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### CHAPTER 5

# DEFINITION, CLASSIFICATION, CHARACTERISTICS AND OPPORTUNITIES OF DEVELOPMENT RECEPTIVITY TO THE NEW

#### **ABSTRACT**

Justifying the relevance of the topic, the authors refer to the following methodological assumptions: triad fragility — stability — antifragile (Nassim Taleb); conclusions about the possibility of "the emergence of order from chaos"; alternative future development (Antonina Yevtodiuk, Ilya Prigozhin); conclusions about the presence of internal connections of a self-organized system with an external environment (Ilya Prigozhin, Hermann Haken). A multidisciplinary approach was used during the research; various scientific directions were integrated; results of theoretical scientific research and practical activities. Receptivity to the new is defined as the ability of an individual to perceive signs of the new (future) and to be guided by the formed idea (consciously or unconsciously) in its practical activities. The classification is presented according to predefined classification features within the definition of receptivity to the new: a form of knowledge of reality; leading aspects of the perceived object; dominant feelings; field of activity; components of the subject's experience; cognitive-emotional processes; environment of selected information; hierarchical level of the management entity.

Traits of a personality susceptible to new things are outlined. Identification of different types of receptivity to the new is given on the examples of autobiographical data of Alexander Fleming, Wilhelm Konrad Röntgen, Isadora Duncan, Fritz Haber, Henry Ford, Steve Jobs, historical socio-political events.

The means of developing individual and group receptivity to the new are revealed. Among the means of developing personal receptivity to the new, the following are presented: an idea creation algorithm, creative problem solving technologies, special exercises and techniques based on the principles of non-linear thinking. From the point of view of formation of team and organizational values, development of collective search and decision-making skills, importance is gained by corporate training in such modified forms as active training methods; modern management models and technologies; coaching training technologies. The issues of creating an idea management system are considered, as such, which stimulates the development of receptivity to the new within the organization, institution, institution.

#### **KEYWORDS**

Receptivity to the new, cognitive function, regulatory function, classification features, form of knowledge of reality, leading aspects of the perceived object, dominant feelings, field of activity, components of the subject's experience, cognitive-motional processes, environment of selected information, hierarchical level of the management entity, means of developing receptivity to the new, idea management system.

Recognition of variability as a leading feature of a person's lifestyle, along with the acquisition of basic knowledge, poses the following urgent task to modern education: to teach students to independently master new knowledge and information, forms and methods of learning, to perceive and produce changes, to develop the need for lifelong learning. Personal characteristics that, according to experts, will contribute to the acquisition of new competencies are "open consciousness", a heightened sense of the new, the ability to "catch, perceive new things" [1]; the ability to respond to challenges "mentally and physically" [2]. For example, living in the world of nanoseconds, nanometers [1], virtual worlds [2], etc.

In our opinion, today the selection is carried out in favor of individuals capable of living in marginal states. "Tsvishens", from an ontological point of view, is a person who is permanently in a state of alternation, who is in a situation "between" (reevaluation of values, reorientation of goals, etc.); in the context of the outlined problem — in the situation of permanent updating of one's own knowledge, abilities, skills.

The slogan "Education for life!" no longer works. "Lifelong education" is a response to rapid changes in information and technologies that must be constantly mastered.

Receptivity to the new becomes the main personal resource, the resource of innovative production, the dominant resource for achieving a stable balance of economic and social development under the conditions of co-evolution of rational innovations and socio-cultural traditions, which enables the productive modernization of social development.

Sustainable economic development requires the formation of optimal conditions for increasing the receptivity of employees to innovative activities, as a continuous source of creating competitive advantages of the organization, institution, and country. The accumulation of such abilities is becoming a global trend. In turn, interest causes the ability of some people, groups, organizations not only to emerge victorious from difficult life, production, business situations (which seem impossible to predict), but also to benefit from them.

Such different situations force us to look for appropriate social and psychological-pedagogical technologies, require employees to be able to combine the application of innate and acquired qualities with the requirements of the environment. Innovative structures require from the employee a special flexibility of thinking, an effective system of perception, an internal need for creativity, a unique form of self-realization and integration into the social system.

The importance of the outlined questions is substantiated by Antonina Yevtodiuk, Pavlo Kukhta, Valerii Pekar, Ilya Prigozhin, Nassim Taleb, Hermann Haken and other authors. However, the concept of receptivity to the new remains undefined, its classification is not concluded, its characteristics are not disclosed.

In view of the above, the purpose of the article is based on the application of a multidisciplinary approach and the integration of various scientific directions, the results of theoretical scientific research; of experience, opinions and beliefs — the results of practical activity, to justify the definition, to present the author's classification, to outline the traits of a personality receptive to the new, to reveal the possibilities of the development of individual and group receptivity to the new.

In this study, the authors support the understanding of interdisciplinarity as a scientific and pedagogical innovation that gives rise to the ability to see, recognize, perceive what is inaccessible within the boundaries of a single science (discipline) with its specific, narrowly oriented object, subject and research methods [3].

Receptivity to the new is a rather complex, multifaceted and multi-vector phenomenon, which can be investigated using the potential of an interdisciplinary approach. An interdisciplinary approach helps to overcome the narrowness of the pedagogical view and to enrich pedagogical science with the achievements of modern economic, sociological, philosophical, and psychological sciences in relation to a given topic. With the help of the application of the achievements of other sciences related to a certain topic, the integration of the latter is achieved at the level of construction of interdisciplinary objects, subjects, the study of which allows to obtain new scientific knowledge (in our case, in relation to receptivity to the new).

In the process of scientific research, scientific work from philosophy, sociology, economics, psychology, pedagogy was analyzed in terms of relevance, objective necessity, and the possibility of targeted influence on the development of receptivity to a new individual, group, organization (institution).

A relatively small number of works on receptivity to the new motivated the expediency of a comprehensive understanding of materials devoted to this problem. In particular, the sources used during the scientific search and which are referred to in the publication were studied (all types of publications: monographs, articles, abstracts of scientific works, conference materials, examination results, interviews with practitioners).

#### 5.1 DEFINITION

Nassim Taleb in the book "Antifragile: things that gain from disorder" introduces the term antifragile as the opposite of fragility in the triad of fragility – resilience – antifragile [4]. Taleb introduces the concept of "antifragile" – the ability of systems not just to be invulnerable and resistant to a crisis (in contrast to fragile systems that a crisis destroys and kills), but on the contrary, the ability to emerge from a crisis even stronger than they were before it.

Antonina Yevtodiuk [5], Ilya Prigozhin [6] and other authors [7] investigate within the framework of social synergy nonlinear changes and processes of self-organization that arise in an unstable society, which justify the possibility of "the emergence of order from chaos." It is obvious that within the chaos there are signs of future order (possible orders). At the moment of bifurcation, it is necessary to take into account the alternative nature of the future development and the peculiarities of the non-linear behavior of society.

Ilya Prigozhin [6], Hermann Haken [8] note that a characteristic feature of developing open systems is their ability to self-organize. That is, during the exchange of information with the external environment, the self-organized system is able to select information that contributes to development. Accumulating, evolutionary transformations lead to qualitative changes in the state of the system.

That is, there are signs of the future in the present. In our opinion, the acquisition of a new quality, a new order will depend on the nature of perceived potential opportunities. The nature of the future order will be determined by a set of selected features.

By definition, perception is a form of knowledge of reality based on perception and feeling [9]. Perception (formed on the basis of perception and feeling) — reflection of objects and phenomena in their visual integrity, formation of an idea about objects [9].

That is, perception is the result of perception (involuntary and voluntary), during which information about individual properties of an object is combined into a sensory image and interpreted as information generated by objects or events of the surrounding environment [10].

The selection of signs of the new can be caused by the features of the surrounding objects and information: their brightness, location, unusualness, as well as a person's personal interest in them; can be characterized by the fact that a person sets a goal to perceive something and makes willful efforts for it.

