A SYSTEMATIC APPROACH TO THE DEVELOPMENT OF BASIC MODELS
OF THE BEHAVIOR OF BUSINESS ENTITIES AND ITS HARMONIZATION

Introduction. Considering the process of developing basic models of behavior of a multitude of business entities based on the initial provisions of the theory of sustainable management, researchers, first of all, formed, substantiated and defined the essence and content of individual initial concepts, such as, in particular, “behavior of a multitude of business entities” and “basic behavioral models of many business entities”. According to the author's opinion:

а) “behavior of many business entities” is an activity related to the enumeration of economic, production, natural resource and social alternatives in order to rationalize behavior in the context of ensuring sustainable management, in which the costs of resources, reserves and opportunities of various nature are minimized and the net benefit is maximized and assets. The prerequisites for rational behavior are four key spaces: economic consciousness, thinking and interests of a business entity; type of economic system; capacity of the natural resource potential and volumes of natural resource assets of business entities; technological level and scale of production; working conditions; production facilities; social stereotypes and information reflection, as well as economic and psychological factors in the behavior of an enterprise with an environmentally-oriented orientation; type of societal system of society”;

b) “basic models of behavior of a plurality of business entities” is the formalization and reproduction in the initial conceptual and analytical model solutions of such behavioral options that are at the tactical level of functioning – they will provide a sustainable management for the natural economic association. At the same time, the basic models should be the most rational, informational and attractive for their use in economic and management practice.

Materials and methods. The methodological basis for studying the work of domestic and foreign scientists on the following issues: spatial management of natural resources and the behavior of business entities; management of the strategic potential of the state and its regions; sustainable development and sustainable management. In the process of preparing the article, the authors deliberately focused on the use of the existing theoretical and methodological development to ensure the stability of economic systems based on the dominant homeostasis, the development of conceptual foundations and factors of the capitalization of natural resources as sources of national wealth and the business ecosystem approach to ensuring sustainable management, represented in the development of I. Bystryakova, D. Klynovogo, M. Khvesyk [1–3]. And, the provisions of normative legal acts of Ukraine are also taken into account in the materials of the article, as well as legal acts of Ukraine, analytical materials of ministries and departments, international organizations and other scientific information materials. The study involves the use of a number of interrelated methods, including: system analysis, philosophical and methodological understanding of new forms of social practice and the intellectual sphere of public life; economic and mathematical, mathematical logic; planning and control, rationalization of the organizational structure of management and investment culture, etc.

Results and discussions. We consider it appropriate to recognize that for the development of real
practice of permanent management, several key types of behavior of business entities should be adopted for use: monetary, marketing, investment, entrepreneurial and adaptive-cavern cognitive behavior models. This proposal proposes key features and factors that generate just such characteristics of the behavior of business entities that serve as the basis for building the correct type of initial model solutions. Namely, behavior patterns:

– monetary: the central moment in the implementation of this type of behavior model of business entities is the financial potential and financial assets and related economic activities, distribution/redistribution, exchange, etc.;

– marketing: the determining factor in the behavior of business entities is the constant study and consideration of the directions, pace and nature of the development and transformation of a certain type of market, as well as an attempt and desire to exert a corresponding influence on it or on its individual elements;

– investment: it consists in the search for the most profitable areas of economic activity by the enterprise in order to place natural resource assets in certain industries or industries, thereby maximizing the level of profitability;

– entrepreneurial (innovative): consists in the orientation of the enterprise only on the fact that in conditions of market uncertainty the subject has and must achieve a certain rate of return in the case when: a) the type of his economic behavior will be adaptive to the external environment, take into account its transformations; b) non-standard managerial, economic, production and social decisions will be made without fail;

– deviant (according to the authors – adaptive-cavernous cognitive [to cover – to slip out, get out]): it consists in deviating from the four generally accepted models of behavior in connection with existing violations (transformations of the external environment) that are acceptable in the field of economics of norms and rules. This model is due to several reasons: natural and artificial restrictions on the use by the subject of management of their abilities and inclinations in a certain field of activity; a specific level of perception of assessments based on the results of informational and economic-statistical analysis of space; the desire to demonstrate their character and preferences, taking into account the state of the internal and external environment of the operation of the business entity; dissatisfaction with the results of management in the system of sustainable management; imitation of non-standard adaptive or risky behavior of other business entities; attempts to introduce risky innovations, breakthrough technologies, etc. into economic activity and management practice.

