

<table>
<thead>
<tr>
<th>Value-based management function</th>
<th>Measures for its practical realization</th>
</tr>
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<tbody>
<tr>
<td>Planning</td>
<td>Determining the necessary actions and decisions that lead to maximum increasing of enterprise value: ✓ strategic level: mission, strategy, goals, value drivers ✓ tactical level: medium and short term plans, targets ✓ operational level: plans for short periods of time</td>
</tr>
<tr>
<td>Organizing</td>
<td>Organizational support for enterprise value-based management implementation: the development of an optimal organizational structure; conducting of explanatory activities and training of employees; forming corporate culture; creation of complex information support.</td>
</tr>
<tr>
<td>Motivation</td>
<td>The system of rewards and incentives in accordance with the achieving performance objectives and contribution of everyone into the increasing of enterprise value</td>
</tr>
<tr>
<td>Control</td>
<td>Evaluation of the results using special indicators of the planned goals fulfillment aimed on increasing enterprise value</td>
</tr>
</tbody>
</table>

Despite sufficient coverage of various value-based management aspects by the principles listed above, in modern scientific research there is lack of attention to the characteristics responsible for coordination interests of different stakeholders. In this connection, we offer to complement existing list of value-based management principles by the following ones:

- the principle of achieving balance of value impact groups’ interests which implies maximum possible coordination and satisfaction of interests of the participants involved in value creating process, and
neutralization of potential threats caused by possible conflict of value impact groups’ interests,

- the principle of ethics which implies the responsibility of the enterprise for implemented value-based initiatives and their compliance with ethical standards.

We consider it is necessary to complement the principle of value half-decay with the principle of development, which implies that value-based management system should be changed over time, developing new organizational abilities of the enterprise. Application of these value-based management principles will allow managing subsystem more clearly coordinate the individual system elements, regulate the process of adoption and implementation of management decisions, ensure the selection of adequate to specific situation management techniques etc.

Since the current management paradigm implies the indivisibility of system and process approaches to management because no system can exist without processes forming it [11], management process is the necessary component of management system. Based on current scientific studies and on the review of value-based management functions we offer the following sequence of managing the process of enterprise value creating:

Stage 1 – Strategic planning of the value and implementation of value-thinking in the strategic decisions of enterprise managers, focus on creating maximum value for the key stakeholders, which determines its strategic and tactical goals.

Stage 2 – Identification of key value impact groups and evaluation of each group’s influence on the enterprise, search for possible sources of conflicts between value impact groups and their neutralization.

Stage 3 – Creating a system of measure indicators (value drivers), which is a tool to justify the choice of the available alternatives and priorities. The
advantage of this value thinking deepening is associating professional tasks of employees with the final, integrating indicator of value.

Stage 4 – Monitoring key value drivers, an early warning of negative processes that impede value creation. Monitoring of value drivers allows to take appropriate measures for more efficient use of enterprise resources in time. The scheme of enterprise value creation monitoring system may be represented as the interaction of three blocks that include data collection, data processing, and resulting information.

Stage 5 – Formation of rewards system that is linking salaries to value indicators. Also, recognition of personnel as the main source of progress and success of the enterprise is very important for motivating employees.

Stage 6 – Evaluating effectiveness and efficiency of value-based management. Effectiveness of value-based management is a measure of the achievement of set objectives of the enterprise and is an external manifestation of its activities. However, efficiency is an internal manifestation of the company, which aims to improve the internal economy of its work. Ensuring the ability of the enterprise to achieve long-term goals of increasing its value is a prerequisite for sustained success of the company. The level of achieving the objectives determines enterprise effectiveness, and compliance of its high level with appropriate efficiency allows continuously improve enterprise success.