Perception, in unity with the comprehensive characteristics of the object, also reflects the subject's multifaceted life (its outlook, past experience, interests, aspirations, hopes). The formed representation (consciously or unconsciously) performs a regulatory function — directs the subject's practical activity according to these properties of objects.

In our case, perception of the new is a form of knowledge of reality based on the perception and feeling of signs of the new in society, science, art, etc. Perception of the new (formed on the basis of perception and feeling of the signs of the new) — anticipatory design of objects and phenomena according to the signs of the new, formation of ideas about the objects of the future.

That is, the perception of the new is the result of perception (involuntary and arbitrary), during which information about changes in individual properties of an object is combined into a not yet clear image and interpreted as information about objects or events that will take place in the future. In the following, the perception of the new performs two interrelated functions: cognitive and regulatory. The lack of clarity stimulates the process of further learning about the characteristics of the object; forecasting uses all the previous experience of the subject (emotional, cognitive, practical), its outlook, interests, aspirations, hopes. At the neurolinguistic level, a regulatory

function is launched — the direction of the subject's practical activity according to the received information (or in the direction of the desired future).

Thus, receptivity to the new is the ability of an individual to perceive signs of the new (future) and to be guided by the formed idea (consciously or unconsciously) in its practical activities. Receptivity to the new is the degree to which an individual is relatively ahead of other members of its social system in perceiving new ideas, phenomena, discoveries that will determine the future.

## 5.2 CLASSIFICATION OF RECEPTIVITY TO THE NEW ACCORDING TO CLASSIFIED CLASSIFICATION SIGNS

The development of a classification of receptivity to the new is relevant.

During the development of the author's classification of receptivity to the new, we understood the classification as a multi-level, consistent division of the scope of the definition of receptivity to the new in order to systematize, deepen and obtain new knowledge about the members of the division [11]. The result of classification should be a system of subordinate concepts: a divisible concept is a genus, and new concepts (members of the division) are species of this genus, subspecies of species, etc. [12]. At the same time, each stage of division was carried out on a different basis. In this way, a system of distribution of objects by groups was formed according to predetermined features within the definition of receptivity to the new.

The divisive (generic) concepts of the classification of the definition of receptivity to the new are defined as follows:

- form of knowledge of reality;
- leading aspects of the perceived object;
- dominant feelings;
- field of activity;
- components of the subject's experience;
- $-\ cognitive\text{-}emotional\ processes;$
- environment of selected information;
- hierarchical level of the management entity.

Below we present the system of distribution of objects according to defined divisive (generic) concepts within the definition of receptivity to the new.

Based on the form of knowledge of reality, we distinguish involuntary and voluntary receptivity to the new.

Depending on the leading aspects of the perceived object, we distinguish the following types of receptivity to the new: receptivity to new changes in space, time, movement, shape of objects.

Feelings can be the dominant basis of receptivity to the new (distant, contact, deep) can be the dominant basis of receptivity to the new. Accordingly, we distinguish receptivity to new visual,

auditory, olfactory, gustatory, tactile, tactile, pain, receptivity to new depth sensitivity (internal organs, muscle sensitivity, etc.).

By branch, we distinguish the receptivity to new things in society, science, art, etc.

As already mentioned, the perception of the new, forecasting uses all the previous experience of the subject, which makes it possible to isolate the receptivity to the new, depending on which part of the subject's experience is involved and, in turn, the formation of which part of the future experience is aimed at. In particular, this is the perception and formation of new outlooks; emotional, cognitive and practical experience in relation to the object of research. Receptivity to the new can be "turned on" (involuntarily or arbitrarily) by the subject's interests, aspirations, and hopes.

According to the cognitive-emotional processes that stimulate the detection, we distinguish analytical, synthesizing, analytical-synthesizing, emotional receptivity to the new.

According to the environment of the selected information, we distinguish receptivity to external and internal information.

According to the number of people involved:

- individual:
- group (innovation, project group);
- collective (enterprise, organization, institution).

Separately, we pay attention to the receptivity to new subjects of management, which, accordingly, makes it possible to distinguish by the hierarchical level of the subject of management (head of a structural component of an enterprise, organization, institution; head of an enterprise, organization, institution; government body of a country; region; industry) that exerts one or another influence on the economic policy of management objects.

Qualitative characteristics of receptivity to the new cause natural interest.

In order to acquire the properties of antifragile (according to Nassim Taleb), one must be flexible and mobile, ready to take risks — both for loss and for gain, have fixed costs and, in case of success, potentially unlimited gain, and, of course, seek possibilities [13]. It is appropriate to mention the saying attributed to Winston Churchill: "A crisis is always an opportunity".

Aleksandr Subetto [14] emphasizes the need for a specific critical attitude to the past (which led to the crisis, chaos), which "does not exclude", but "takes with it" all that contributes to the exit from the crisis, that which, from the standpoint of guarantee survival, could be called truly intelligent.

Ilya Prigozhin [6], Hermann Haken [8] note that a characteristic feature of developing open systems is their ability to self-organize. That is, during the exchange of information with the external environment, the self-organized system is able to select information that contributes to development.

According to Poincaré's famous statement, mind has creative power only when experience forces it to do so [15]. It is about the active involvement of the factor of the future and its influence on the formation of new trends in the development of science, technology, and education. In our opinion, it is about the desire to survive, to endure, to continue to develop.

From this point of view, it can be considered that any crisis is an impetus for development. A large number of people, by their very nature, are able to radically change only after getting into a hopeless, at first glance, situation. In our opinion, it is precisely in crisis situations that previously selected potentials (opportunities, strategies, behavioral patterns) can be realized. After all, "...nothing will come out of nothing".

Nataliia Tyshchenko considers readiness to move forward and quickly implement decisions, ability to change in response to external challenges to be an important trait [16].

Summarizing, it is possible to list the traits of a personality receptive to the new:

- an active attitude to the future, "attracting the factor of the future";
- a critical attitude to the past, which "takes" with it everything that contributes to the exit from the crisis, further development;
  - flexibility and mobility, readiness to take risks;
  - ability to self-organize;
  - ability to change in response to external challenges.

The basis of receptivity to new things, like any other ability, is the potential of its bearer. In the UN Development Program, the concept of "potential" is defined as the ability of people, organizations, and communities to consistently perform certain functions, solve problems, and set goals [17].

In our case, it is the potential of the ability to perceive signs of the new (future) and to be guided by the formed idea (consciously or unconsciously) in one's practical activities; the potential ability of an individual or a group of other members of their social system to be relatively ahead in the perception of new ideas, phenomena, discoveries that will determine the future. This ability is borderline with professional, commercial, life, etc., intuition. The term "potential development" characterizes the task of increasing the level of such abilities (in our case, receptiveness to new things) of people and institutions.

#### 5.3 EXAMPLES OF DETECTING DIFFERENT TYPES OF RECEPTIVITY TO THE NEW

Scientific intelligence autobiographical information of outstanding personalities (Alexander Fleming, Wilhelm Konrad Röntgen, Isadora Duncan, Fritz Haber, Henry Ford, Steve Jobs, etc.), historical events (the Great French Revolution of the 18<sup>th</sup> century, the struggle for independence and the establishment of the independence of the United States America in the 18<sup>th</sup> century, the Paris Commune in the 70s of the 19<sup>th</sup> century, the October Revolution of 1917 in Russia, the Chinese Revolution in the late 40s of the 20<sup>th</sup> century, etc.) drew the author's attention to the discovery of different types of receptivity to the new in different people in different historical periods.

It is relevant to generalize information regarding the detection of different types of receptivity to the new according to the identified classification features in different people in different historical periods.