Considering that the situation both in Ukraine and in the world has signs of turbulent shifts, and the economic system of the state has acquired declines and stagnations, it is not advisable to use the established four models of behavior by subjects to achieve results. Therefore, the basic models should be combined conceptual and analytical solutions, such as:

**Model of monetary-entrepreneurial (innovative) behavior.** Incorporation to the monetary model of the determinants of entrepreneurial (innovative) behavior is due to the existence of five key factors for generating social adaptability in the modern monetary culture of individuals [1] (Table 1).

**The content of the determining factors of generating monetary signs of the real behavior of a plural number of business entities in the system of sustainable management [4; 5]**

<table>
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<th>Key factors for generating social adaptability in modern monetary culture</th>
<th>Weighting, %</th>
<th>Factor loading indicators</th>
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<tr>
<td><strong>&quot;Monetary Anxiety&quot;</strong>. Explained by: the transformation of the economic environment, economic instability, financial stratification, causing contradictions in the subject, which entail anxiety. Associated with: distrust in the financial market, which is not possible due to: emotional response to financial scandals; lack of information about the realities of market development; the likelihood of fraud in the social environment, etc.</td>
<td>40,0</td>
<td>Reflections and concerns about the loss of financial potential and the financial condition of the business object; Acceptance of the fact that money can solve all problems, a business entity is assessed by their financial position and scale of profit.</td>
</tr>
<tr>
<td><strong>&quot;Planning&quot;</strong>. Explained by: a tendency to save money and control costs, respect for the result of labor; planning income and expenses, the desire to strengthen the financial condition.</td>
<td>17,0</td>
<td>The feasibility of saving; Awareness of the financial position of the business object; Accumulation of financial potential.</td>
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<tr>
<td><strong>&quot;Money is opportunity&quot;</strong>. Explained: due to the belief that the subject's social representations contain monetary stereotypes &quot;money can do anything&quot;; adoration, sacralization of money; money is a religion that subjects worship and serve.</td>
<td>17,0</td>
<td>Money as a means of power and control; financial potential as the equivalent of intelligence and dignity; the scale of the financial potential is becoming an increasingly authoritative factor and is reflected in the minds of the subjects.</td>
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It is the elimination of the determinants of "monetary anxiety" and the factors "earnings" and "money is evil" with a constant increase in the significance of the influence on the choice of the behavioral factors "planning" and "money is opportunities" - and necessitate the combination of "monetary" behavior with "entrepreneurial" in the context of the formation of the specificity of behavior (financially and economically culturally developed) for each business entity. Therefore, the monetary behavior of many business entities is an artificial environment that is created under the influence of economic-psychological factors by the entities themselves in the process of carrying out activities and socio-economic life. Thus, the monetary behavior of a business entity, due to the values dominating in a group (many entities), reflecting the spiritual level and psychological characteristics of the community, as well as personal qualities, will require adjustment and adaptation.

And behind this is building up and strengthening the financial potential of the economic object. However, the dominant requirements of the group (many business entities) can only be met thanks to (if implemented) simultaneously with the monetary model and the model of entrepreneurial (innovative) behavior. And, accordingly, thanks to the binary behavior model, a certain enterprise will become able to operate effectively and efficiently in the financial and economic sphere. A business entity acquires such binary abilities in the process of assimilation of values, the bearers of which are the normative image of the model of the “subject of the monetary-entrepreneurial (innovative)” culture of society.

Model of marketing and investment behavior. Investment behavior - is to make a profit by investing a certain amount of investment in the source of its receipt; or, in other words, in investing in the economy (of any scale: household, firm, industry, region, country, etc.), from the operation of which the enterprise makes a profit. However, the implementation of one investment model itself by many business entities in the market will not be effective if the entities do not adhere to both the marketing behavior model and, at the same time, the corresponding principles of investment and marketing behavior (Table 2).

Table 2

<table>
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<tr>
<th>Principles for implementing a specific behavior model</th>
<th>investment</th>
<th>marketing</th>
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<tr>
<td>implementation of basic strategies for operating activities of a business entity</td>
<td>social partnership</td>
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<td>focus on the entrepreneurial style of strategic investment management</td>
<td>freedom of enterprise</td>
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<td>consistency of prospective, current and operational management</td>
<td>self-regulation of economic activity</td>
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<tr>
<td>adaptation of the investment strategy to changes in the factors of the external investment environment</td>
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<td>taking into account the level of investment risk in the process of making investment decisions</td>
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Therefore, it should be recognized that only with the binary orientation of the implementation of investment measures, it is possible to secure a favorable economic environment at any level of management in compliance with certain ethical norms of behavior of business entities in the space of a certain market.