Stage 7 – Measurement and analysis of the results of strategic plans implementation, control standards development, comparing actual values with the standard (optimal) ones, setting possible deviations, eliminating detected nonconformities and preventing their repetition. The control is intended not only to verify the functioning of value-based management objects, but also, what is very important, to evaluate the feasibility and effectiveness of management decisions.
Formation of an effective value-based management system and construction of relevant process should be based on clear guidelines of behavior in specific functional areas and the use of appropriate methodological tools. Management of capital as a strategic resource of the enterprise in the context of value creation should be shifted from the priority to minimize costs and suppression rivals in the market competition to creation unique competences, hard copied by others, as the basis for leading in business. In this context, the mechanism of value creation may be described by a business model, which is a simplified mechanism for reflection of certain economic activity related to the production (sale of goods, services, works) that is valuable to the consumer, and gives a profit. The business model of the enterprise is considered in three aspects: economic, operational and strategic (Fig. 3).

Fig. 3. Structural components of the enterprise business model
[Developed by the author based on 288, p. 730; 280, p. 123-127]
The operational aspect of business modeling represents internal business processes and the processes of value creation. The economic aspect of business modeling focuses on the logic of profit formation and measuring the value of the enterprise as an integrated sustainable development criterion. The strategic aspect of business modeling focuses on creating value for the value impact groups.

It is the authors’ opinion, that the comfortable and effective method of enterprise value measuring is a vectorial method (Vector based Hybrid Value Metric), which allows to visualize and to calculate result, that is formed from quantitatively-(economic value) and qualitatively-measureable (social value) indexes (Fig. 4).

![Fig. 4. Vectorial method of value measurement](image)

In Fig. 4 the scale of axis (x) corresponds to the numerical value of economic value (financial results of the company activity), the scale of ordinate (y) corresponds to values of quality indicators of achieved social effect (for example, on a scale from 1 to 10, determined on the basis of a questionnaire). The length of vector V, which passes through the origin of coordinates and the point of intersection of these two values, is an indicator
of created shared value. Under such approach, enterprise value can be measured by the formula (1):

\[ V = \sqrt{x^2 + y^2}, \]

where \( V \) – enterprise value,
\( x \) – value created for owners,
\( y \) – value created for value impact groups.

The angle of vector \( \alpha \) allows to draw a conclusion about balance of the created economic and social value in dynamics: if in course of time angle \( \alpha \) becomes sharper, it means that an enterprise creates more economic value, however a social value here has a tendency to destruction. And vice versa - if the angle tends to increase within a certain interval of time, then an enterprise creates more of social value, however it receives less profit here. In both cases managers of the enterprise should revise the plans of actions and balance economic and social effects.

**Conclusions.** The results of research of theoretical foundations of value-based management system lead to the following conclusions. The system of value-based management is a set of interacting elements such as object and subject, goals and objectives, functions, methods, principles and management process. The object of value-based management is the accumulated value in monetary, material and immaterial forms, that is the capital of an enterprise as a tool for achieving its objectives in the long run. The subjects of value-based management are structurally defined unifications of people and leaders on a personal level, endowed with administrative authority and performing management activities aimed on increasing enterprise value.

The objective of value-based management is ensuring conditions for increased enterprise value and obtaining a target profit in the long run. Achieving this objective needs a solution of a wide range of goals, among which the main are: determining the impact of factors on the formation of
value; ensuring investment attractiveness of enterprise; developing motivation system for employees; identifying effective combinations of resources, capabilities and competencies of the enterprise; ensuring interconnection between elements of the enterprise potential in the process of value creation; forming of organizational culture focused on finding and implementing opportunities for enterprise development; coordination of value impact groups’ expectations; formation of new needs based on a deep study of consumer behavior; minimizing the risks associated with the failure of partner agreements and obligations; identification of the conditions under which it becomes possible to create “shared value” – the prospects for profits from solving pressing social problems.

The main principles of value-based management, proposed by the author, are the following: achieving a balance of value impact groups’ interests, ethics and development.

Managing of value creation occurs in 7 stages:

1) strategic planning of value,
2) identification of key values impact groups,
3) creating a system of measure indicators,
4) monitoring key value drivers,
5) forming a system of rewards,
6) evaluating effectiveness and efficiency of value-based management,
7) measurement, analysis and correction of the results of the strategic plans.

Methodological toolkit of value-based management system is the concept of the business model (business, economic and strategic aspects) and vector method of measuring value.

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