In the author's classification of the definition, feelings can be the dominant basis of receptivity to the new to the new is defined by the following divisible (generic) concepts:

- form of knowledge of reality;
- leading aspects of the perceived object;
- dominant feelings; field of activity;
- components of the subject's experience;
- cognitive-emotional processes;
- environment of selected information:
- hierarchical level of the management entity.

Based on the form of knowledge of reality, we distinguish involuntary and voluntary receptivity to the new.

Involuntary (unintentional) receptivity to new things occurs when a person does not set a goal to perceive something and does not make an effort of will for it.

For example, the discovery of penicillin (which saved and still saves the lives and health of a large number of people) by Alexander Fleming is attributed to his sloppiness and a random coincidence of circumstances. While researching the flu, he did not wash the laboratory dishes in time and did not throw away the flu cultures for several weeks. So, one day, in one of a large number of unwashed Petri dishes, he discovered mold, which, to his surprise, suppressed the seeded culture of staphylococcus bacteria. Fleming left the cup on the laboratory table and went to rest. Alternating cold and warming in London created favorable conditions for the growth of mold and bacteria. In our opinion, in addition to the coincidence of circumstances, arbitrary receptivity to the new (prepared by previously acquired special knowledge and experience) worked.

Arbitrary, purposeful receptivity of the new is characterized by the fact that a person sets a goal to perceive something and makes willful efforts for it. In our opinion, the combination of involuntary and arbitrary receptivity of the new served Wilhelm Konrad Röntgen in the discovery of X-rays. At first, during his experiments, his attention was drawn to the fact that a vague greenish cloud appeared on the chemically cleaned screen at a distance of several feet. And then, by concentrating for several weeks on the cause of the glow, it was discovered that the cause of the glow was the direct rays coming from the cathode ray tube, that the radiation produced a shadow, and that it could not be deflected by a magnet — and many other things. In addition, it turned out that human bones cast a denser shadow than soft tissues, which is still used in radiography.

Depending on the leading aspects of the perceived object, we distinguish the following types of receptivity to the new: receptivity to new changes in space, time, movement, shape of objects. We imagine that it can be both a reaction to changes in the object that have taken place, thereby starting the process of changes in the environment (for example, service functionality), and predicted changes in space, time, movement, form (will cause a change in the object, service functionality, etc.).

Feelings can be the dominant basis of receptivity to the new (distant, contact, deep) can be the dominant basis of receptivity to the new. Accordingly, we distinguish receptivity to new visual,

auditory, olfactory, gustatory, tactile, tactile, pain, receptivity to new depth sensitivity (internal organs, muscle sensitivity, etc.). The emergence and development of impressionism in painting, sculpture, and music are demonstrative and illustrative of the specified classification feature. The choreography includes Isadora Duncan's "free" dance, based on her own feelings caused by the music. It is appropriate, in our opinion, to mention doctors who resorted to self-infection with the disease in order to describe the symptoms and effects of treatment based on their own feelings.

By branch, we distinguish the receptivity to new things in society, science, art, etc.

As already mentioned, the perception of the new, forecasting uses all the previous experience of the subject, which makes it possible to isolate the receptivity to the new, depending on which part of the subject's experience is involved and, in turn, the formation of which part of the future experience is aimed at. In particular, this is the perception and formation of new outlooks; emotional, cognitive and practical experience in relation to the object of research. Receptivity to the new can be "turned on" (involuntarily or arbitrarily) by the subject's interests, aspirations, hopes (which, in turn, causes a favorable or inhibitory effect).

This is precisely how we explain the fact of the influence of ideology on social changes in various countries of the world in the last two or three centuries. Political parties and social movements, which carried out radical transformations in all spheres of society's life, were guided by ideological doctrines, ideals, and programs that became a direct impetus for change.

The Great French Revolution of the 18<sup>th</sup> century, the struggle for independence and the establishment of the independence of the United States of America in the 18<sup>th</sup> century, the Paris Commune in the 70s of the 19<sup>th</sup> century, the October Revolution of 1917 in Russia, and the Chinese Revolution in the late 40s of the 20<sup>th</sup> century remained the most significant in world history, etc. It is believed that all of them were carried out under the banner of the struggle for the implementation of certain ideological principles and values (liberal-bourgeois, Marxist-Leninist, Maoist, etc.).

The most progressive modern ideology can be the ideology of creating a state whose goal is happiness of all citizens [18].

According to the cognitive-emotional processes that stimulate the detection, we distinguish analytical, synthesizing, analytical-synthesizing, emotional receptivity to the new.

Thus, the patriotic desire to serve his homeland was driven by Fritz Haber, a German chemist of Jewish origin, laureate of the Nobel Prize in Chemistry, for his contribution to the synthesis of ammonia, necessary for the production of fertilizers and explosives; the father of chemical weapons.

Henry Ford was stimulated by a passion for invention, the desire to invent a "carriage that moves itself" and then endlessly improve it (the author of 161 US patents), which led him to develop a technological line (conveyor), and finally – to establish the production of a "car for everyone".

Steve Jobs' real talent was not in building computers, but rather in anticipating the wants and needs of potential consumers; understanding the transformative impact of personal gadgets.

Fritz Haber, Henry Ford, Steve Jobs influenced the formation of the world in which we live today.

According to the environment of the selected information, we distinguish receptivity to external and internal information.

In particular, for the closed model of the innovation process, the sensitivity to internal information is important, which at first glance can solve all the problems related to the innovation process independently within the enterprise, organization, institution. For example, Medtronic (USA) owns 25 research centers in which 45,000 employees produce innovations [19].

If we extrapolate certain provisions of nanotechnology to the indicated question ("nano" means one billionth (10<sup>-9</sup> power) part of anything) and take into account that there are more than 6 billion people on the globe, we can conclude that every person is a potential carrier of the proposal, which will change the performed work, technological process, etc., for the better. The combination of such nano-proposals can cause a cumulative effect and lead to significant changes.

In the context of the theory of open innovation, sensitivity to external information, receiving valuable offers from partners, end users, and constructive cooperation with competitors becomes important. According to Henry Chesbrough, open innovations are "valuable ideas that can come both from the company itself and from outside and can be provided on the market as a result of both the actions of the company itself and other structures" [20].

According to the number of people involved, we distinguish individual, group (innovation, project group), collective (enterprise, organization, institution) receptivity to the new.

Separately, we pay attention to the receptivity to new subjects of management, which, accordingly, makes it possible to distinguish by the hierarchical level of the subject of management (head of a structural component of an enterprise, organization, institution; head of an enterprise, organization, institution; government body of a country; region; industry) that exerts one or another influence on the economic policy of management objects.

#### 5.4 INDIVIDUAL AND GROUP RECEPTIVITY TO THE NEW, POSSIBILITIES OF THEIR DEVELOPMENT

Today's fast-moving world requires a high level of receptivity to the new. The winners are those who, faster than others, are able to respond to new changes in science, production, education, society, perceive them, reflect, and implement what is planned. The logical issue is the development of individual and group receptivity to the new.

Concepts, possibilities, methods of development of receptivity to the new in everyday activities and in the learning process were studied by Genrih Altshuller [21], Albert Bandura [22], Tom Wujek [23], Svetlana Kuzheva [24], William Lazier [25], Vladimir Nikolko [26], Nataliia Sas [27–29], Aleksey Sitnikov [30], Anatoliy Shevyirev [31].

Personal receptivity to the new can be developed by mastering the idea generation algorithm, the technology of creative problem solving, special exercises and techniques based on the principles of non-linear thinking. The most famous of the individual ways of finding new ideas are: direct analogy, personal analogy, fantastic analogy [32].

Direct analogy — ready-made solutions of similar tasks in other areas of knowledge are used, with their subsequent adaptation.

For example, the analogue of a salt shaker in medicine is saline solution (the same table salt, but dissolved in water), which is usually introduced into the body through a needle from a syringe or a dropper. Well, we have already received the idea of a new salt shaker with a concentrated salt solution that is squeezed out through a narrow opening, and this fruitful idea can be further developed.