Therefore, in order to form a favorable investment environment in the system of sustainable management, certain marketing norms of behavior of a multitude of business entities in any market should be observed. They, along with general moral values (mutual trust, decency, conscientiousness, honesty, respect for a person and faith in his strength), also include new (clarified) rules of investment behavior in business, loyalty to the word and helpfulness in relationships. It is the binarity of behavior according to marketing and investment principles that will provide an alternative to a strategic investment choice. After all, the basis of strategic investment decisions by subjects is usually the result of an active marketing search for alternative options for directions, forms and methods of management, the choice of the best of them, the construction on their basis of a general strategy for the development of an economic object and the formation of mechanisms for its effective implementation.
It is alternativeness that is the most important distinguishing feature of the entire system of strategic management and is associated with all the main elements of a strategic choice - investment goals; social, industrial, investment technological, natural resource (etc.) policy on certain aspects; sources of formation of natural resource, investment, production, personnel (etc.) resources, style and mentality of behavior, etc.

Model of adaptive-cavern cognitive behavior. Ensuring the continuous use of the results of technological progress in economic activity is the main mechanism for introducing technological innovations that ensure the growth of the competitive position of the enterprise. However, in the process of life, the socio-economic system generates destructive waves of different levels. There are many of them, and they are due to the various types and sizes of sources, changes in the political structure, and the lack of a strategy for overcoming the economic, financial, technological, and natural resource crises. And, the imposition of these waves on smaller ones – have an extremely unstable behavior, which creates a chaotic picture of reality. Economic turbulent waves [8; 9] are characterized by the duality of physical (real) and value (financial) processes, which cause lack of freedom and limited entrepreneurial activity, the decline of state institutions, etc.

The dramatic state of the world economy has given top priority to the task of in-depth understanding of the nature of changes in the behavioral patterns of business entities, as well as the conditions for eliminating crisis processes. The economic life of Ukraine is turbulent, combined with a deep crisis and hostilities, which makes it difficult to use fiscal levers to ensure sustainable management. In order to mitigate and palatalize (to cover) economic stresses and restore the national economy, organizational and economic levers and regulators should be aimed at reducing the duration of the period of recession and depression and, accordingly, at continuing the period of economic goal-oriented development. The above is possible only through the implementation of the general goals of the strategic development of not only individual enterprises, but also associations and corporations. And this largely depends on a change in the behavioral model of many business entities for adaptation and rapid use of the latest technologies and innovations in economic practice [2; 9]. Therefore, the formation and development of an adaptive-cavernous cognitive model of behavior in the context of increasing threats and risks of a different nature is essential.

The study of meaningful features of modern models of behavior [1; 3; 10; 11] of business entities showed that the phenomenon of transformation of the economic behavior of subjects lies in the exclusivity of this concept as a phenomenon that is unique, justified, as well as its formation under the influence of interrelated scientific disciplines with an increase in relevance and significance in the framework of a market economy.

This is due to the following reasons: a) a change in the intensity and nature of economic activity, which led to the formation of a new consciousness among business entities, in which the economic aspect occupies an independent place; b) the influence of economic behavior as a substructure of social consciousness on its other substructures; c) the specifics of the genesis of economic behavior, which consists in the fact that economic consciousness is formed a little later than other types. And just when the subject of economic activity is included in all stages of reproduction.

From this, we recognize that the initial provisions of the model of adaptive-cavernous cognitive behavior of a plurality of business entities, according to the author's belief, are a triad of principles for implementing the action of an adaptive management system, cavernous behavior, philosophical and methodological understanding of new forms of social practice and the intellectual sphere of public life.

Therefore, summarizing in a certain way, we note the following: the central point in the implementation of the monetary-entrepreneurial (innovative) type of behavior model of economic entities is the financial potential and financial assets and related economic activities, distribution/redistribution, exchange, etc. At the same time, the key task of applying this model is, at the same time, the orientation of the enterprise only to the fact that in conditions of market uncertainty it has and must achieve a certain rate of return in the case when the type of its economic behavior is adaptive to the external environment, take into account its transformation, as well as the actions of the subject must necessarily provide for non-standard managerial, economic, production and social decisions; the determining factor in the marketing and investment behavior of business entities should be the constant study and consideration of the directions, pace and nature of the development and transformation of a certain type of market, as well as attempts to exert an appropriate corrective influence on it or on its individual elements.