Personal analogy — it is suggested to enter the role of the object that needs to be invented, to concentrate on feelings and ways to solve the problem. Imagine yourself as a salt shaker with a holey metal lid on your head and listen to your inner feelings. Yes, it is not very pleasant when you are shaken upside down over a plate of hot soup. It is much more comfortable to be in a natural position. The new salt shaker must have a dispenser and a hole on the bottom side — you press the button from above, the lid opens from below and the necessary portion of salt is poured into the plate. Very intelligent and no risk of getting burned.

A fantastic (fairy tale) analogy suggests introducing fantastic means or characters into the task: "Sit down more comfortably, I will tell you a fairy tale. This happened in those distant times, when people did not have salt shakers yet. And when they needed salt, they came to the giant Salty sedge and chopped off pieces of rock salt from him with huge axes, and then at home they broke these pieces into smaller pieces with a hammer. One poor family ran out of salt, but there was no one to go to the store because dad was working and mom was sick. Then the two small children went to the cliff by themselves, but they did not have enough strength to break off even a tiny piece. They grieved at first, and then thought and decided to sing a humorous song. The Rock laughed, laughed so hard that tears fell from his eyes, and each tear turned into a salt bead. Smart children collected these beads and took them home". That's how another idea was born.

It is not easy to use analogies, and, most importantly, this technique does not relieve painful creative searches.

Svetlana Silvanovich [33], Aleksey Sitnikov [30] believe that the formation of an effective innovative personality orientation is possible on the basis of mastering **psychophysiological technologies** aimed at the ability to:

- carry out self-programming, to change certain qualities, to block oneself from the accumulation of negative emotions:
  - effectively use internal resources;
  - to motivate, as a manager, both itself and it subordinates to achieve long-term goals;
  - take a look from the future.

NLP (neuro-linguistic programming) techniques can be particularly effective for activating creative thinking, and the simplest of them is "resource anchoring". The essence of this technique is to consciously and at the right moment summon and use one's psychological resources, for example, the state of creativity, mastery, perfection. In order to create an "anchor", it is necessary to recall cases from your life when such a resource manifested itself most intensively: situations in

which you gushed with ideas, easily generated brilliant solutions, were overflowing with creative forces and inspiration. Then immerse yourself in the memories, recreate that resource state of yours and feel again. Choose an anchor - a kind of "button" that will trigger the desired state. It can be a tactile sensation, a sound, a visual image. Next, return once again to the experience of the resource state of creativity and, after waiting for the peak of its intensity, put an anchor, for example, touch a point on the brush of the left hand. Repeat several times. Check - if the anchor is set - touching the selected point on the left hand brush automatically reproduces the resource state of creativity. Then - pour out ideas.

A deeper technique is reframing. The word "reframing" literally means "to put in a new frame", it is used in NLP to denote the process of changing the perception of a situation. "Going beyond" one's own and collective stereotypes is the basis of any creativity. Reframing requires some training or the help of an NLPier, but the results are worth it.

One of the postulates of NLP shows that what at least one person in the world can do, others can repeat. NLPiers study the creativity of prominent figures and shoot models from them. Walt's Creativity Strategy can be very helpful Disney, a description of which can be found in special psychological literature.

Its essence is that the process of generating new ideas is separated from their criticism, which removes internal barriers. Walt Disney mentally placed three characters in the corners of his room — the Dreamer, the Critic and the Realist.

Then he incarnated in each of them in turn. Taking the place of the Dreamer, he put forward new ideas, indulged in fantasies. Having moved to the Critic's corner, he looked for flaws and weak points, smashing the rainbow castles of the Dreamer to pieces. Moving to the corner of the Realist, Disney weighed all the pros and cons and looked for the best option. The effectiveness of such a strategy has been proven by the entire career of Walt Disney, who went from a poor animator to the creator of a multi-billion dollar empire and became one of the most successful businessmen in the world.

Even more profound techniques, based on the incredible possibilities of our subconscious, are based on the use of trance states. It looks like this. The formulated goal is to invent Super salty. After a few vague phrases spoken by the specialist or the subject himself, the latter is "disconnected" from reality for a short time, and then he returns back with a ready-made idea of a wonderful Super salty. The usual miracle happened.

The analysis of modern research revealed contradictions between the need for people with a high level of receptivity to the new in the conditions of a constantly changing environment (the presence of special personal and professional qualities, the complexity of activities, etc.), and the absence of developed effective programs for their development.

From the point of view of the possibility of self-improvement of the flexibility of thinking, increasing the level of receptivity to the new, increasing the desire to acquire new knowledge of innovative management, the self-control program developed on the basis of the social-cognitive theory of Albert Bandura [22], which was detailed by David Watson and Roland Tharp, is of interest.

David Watson and Roland Tharp suggested that the process of behavioral self-control consists of five main steps. They included defining the behavior to be influenced, collecting baseline data, designing a program to develop the desired behavior, implementing and evaluating the program, and terminating the program:

- 1. Determination of the form of behavior. The initial level of self-control is identifying the exact behavior that needs to be changed. Unfortunately, this crucial step is much more difficult than you might imagine. Many of us tend to think of our problems as certain negative personality traits, and it takes a lot of effort to accurately describe those traits. Regarding the problem under consideration, it may be desirable to develop flexibility of thinking, increase the level of receptivity to new things, increase the desire to acquire new knowledge, etc. Innovative management requires finding ways to finance innovative activities, successfully promoting one's institution, which, in turn, requires being in contact, being able to convince, prove, interest, etc. To determine the limitations of professional activity, it is advisable to use the questionnaire "Analysis of your limitations" [34].
- 2. Collection of basic data. The second step of self-monitoring is gathering basic information about the factors influencing the behavior we want to change. Regarding our problem, it can be: learning to see the same objects from different angles; to learn the technique of removing criticism and idealization that prevent creation, to motivate oneself to further develop one's receptivity to the new. Choose exercises and tasks, appropriate algorithms, technologies for finding ideas that contribute to the activation of thinking, arm yourself with methods of combating psychological inertia, form skills for solving creative tasks, that is, transform the process of creative thinking from chaotic to clearly organized and controlled. It is also important to choose a time to perform the exercises, some of them can be performed in the morning while taking a shower or in the evening before going to bed, try to record the time, circumstances, environment in which the maximum effect of the exercises is achieved. In fact, we must become like a scientist who observes our own reactions and their manifestations, recording their frequency for feedback and evaluation. In social-cognitive theory, the collection of accurate data about the behavior to be changed is not at all similar to the global self-understanding that is emphasized in other therapeutic techniques.
- **3. Development of a self-control program.** The next step in the process of changing your behavior is to develop a program that will effectively change the repetition of a specific behavior. According to Albert Bandura, changing the frequency of repetition of this behavior can be achieved in several ways. Basically, this is self-reinforcement, self-punishment and planning of the environment.

**Self-reinforcement.** Self-reinforcement in social-cognitive theory means that the individual encourages and rewards itself, and it is able to control this process. At the third stage, you should determine what consequences (pleasant events, situations, etc.) will have the character of self-reinforcement for you. In the process of work, you need to constantly encourage yourself to act in the desired way. Although the basic strategy is quite simple, some tips for developing an effective self-reinforcement program will be useful. First, since behavior is controlled by its consequences, it obliges a person to organize these consequences in advance in order to influence the behavior in the desired way. Second, if in a self-control program self-reinforcement is the best strategy,

it is necessary to choose a reinforcing stimulus that is actually available to the person. The leading motive in the system of self-reinforcement for the head of an educational institution is the expectation of success and attractiveness, the provision of positive guidelines for organizing one's behavior, the conscious loss of options for successful actions and decisions — increasing self-efficacy.

**Self-punishment.** In order to reduce the repetition of unwanted behavior, you can also choose a strategy of self-punishment.

You can remember preparing for exams at school age. Many people, having not studied the planned number of tickets during the day, punish themselves by planning to study twice as many tomorrow. However, a significant disadvantage of punishment is that many people find it unnecessary to constantly punish themselves if they fail to achieve the desired behavior. To cope with this, you should remember two guidelines. First, if learning skills are the problem, it's best to use punishment in conjunction with positive reinforcement. Combining aversive and pleasurable self-regulated consequences is likely to help implement a behavior change program. Second, it is better to use a relatively mild punishment: this will increase the probability that it will really be self-regulating. The balance of situational self-reinforcement and self-punishment is highly individual.

**Environment planning.** In order for unwanted reactions to occur less frequently, it is necessary to change the environment in such a way that the stimuli preceding the reactions or the consequences of these reactions are changed. To avoid temptation, a person can avoid tempting situations, firstly, or, secondly, punish itself for giving in to temptation.

Our life is determined by our environment. In everything that has happened to you so far, in your past, which you cannot influence now, your immediate environment played a certain role. It makes no sense to question the human qualities and value of those around you. You can continue to love and appreciate them for what you have, but only listening and following their advice on innovative activity, development of innovative management technologies is suicide, except for those cases when they themselves have already achieved something. You will inevitably be influenced by your environment, because every person from childhood uses the same method of learning — imitation. It is not for nothing that they sometimes say: "with whom you behave, you will gain". If you want to strengthen your own innovative capabilities, communicate with successful people, learn to do what they already know how to do. It is best to unite with others of your kind to jointly acquire the necessary knowledge and skills in innovation management.

**4. Implementation and evaluation of the self-monitoring program.** After the self-modification program is developed, its implementation begins, adaptation to what seems necessary. It must be borne in mind that for the success of a behavioral program, constant vigilance is necessary in the interim period, so as not to return to old forms of behavior. An excellent means of control is a contract with oneself — a written agreement with a promise to adhere to the desired behavior and use appropriate incentives and punishments. The terms of such an agreement must be clear, consistent, positive and fair. It is also necessary to periodically review the terms of the contract to make sure of their expediency: many initially set unrealistic tasks, which often leads to unnecessary complications and despair in the self-control program. To make the program as successful as

possible, at least one other person (friend) should participate in it. It turns out that it makes people take the program more seriously. Consequences should also be detailed in the contract, with terms of incentives and penalties. And finally, incentives and punishments should be immediate, systematic and take place in fact, not just verbal promises or verbal intentions.

David Watson and Roland Tharp note several of the most common mistakes in implementing a self-control program. These are situations when a person:

- a) tries to accomplish too much, too quickly, setting an unrealistic goal;
- b) allows a long delay in encouraging appropriate behavior;
- c) establishes weak incentives.

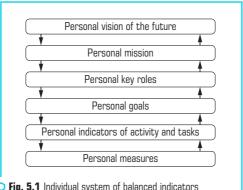
Such programs are not effective enough.

**5. Completion of the self-monitoring program.** The last step in the process of developing a self-monitoring program is to clarify the conditions under which it is considered complete. In other words, a person must accurately and carefully determine the ultimate goal — regular exercise, reaching a set weight or stopping smoking within a specified period of time. It is useful to complete the self-control program by gradually reducing the frequency of incentives for the desired behavior.

A successfully executed program can simply disappear by itself or with minimal conscious effort on the part of the person. Sometimes a person can decide for itself when and how to end it. The goal is to form new, improved forms of behavior that are preserved forever. Of course, a person should always be ready to restore self-control strategies if maladaptive reactions reappear.

A new approach to managing the development of a manager's personal qualities is **the use of** a universal performance indicator system (TPS).

A personal system of balanced indicators includes information about a person's personal mission vision, personal key roles, personal success factors, personal performance indicators and tasks, improvement measures. The system of indicators develops one's own sense of self and success and stimulates constant self-improvement (**Fig. 5.1**).



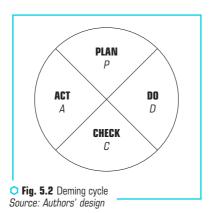
• Fig. 5.1 Individual system of balanced indicators Source: Authors' design

Four elements of a balanced scorecard form an effective tool for determining key success factors (Table 5.1).

• Table 5.1 Tools for determining key success factors

Element of the scorecard	Success factors			
Financial perspective	Financial well-being			
External perspective	Perform work at a high level. To move towards success together with colleagues, to maintain an open and harmonious atmosphere. Be a support for children			
Internal perspective	Strive for physical and mental health. Be proactive and constantly learn to enjoy your work. Maintain a balance between professional and personal life			
The perspective of knowledge and learning	Constantly develop professional qualities			

Applying the PDCA model is the next step in the process of self-improvement. The PDCA Cycle, or Deming Cycle, is a model of continuous quality improvement. It consists of a logical sequence of four repeated stages for continuous improvement and learning: PLAN, DO, CHECK and ACT (Fig. 5.2).



In our case, the Deming cycle was used to build a self-improvement system with a specific interpretation of it for a specific subject.

#### Plan:

- development of own balanced system of indicators;
- formulation of a personal balanced system of indicators in such a way that the main attention is paid to work and free time;
  - creation of a system of simple goals and appropriate actions for its improvement.

In the work-related part, it is necessary to discuss the system of indicators with the immediate supervisor.

#### Do:

- carry out all plans;
- involve your manager, colleagues, subordinates, clients, and/or those whom you trust in evaluating your results;
  - develop your competencies to achieve your goals.

#### Check:

- analyze the results in accordance with the established results indicators and their target values;
- find out the degree of fulfillment of own plans, and if necessary, adjust the personal balanced system of indicators;
- together with a trusted person, analyze the system of indicators for the formation of a plan for continuous improvement.

#### Get over:

- be ready to overcome difficult obstacles and choose more difficult goals;
- choose goals corresponding to new competences and knowledge, when previous improvement actions are no longer inspiring;
  - enjoy the improvement process;
  - write down everything you have learned;
  - observe the improvement of your actions and thinking skills.

Thus, analyzing the results of the assessment of balanced indicators for the past period and now, it can be concluded that after a thorough analysis, a certain subject has determined the necessary priorities for its own development (**Table 5.2**).

A 360-degree evaluation method is proposed for receiving feedback. The 360-degree evaluation refers to the "circular evaluation" of the employee by the immediate supervisor, employees of the corresponding category of its or adjacent departments, subordinates, as well as the employee's evaluation of itself. The purpose of the 360-degree assessment is to determine the level of development of the business qualities of employees.

The assessment procedure includes the following stages:

- preparatory stage;
- survey;
- processing of results;
- preparation of assessment reports.

In the evaluation of the research subject, the following participate:

- the evaluated person;
- senior manager;
- a lower-ranking employee of a subordinate unit;
- the head of the adjacent unit.

The assessment allows the research subject to:

- receive feedback when reviewing the evaluation report;
- better understand your strengths and weaknesses;
- decide on personal development in the direction of career growth.

Table 5.2 Summary table of balanced improvement indicators

Formulation of a personal system of balanced	Priority 1–5	Current (X) and desired (O) level				
indicators and continuous improvement		1	2	3	4	5
Personal vision of the future	4		Χ		0	
Personal mission	5		Χ		0	
Personal key roles	5			Χ	0	
Personal success factors	5			Χ		0
Personal goal setting	5			Χ	0	
Personal performance indicators	5			Χ		0
Target values based on personal goals	5			Χ	0	
Improvement process	5		Χ			0
Application of the PDCA model to the process of personal improvement	4	Χ			0	
Overall assessment						

And if earlier these were mainly short-term goals, without a built line of vision for one's own future, then with the help of these means one can consciously make decisions about the direction of one's development as an individual in the surrounding society.

The solution to any problem involves mastering and using **methods of finding new ideas and** acquiring knowledge and skills for solving creative tasks.