In addition to the above, the key task of a business entity according to this model is to constantly search for the most profitable areas of activity in order to place natural resource assets precisely in certain industries and industries, and thereby maximize the level of profitability. The basic task is a fundamental deviation of the adaptive-cavernous cognitive concept of behavior from: a) four generally accepted models of behavior of business entities and, accordingly, from two types of combined model solutions (due to the existence of cardinal disturbances in the external environment and its significant transformations); b) norms and rules acceptable in the field of economics; c) established procedures for making managerial decisions.

The application of this model is due to several reasons: natural/artificial critical restrictions on the use by the subject of his abilities and inclinations in a certain area of management; a specific level of definition and
perception of estimates based on the results of informational and economic-statistical analysis of space; the desire to demonstrate one's character, abilities and preferences, taking into account the critical state of the internal and external environment; dissatisfaction with the preliminary results of management in the system of sustainable management and the likelihood of real threats and risks; imitation of non-standard adaptive or risky behavior of other subjects; the desire to use their own potential and make attempts to introduce risky innovations and innovations, breakthrough technologies, etc. into practice.

In accordance with the presented by the authors, the stages of accounting for economic and psychological factors by business entities were revealed, which must be provided for in a closed five-stage choice of a basic behavior model for a certain set of business entities that implement it in practice. Namely:

I) the formation of the subject's idea of the goals (criteria, preferences) of choice. This representation reflects all the information that is available to the subject about the world around him, the psychological characteristics of his perception and interpretation of this information, the degree of mobilization and use of intellectual energy, as well as an adequate analysis of his own emotions, capabilities and potential for reproducing the reality tunnel;

II) the formation of alternatives (space) for choosing a subject that requires serious work of memory, intellect, emotions to attract and analyze a serious amount of information, each of which has a different emotional coloring;

III) the procedure for choosing an alternative that meets the purpose of the enterprise. Therefore, one can focus on popular models of behavior in the field of sustainable development (“like everyone else”) or on taking into account the individuality and characteristics of the functioning of one’s enterprise (associations, etc.). In addition, one or another inclination of the subject to make decisions (caution and prudence, riskiness, a tendency to danger, etc.) is of particular and decisive importance for the choice of alternatives of behavior;

IV) determination of the significance of the impact on the subject of the characteristics of individual conditions and situations during which decisions are made and alternatives of behavior are selected. As the analysis of possible options or the choice of alternatives is carried out, the enterprise gradually changes its advantages and rethinks the criteria for choosing the nature of behavior. In addition, if the prospects for development and changes in the external environment are not determined in advance, the latter significantly affects the choice of a behavior model;

V) change in the attitude of the subject to the goal. The latter, when making decisions and choosing a variant of behavior, may not perceive and not accept the early consequences of the implementation of certain alternatives, or the subjects may focus excessively on long-term consequences, neglecting short-term/immediate ones. In this regard, with time and changes in the characteristics of the spatial system for managing natural resource assets [6; 8], signs may appear, including the abandonment of the chosen goal.

Closed five stages are grouped by researchers into three multidimensional phases: I) identification of prerequisites for choice in a certain space and time; II) description of initial models and determination of objective functions; III) implementation of a closed cycle of choosing a basic behavior model. At the same time, in order to determine and detail the content of the formalization of organizational, economic-psychological and institutional procedures for these phases of the selection of behavior models, it is proposed to use an approach to formalize the process of sustainable management in a three-dimensional coordinate system: time – money – coverage space. Therefore, taking into account the principles of formation of basic models of behavior, presented through combined conceptual and analytical solutions, taking into account the sequence of implementation of organizational, economic and institutional procedures and economic and psychological factors of choice, will significantly increase the level of representativeness of managerial actions to ensure the implementation of the concept of sustainable management.

Conclusion. Summing up the results of the task, it should be recognized that the researchers:

a) basic models of behavior of many business entities are formed and substantiated, presented in the form of combined conceptual and analytical model solutions, taking into account a clear sequence of implementation of organizational, economic and institutional procedures, as well as economic and psychological factors of choosing which of them to use in business practice;

– a model of monetary-entrepreneurial (innovative) behavior – described by the content of the determining factors for generating monetary signs of the real behavior of business entities, the key factors for generating social adaptability in modern monetary culture and the significance of these factor, factor loading indicators;

– a model of marketing and investment behavior, detailed by a binary complex of combinatorial principles for the implementation of new models of investment and marketing behavior;