According to Anatoliy Shevyirev, "own technology is not only in the production of things, but also in the production of ideas". The head of the educational institution can go all the way to finding a solution on his own or start searching for information about existing solutions.

Thomas Edison is credited with saying: "If you want to come up with great ideas, know that you can borrow the best ideas". Everything that can benefit the activity of the educational institution is worthy of use.

There are many methods of finding ideas. With some degree of convention, we singled out the following groups: methods of psychological activation of thinking, methods of systematic search, methods of collective search for management solutions, methods of production management, applied as innovative in the management of educational institutions.

Each of the methods aims to facilitate the search for a solution to a creative task compared to the so-called "trial and error" method that a person usually uses. The feasibility of using a method belonging to one or another group depends on the complexity of the problem being solved.

For the individual solution of tasks, it is advisable to use methods of psychological activation of creative thinking and methods of finding alternative options belonging to the first two groups.

Methods of psychological activation of creative thinking are aimed at eliminating the so-called psychological inertia of thinking, which prevents a comprehensive consideration of the problem, hinders the finding of management solutions and new management ideas. These methods include the idea generation algorithm discussed above, creative problem solving technologies, special exercises and techniques, based on the principles of non-linear thinking.

Methods of psychological activation of thinking: in addition to the already described methods of the analogy method, they include the method of focal objects, the RVS operator, the "Method of little men", the "Method of garlands of associations and metaphors", the "Six thinking hats" method, the "Coaching" method, inversion method, idealization method.

Methods of creative search for alternative options contribute to the activation of the management decision-making process and the resolution of problematic issues.

To the methods of systematic search, we include lists of control questions, morphological analysis, functional analysis, functional design method of Matchett, method of multiple sequential classification, method of synthesis of optimal forms, method of systematic economic analysis and element-by-element development of constructive solutions, "Five Whys" method.

An indicator of the organization's receptivity to innovations can be the term of introduction of a specific innovation or the total number of innovations accepted for development in a specific organization at a certain time. Thus, the faster the implementation decision is made or the more innovations are mastered in a certain period of time, the higher the organization's receptivity to new things.

The receptiveness of organizations, institutions, and institutions to innovations is a characteristic of their innovation systems, which is expressed in the ability to find innovations that are potentially useful for themselves, adequately evaluate them and rationally choose them, based on the needs and opportunities of their development. The receptivity of organizations, institutions, and institutions to innovations largely depends on such factors as the fact that leaders and teams are aware of the need for the development of the institution (organization, institution), their awareness of existing developments, criticality in the evaluation of the existing ones in the institution (organization, institution) of production, management systems and the quality of innovation assessment methods.

In every institution (organization, institution) there are categories of employees with a high level of receptivity to the new, but there are also specialists who can increase the level of receptivity to the new under the conditions of purposeful training (individual and group).

Among the possible forms of increasing the level of knowledge and skills: independent work, studying at advanced training courses, attending thematic seminars, trainings, consulting

specialists on certain issues. The disadvantage of these forms is that a large group of managers, employees of one institution, institution, organization cannot participate in them due to the need to carry out operational management, participation in the production process. From the point of view of formation of team and organizational values, development of collective search and decision-making skills, corporate training becomes important [36].

Corporate training can significantly increase the ability to generate ideas, show creative initiative, put forward original ideas; the ability to manage innovation as a process (make decisions in conditions of uncertainty, take financial and entrepreneurial risks, be able to overcome organizational and psychological difficulties); carry out information provision, analysis of the external environment and internal capabilities, etc. [28, 39, 40].

Among the approaches to the purposeful influence on the collective receptivity to the new, we pay attention to the one that allows us to identify and increase the level of favorability to the new in the activity (we mean active forms of training).

Active learning is widely characterized as a method of forming an innovative component of professional activity in institutions of higher education [39, 40]. Thus, Natalia Sofiy, Vira Kuzmenko consider active learning methods to be means of activating the educational and cognitive activity of students, which encourage them to intensively master the material [41].

Maryna Diachenko-Bohun interprets active learning methods as a set of measures aimed primarily at the possibility of teaching to think prospectively, non-traditionally, alternatively, at the development of the student's need for knowledge, the emergence of personal interest in the results of work, the formation of a creative approach to tasks [42]. Methods and forms of active learning developed on the examples of higher education institutions can be implemented in the organization of corporate training.

Active learning is based on the principle of the student's direct participation in the educational process, which is focused on finding ways and means of solving the problems studied in the educational course. For this, it is necessary that the educational process be an imitation of the environment in which future specialists work or will work, as well as ensure the formation of abilities for practical tasks, to change and improve the subject world where they live and work.

A high degree of flexibility and adaptability of active learning methods helps the teacher (trainer, speaker) to use them with equal effectiveness in the following cases: at the end of a lecture, story, conversation — as a practical justification of the relevance of the issue raised; in the introduction to a lecture, story, conversation — to formulate a practical problem to be solved; during the illustration of the theoretical provisions outlined in the content of the lecture; presentation of new material, when one part is communicated by the teacher monologue, and the other — using an active method; instead of a lecture, the topic of the lesson is revealed by using an active method.

In line with the analysis of this issue, Tetiana Vakhrusheva [43], Vershinina Galina [44] specify the tasks that are solved by introducing active methods into the process of training future specialists in innovation management:

- subordinate the learning process to the actions of the teacher (coach, speaker);
- ensure active participation in educational work of both trained and untrained participants;
- implement educational functions (consolidate theoretical knowledge; practice new techniques and methods; find out the conditions of application of acquired knowledge and practical skills; form methods of cognition and activity, self-development and self-realization);
- perform management functions (work out the management system and its functions: organization, planning, accounting, control, analysis, coordination, regulation, etc. to implement the strategy of innovative development; forecast the development of the institution, organization, institution; solve the problem situation, etc.);
- implement research functions master the management decision-making algorithm (identifying a problem, setting a task, finding ways to solve a problem, etc.);
  - establish direct control over the process of assimilation of educational material.

The author's experience allows us to talk about the use of a whole complex of active methods of organizing the educational process, including business, role-playing and didactic games.

Active methods of organizing the educational process during the assimilation of new knowledge, techniques, methods of work significantly reduce the pressure of stereotypes formed in the professional sphere, since new techniques do not compete with old ones, but are included in other conditions and when solving other tasks [24, 35].

With the help of active methods of organizing the educational process, the barriers of communication and perception of the participants (age, gender, etc.) are overcome. An important role is played by the motivation and mood of the learner, as well as the organization of the educational process.

The use of active methods in the organization of corporate training determines the expenditure of additional efforts by the manager (institution, organization, institution) to solve management tasks and develop a strategy. If this does not happen, then it "slips" to the repeated traditional path.

Among the modern management models and technologies that allow creating a management team receptive to innovations and achieving a stable positive result, Anna Peretiatko singles out the following:

- model of decision-making in conditions of uncertainty sequence of actions of members of the management team: from information analysis; on the development of criteria for comparing alternatives; from the selection of the optimal decision option;
- mechanisms for the formation of managerial will practical methods aimed at filling the "will deficit" of the head of an institution, institution, organization, the application of which allows you to manage their development;
- responsibility distribution matrix and process-job matrix an approach to the structuring of functions and job duties, which is aimed at the optimal distribution of responsibilities between managers and specialists and promotes the concentration of attention on the results of the activities of the institution, institution, organization to meet the needs of the end user of goods and services;

- the algorithm for creating a management system a sequence of steps for creating a system order regarding the management functions of an institution, institution, organization;
- project and program portfolio management a strategic project management tool that allows timely management decisions regarding the initiation, suspension or closure of projects and programs;
- method of scenarios for implementing changes a method of planning and organizing events that allows you to quickly implement changes in the activities of an educational institution, avoiding the loss of resources and time, and others [41].

It is important to master the methods of collective search for ideas. Among such methods are: brainstorming, brainwriting, metaplan, or moderating method, collective notebook method, CNB-method, method 635. These methods are characterized by the fact that during a conversation/meeting or discussion, the participants within a clearly defined time, they present their ideas or even just concepts and words according to the given topic. After that, an analysis and analysis of all expressed ideas and decisions is made.

Wide use of various methods of group dynamics, collective search for ideas allows members of the management team, the organization as a whole, to develop tolerance, respect for the opinions of colleagues, the ability to listen and hear and achieve a synergistic effect, when the overall result significantly exceeds the achievements of team members using traditional methods (working meetings, meetings of methodological commissions, etc.).

That is why traditional business trainings aimed at any audience are dying out. Coaching learning technologies are taking their place. With the help of individual and group coaching, you can quickly identify the need, moderate the finding of their solutions. Individually created training programs for the requests identified in this way are becoming more and more widespread. Business trainings of a new generation, business sessions, master classes, created specifically for the problems and requests of employees.

We will give several examples of the transformation of outdated training methods into new forms of work with personnel:

Example 1. The technology of using metaphorical associative coaching cards, which allows you to quickly teach applied coaching. This technology is applied in nature, in contrast to traditional coaching with its fuzzy psychotherapeutic reflections.

Example 2. Team building trainings should go into the field of group coaching, into a team style of management, which involves a clear step-by-step implementation. The formation of the team should be measurable according to the identified criteria. And such a test that changes the level of team development has already been created. It is called "Assessment of the potential of the team" and is carried out at the initial stage of working with the team and after interventions for its development. It gives the business real performance indicators, simplifies the process of building teams and makes it technologically understandable. Today, team building trainings are focused on the organization of corporate holidays, which are emotional, but technologically blurred, and their results cannot be transferred to business.

Example 3. Corporate trainings should be transformed into a workshop on finding better ways to solve business issues. For example, creative workers should be united in creative teams, which will aim to find better experience in solving problems in the professional field.

That is, corporate training should become accessible and technological. Training should simplify and reduce the risks of employees in the implementation of difficult tasks and the achievement of ambitious goals of the company, institution, organization. Employees acquire skills at the workplace, in the mode of communication with managers. Corporate trainings, trainings for managers should not replace the work of managers with employees. They should supplement it in those areas where employees cannot receive ready-made solutions directly from the manager, for any reason. Such corporate training, in our opinion, is valuable not only for employees, but also for managers. Thus, the trends of modern corporate training on the development of receptivity to the new are closely related to innovative processes, business development trends.

Comprehensively, all the above-mentioned means of development of receptivity to the new are applied in the innovative business game. An innovative business game is a kind of system of reproduction of management processes that took place in the past, are happening now and are possible in the future.

Understanding the importance of an innovative business game in the development of receptivity to the new is difficult to overestimate. It is necessary to understand this method as an implementation of the dialogic principle in corporate training. The game simulates one or another aspect of professional activity, activity of an organization, company, or institution. Game participants are given roles that determine the difference in their professional interests and incentives. Game actions are regulated by a system of rules.

In the business game, the spatio-temporal characteristics of the simulated activity are transformed. The game is conditional.

The contour of the regulation of the game consists of the following blocks:

- conceptual;
- scenario:
- production;
- stage;
- block of criticism and reflection:
- referee:
- block of providing information.

The qualification of the innovative business game is carried out according to the simulated object — there is a general management and functional game (simulation of production, management, financial activities).

The goals of the game are consistent with the practical needs of its participants. The organization of an innovative business game removes the contradiction between the abstract nature of the game process and the real nature of professional activity. The method allows you to combine a wide coverage of problems and the depth of their understanding.

The game form corresponds to the logic of activity, includes a moment of social interaction, prepares for professional communication; promotes greater involvement of participants in the problems of the institution, organization, company, institution in the conditions of innovative changes; in the game, professional attitudes are formed, stereotypes are easily overcome, and self-esteem is adjusted.

In combination with the dominance of the intellectual sphere, the personality of the participants is manifested in the business game. The business innovation game provokes the inclusion of reflexive processes, provides an opportunity to interpret and understand the obtained results, contributes to the formation of internal motivation for innovative changes and the achievement of successful results in reality. During the construction of the game, the organization of the joint activity of the players, which has the character of role-based interaction in accordance with the rules and norms, is assumed.

Achieving the goal occurs by making group and individual decisions [26].

The content can be a phenomenon to which there are many approaches (theoretical and practical), due to different semantic positions of the participants. The fabric of the event should represent a constant clash of interests of the game participants. The game is built as a hidden dialogue of meanings.

The situation should imply the ambiguity of decisions, contain an element of uncertainty, which ensures the problematic nature of the game and the personal expression of the players. Direct formulation of the problem or pointing to it is inadmissible. At the same time, rules and norms are formulated unambiguously and unconditionally.

In the context of the game, there are opportunities for each player to make a decision and ensure that the participants are aware of it. To implement the procedure of the innovative business game, a package of documents containing the rules of the game and instructions for using certain management tools to implement the procedure, as well as forms and forms of the proposed technologies, is being developed:

- Stage 1. Brain storm.
- Stage 2. Analysis of the external environment (STEP-analysis).
- Stage 3. Internal environment analysis (SWOT-analysis).
- Stage 4. Summary analysis of the organization's environment (SPACE-analysis).
- Stage 5. Building a problem tree (Future technology Search).
- Stage 6. Algorithm for developing an innovative project based on a selected issue for teamwork.

Informational material on the issues of the business game, features of the external and internal environment of the institution, organization, company, institution, as well as statistical material is offered. To facilitate the development and conduct of the game, as well as the learning of the rules by the participants, despite the conditions of teamwork, it is desirable to focus each package of documents on a specific player.

The game should reflect the most significant factors of the educational institution's work, well-thought-out incentives to ensure the involvement of participants. The game procedure provides

for repeated feedback after each stage with the performance of the team members. It reproduces the development of the system as a result of the decision made and clearly differentiates the participants.

The game has a clear sequence of actions, is dramatized by the creation of a certain tension and the problem of the effective existence of the organization in the external environment in the conditions of external competition.

#### 5.5 MEANS OF COLLECTING PROPOSALS FROM EMPLOYEES IN THE IDEA MANAGEMENT SYSTEM

The key resources of any organization are employees and their competencies — those that are used according to functional tasks, and those that are hidden, not actualized. Functional and potential knowledge, abilities and skills are assets that must be systematically managed to increase the effectiveness of the organization's development. Today, the greatest achievements in the development of organizations, institutions, and institutions are associated not with technological, but rather with organizational and management innovations, as evidenced by such new paradigms as "open innovation" and "global sourcing" (sourcing). In particular, the paradigm of "open innovation" allows to attract unique intra-organizational knowledge and experience and combine it with external information to the advantage of each individual institution, as this will reduce the time to implement a large number of innovations.

The opinion of Kenneth Rosenfeld and Jenny Servo — consultants on innovation management of the Kodak company (1984) is quite well-known that the failure of large corporations to use innovative ideas is mainly due to the lack of an internal communication system, rather than to a decline in the ingenuity of employees. A tool that, in our opinion, is not used today for the development of organizations, institutions, and institutions is the idea management system.

Features of "intellectual management" are revealed by Aleksey Eremin; stages of the idea management process — Nikolay Sushko, Dmitriy Homutskiy; Ruslan Dolzhenko, Konstantin Ozerov, Azat Sadriev, Nataliia Sas, Yuriy Smirnov reveal separate means of collecting ideas in the organization, the experience of their use. The issue of means of collecting proposals from employees in the idea management system is of interest.