– model of adaptive-cavernous cognitive behavior – according to the triad of principles of adaptive, cavernous and cognitive behavior;

b) the essence and content of the triad of basic models of behavior of a plurality of business entities (monetary-entrepreneurial (innovative) behavior, marketing-investment behavior, adaptive-cavernous cognitive behavior) are determined, a detailed description of which is characterized taking into account economic and psychological factors of justifying the choice and conditions for intensifying a number of
economic and non-economic activators in the context of the implementation of the action of the determinants of sustainable management;

c) the scheme for choosing a variant of the model of behavior of a multitude of business entities, built according to a closed cycle of implementing the five stages of the implementation of organizational procedures, taking into account the economic and psychological prerequisites (economic consciousness, economic thinking, economic interests, social stereotypes) of the objectification of selection, has been improved. Namely:

– formation of a clear idea of the subject about the goals (criteria, preferences) of choice;
– formation of alternatives (space) for the choice of the subject;
– implementation and selection of procedures for choosing an alternative, which exactly corresponds to the clear goals of the activity of a business entity;
– determining and taking into account the weight of the impact on the subject of the characteristics of individual conditions and the situation during which decisions are made and the choice of alternatives of behavior takes place;

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The above can become, in the future, the basis for detailing the content of the structural-functional scheme of formalization (according to the content of organizational-economic, institutional and economic-psychological procedures) of choosing one of the three combined basic models of behavior of a plurality of business entities, built on three closed multidimensional phases. Namely: I) identification of prerequisites for choice in a certain space and time; II) description of initial model solutions and determination of objective functions; III) implementation of a closed cycle of choosing a basic behavior model. At the same time, the substantiation of directions and further detailing of the possibilities of implementing combined models of behavior, taking into account the modern conditions of the functioning of the national socio-economic system, will allow to intensify activities on the implementation in practice of typical spatial systems of sustainable management [12] with the aim of eliminating socio-political and military-economic threats and risks to our state.

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Модель вибору суб'єктів представлень в національні проблеми економіки – глобальні та національні економічні проблеми

В. Микитенко, М. Чуприна, С. Серхиенко


Микитенко В. В., Чуприна М. О., Сергієнко С. С. Системний підхід до розробки базових моделей поведінки суб’єктів господарювання та її гармонізації

Аналітична система, розроблена та обґрунтована базові моделі поведінки множин суб’єктів господарської діяльності, репрезентованих у вигляді комбінованих концептуально-аналітичних моделей віршень із урахуванням як чітких положень, так і інтелектуальних розумінь в них. Методологічні принципи гармонізації, включаючи ключові фактори, визначення адаптивності, монетарних інституційних процедур, а також економіко-психологічних факторів вибору, що визначає особливості діяльності суб’єктів господарювання.

Базові моделі поведінки суб’єктів господарювання, розроблені в рамках визначення адаптивності, монетарних інституційних процедур, а також економіко-психологічних факторів вибору, що визначає особливості діяльності суб’єктів господарювання.

Ключові слова: стали господарювання; комбіновані моделі поведінки; моделі монетарно-підприємницької, маркетингово-інвестиційної та адаптивно-когнітивної поведінки.

Микитенко В. В., Чуприна М. О., Сергієнко С. С. A Systematic Approach to the Development of Basic Models of the Behavior of Business Entities and its Harmonization

The authors have formed and substantiated the basic models of behavior of a plurality of business entities, presented in the form of combined conceptual and analytical model solutions, taking into account both a clear sequence of implementation of organizational, economic and institutional procedures, and economic and psychological factors of choosing which one to use in business practice. Proposed: a) a model of monetary-entrepreneurial (innovative) behavior - it is described by the content of the determining factors for generalizing key signs of the real behavior of business entities, the key factors for getting social adaptability in modern monetary culture and the significance of these factors, factor load factors; b) a model of marketing and investment behavior, detailed according to a binary set of principles for implementing new models of investment and marketing behavior; c) model of adaptive-cavernous cognitive behavior - identified by the triad of principles of adaptive, cavernous and cognitive behavior. A closed scheme of formalization, in five stages, has been developed for choosing one of the three combined basic models of behavior of business entities, which is carried out in phases: identification of prerequisites for choice in a certain space and time; description of initial model solutions and determination of objective functions; implementation of a closed loop for choosing a basic behavior model.

Keywords: sustainable economy; combined behavior patterns; models of monetary-entrepreneurial, marketing-investment and adaptive-cavern cognitive behavior.