According to the theory of intellectual systems, Aleksey Eremin proposes to introduce the concept of "intellectual management" (management of the macro-society and its subsystems: nano-, micro-, millisocieties), the features of which are the realization of characteristics and functions characteristic of intellectual systems (autonomy, fractality, hierarchy, dissipativeness, heredity and memory, coherence, bipolar asymmetry, synergy). The defining feature of the intellectual approach, in contrast to the systemic and situational approach, is the consideration of features characteristic only for intellectual systems — "intellectual reflection" and "informational instinct", which form the dominant intellectual systems with their objective advantage — a better ability to adapt to the environment, due to the property of active reflection of objective reality. The goals

of a person, nano-, micro-, millisocieties can contribute to the formation of a strategy of behavior and management [45].

The idea management system, according to Nikolay Sushko, consists of the following stages: collection of ideas; rating; refinement; implementation [48].

Dmitriy Homutskiy imagines the process of managing ideas as follows:

- the birth of an idea:
- formation of the primary pool;
- development and enrichment of the idea;
- management assessment;
- selection of business ideas that have practical value for a specific organization [49].

In our opinion, the full cycle of idea management looks like this:

- the birth of an idea:
- formation of the primary pool;
- development and enrichment of the idea;
- management assessment;
- selection of business ideas that have practical value for a specific organization;
- refinement:
- implementation.

It is clear that each stage, in turn, can be decomposed and instrumented according to the specifics of the organization, institution, institution.

The main thing that the system of receiving and evaluating ideas will give to the organization, institution, institution is directly the proposals themselves. The ideas of employees to improve the work of the organization, institution, institution will allow to improve technological and marketing processes, and introduce innovations. In addition, working with ideas is important for employee motivation (employees understand that management listens to their opinion; a system of possible bonuses for authors of supported ideas will stimulate employee creativity).

In our opinion, the conditions for the success of the idea management system are as follows:

- mutual recognition of the capabilities and contributions of each employee;
- free expression of one's own opinion by each employee without fear of being punished, exchange of ideas without obstacles within the organization (between top leaders, managers, employees, consumers, partners and suppliers);
- use of various communication systems for informal communication (constant meetings, exchange of messages, thoughts, considerations);
- management of ideas is clearly managed, but not programmed, it arises on the basis of a common interest or a topic that unites people and determines their desire to actively contribute to their development.

In any idea management system, the means of their collection are important. The most used are the "box for ideas and suggestions"; kaizen – proposals; automated means. In the pre-digital era, suggestions were collected using an "idea and suggestion box" in which the author placed

an idea laid out on paper. Such boxes were located in each division (department or workshop) of the enterprise.

Using the box of ideas as a means of collecting them revealed the following limitations (the very principle of such a system is not transparent):

- the author cannot follow the full cycle of consideration of an idea (ideas can be lost or stolen, it is difficult to analyze their flow, it is difficult to give feedback to the authors);
- the effectiveness of the procedures for selection and examination of employee proposals began to decrease more and more due to the increasing complexity of ensuring objectivity and competence in their implementation;
- the proposal box was deprived of the possibility of public discussion of ideas by the entire company team and their prompt implementation by individual interested employees;
- the lack of information about the results of the assessment and the implementation of the proposed proposals affected the motivation of the authors' further creative activity.

In the system of kaizen proposals, the main emphasis is not on individual creativity, but on collective work within the framework of continuous improvement teams (so-called "quality circles", which unite employees of individual units in informal groups). The disadvantage of such a means of gathering ideas and suggestions is the difficulty of using them for the development of major product innovations. However, this shortcoming is overcome in the process of creating special venture teams and idea incubators, whose professional participants are clearly focused on the search for promising, first of all, breakthrough ideas in the organization, their implementation as soon as possible and the promotion of the obtained results to the market [49].

The growing complexity of managing ideas in companies led to the emergence and wide distribution of special software products [50]. All the variety of these software products can be divided into four main groups.

The first group unites programs of centralized automated systems such as: "exchange of ideas", "single window of innovations", "information incubator of innovative ideas". It allows all employees to register as acquirers, independent experts, submit proposals without sending a package of documents on paper, send proposals for examination, monitor the current state of the proposal [51]. The specificity of these programs, which consists in the fact that their use is carried out in the mode of remote access, during which the user, without physically owning the program, can implement only its functionality, refers these programs to the number of so-called "Cloud Services"

The second group combines programs based on the use of the social rating method, which involves public discussion of submitted proposals, their evaluation and ranking depending on the results of the voting. The capabilities of the programs of this group allow you to single out the most important and interesting ideas and, giving them the appropriate rating, make their implementation a higher priority.

The third group of programs is based on the selection of ideas with the help of trading on the so-called prediction markets, designed to create forecasts of various topics and obtain informa-

tion based on them about, for example, changes in consumer values and market expectations. The general ideology of building software that works with prediction markets is to develop a resource with the help of which participants' bets are accepted regarding the occurrence of this or that event [45].

The fourth group of programs work as innovative platforms that provide their users with access to functions for organizing brainstorming, holding meetings, meetings of closed groups, access to various databases, etc.

Important, in our opinion, is Nikolay Sushko's conclusion that when using a business process management system (in which the management of ideas itself becomes one of the company's business processes), a separate product for managing ideas becomes unnecessary. Any employee can easily offer something. The initiator simply submits an application, it automatically goes to the manager or employee responsible for analyzing ideas. At the stage of collection, the idea can also be clarified if some nuances are unclear [48].

Information systems for idea management — software products that allow employees to make suggestions and management to systematically receive and work with them — are much easier to use. However, they are not without limiting characteristics. In particular, not all employees have access to a computer; not everyone has electronic programs for creating drawings or diagrams with detailed explanations. This requires additional training of personnel [50].

The analysis of the experience of using the considered means of collecting ideas made it possible to identify a number of factors that prevent the active involvement of employees in the innovation process (regardless of the means of collecting ideas).

#### They include:

- low awareness of employees;
- complex application submission and processing procedure;
- a long period of consideration of applications;
- lack of access to professional consultations;
- $\, \mbox{fear}$  of refusal to consider applications, fear of criticism;
- low involvement of business units at the stage of selection and evaluation of offers;
- insufficient motivation of employees to implement innovations;
- insufficient level of innovative culture at the enterprise, organization, institution;
- lack of an effective control mechanism for the implementation of proposals;
- difficulties in assessing the economic effect of innovations.

#### CONCLUSIONS

Thus, the authors substantiated the relevance of the given topic, defined the concept of the phenomenon of *receptivity to the new* as the ability of an individual to perceive the signs of the new (future) and to be guided by the formed idea (consciously or unconsciously) in its practical activity;

as the degree of relative advance by the individual of other members of its social system in the perception of new ideas, phenomena, discoveries that will determine the future.

The classification features were singled out and the author's classification of receptivity to the new was concluded. The divisive (generic) concepts of the classification of the definition of receptivity to the new are defined as follows:

- form of knowledge of reality;
- leading aspects of the perceived object;
- dominant feelings;
- field of activity;
- components of the subject's experience;
- cognitive-emotional processes;
- environment of selected information:
- hierarchical level of the management entity.

The following features of a personality receptive to the new are presented:

- an active attitude to the future, "attraction of the future factor";
- a critical attitude to the past, which "takes" with it everything that contributes to the exit from the crisis, further development;
  - flexibility and mobility, readiness to take risks;
  - ability to self-organize;
  - ability to change in response to external challenges.

Individual and group receptivity to the new and means of their development are characterized; creation of an internal organizational climate stimulating the development of receptivity to the new.

We see a perspective in further clarification of classification features, characteristics of typologies of receptivity to the new, research of factors that promote or inhibit the development of receptivity to the new. Among the promising tasks are the research of issues related to the development of receptivity to the new, the development of diagnostic tools and conducting experimental work.

#### CONFLICT OF INTEREST

The authors declare that they have no conflict of interest in relation to this research, whether financial, personal, authorship or otherwise, that could affect the research and its results presented in this paper.

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