

ІННОВАЦІЙНЕ ПІДПРИЄМНИЦТВО ТА ІНВЕСТИЦІЙНА ПРИВАБЛИВІСТЬ

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MANAGEMENT OF CREATION OF INNOVATIVE VALUES: COLLABORATIVE PARADIGM

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АНОТАЦІЯ. Адекватна рефлексія властивостей і характеристик створюваних інноваційних цінностей не завжди здійснена в умовах закритого аксіогенезу, що зумовлює появу аксіологічного дисонансу, як реакції суб'єктів споживання на інноваційний об'єкт, який не відповідає очікуванням ринку. Ресурси для подолання зазначеного дисонансу не завжди зосереджені у внутрішньому середовищі підприємства. Метою статті є обґрунтування методологічних положень конвергенції інноваційної системи підприємства і ринку, за допомогою відкриття окремих етапів процесу створення цінності для інноваційно-активних суб'єктів зовнішнього середовища (споживачі, дилери, постачальники і т.д.). Подібна конвергенція творчих зусиль суб'єктів створення і суб'єктів споживання цінності дозволить наповнити об'єкт актуальними властивостями і через знаходження параметрів порядку детермінувати ринкові тренди.

КЛЮЧОВІ СЛОВА: аутопоез, аксіогенез, співпраця, коеволуція, проліферація, полісуб'єктивність, вартість.

ANNOTATION. Adequate reflection of properties and characteristics in created innovative values are not always feasible in terms of the private axiogenesis, which causes the appearance of axiological dissonance as reactions of the subjects of consumption on an innovative object that does not correspond to the expectations of the market. Resources for the overcoming of specified dissonance are not always focused on the internal company environment. The purpose of the article is substantiation of the methodological guidelines for convergence innovation system of the enterprise and the market, through the opening of the individual stages of the process of creating value to innovative and active subjects of the external environment (consumers, dealers, suppliers, etc.). This convergence of the creative efforts of the subjects of creation and subjects of consumption of values will enable actors to fill the object with actual properties and through the finding of order options determine market trends.

KEY WORDS: autopoiesis, axiogenesis, collaboration, co-evolution, proliferation, polysubjectivity, value.

The traditional linear paradigm of innovation development, implying the movement of innovative values along the chain of "science-technology-production", along with the classic approach to scientific rationality, eliminating the subject of the learning process, in practice, demonstrate the limitations of their own epistemic positions, which requires the development of fundamentally different knowledge of optics that allow you to focus on the factors providing consistency of the generated value with basic market needs. Analysis of the causes specified mismatch lets you select a whole series of social transformations to which most of the enterprises in post-socialist space are grown largely indifferent. Let us turn our attention to some of them, to clearly manifest the relevance of designated subjects. The formation of society of increasing reflection, the intensification of development processes by the diffusion of information and communication technologies, providing unprecedented in the history of mankind the ability to integrate disparate subjects until then, leads to various innovation-oriented communities, implementing the collaborative filtration of created values and thus troubleshooting dominant information asymmetry between the spheres of production and consumption. Because of the implementation of such activities going on crystallization of new subjects of consumption, comparable to the degree of cognitive perfection with the subjects of science and engineering, but superior in

ideological diversity and understanding of evolutionary market trends, because of their large, heterogeneous knowledge and experience, as well as focusing on different areas of activity. Ignoring these changes can leave it on the side of the main ways of modern innovative axiogenesis.

The purpose of the article is the formation of methodological basis of the functioning of environments of co-creating of innovative values which congruent to complexity and uncertainty of market processes for the ensurance of consonant axiogenesis, oriented on the satisfaction of consumers.

The study of nature of poly subjective environments of joint value creation [1] allows us to draw parallels with the key concept of synergetic, as "autopoiesis", imported from neurobiology (H. Maturana, F. Varela [4; 5]) and the theory of media communication (N. Luman [3]). The idea of autopoiesis was presented in the work of H. Maturana as philosophical synthesis of neurophysiological observations, which defined the autopoietic system as "system, which, as a unit, defined as network components, which are (1) recursively, through their interaction, generate and implement network that produces them; and (2) constitute, in the space of its existence, the boundaries of these networks as components that participate in the network" [7, p. 21]. N. Luman began to use the term in the aspect of communication processes and defined it as "a system which reproduces all its elementary parts using the same existing network elements and thus are delimited from environment" [3, p. 11], that allows us to define autopoiesis and axiogenesis as a way of self-reproduction through the system. The mechanism that converts systems in autonomous unities, manifests itself through autopoiesis: the system is autonomous if it sets its own appropriate laws. We argue that the mechanism turns creatures into the autonomous system is autopoiesis. This is what characterizes them as autonomous systems" [4, s. 42]. The poly subjective environment of joint value creation is an autonomous system, establishing standards and benchmarks on their own co-creation, synthesizing their components from the environment, including external innovation and active actors, as a source

of new images and meanings for sustain of autopoiesis of collaborative axiogenesis.

In addition, external innovative and active subjects depending on their interests and needs, make a choice of one or the other poly subject of joint axiogenesis as reflexive-axiological platforms for self-expression. Actors, at their discretion, can seamlessly integrate into the poly subject and disintegrate from it.

Existential meaning of poly subject co-creation environments is a representation of subjective values of its constituent actors, through the creation of object values in which properties the collective axiology is reflected. Poly subject generates semantic orientation of private communication, representing those or other values and needs of the subject. Because of autopoiesis of poly subjective axiogenesis due to communicative acts is the formation of the image of the object as a carrier of integral properties and characteristics that reflect the collective interests and needs of the actors involved in the joint axiogenesis. Thus, poly subject organizes not only its own structure and its own representation but also the interests and needs of actors in the process of co-creation.

It should be noted that impacts on the poly subjective environment by the external environment create just the impetus for the beginning of the process of change. The external environment could only encourage the poly subject to choose any trajectories, but only in the poly subject, this impulse can be transformed or not into information that will be used in the process of axiogenesis. According to H. Maturana and F. Varela "interactions (as long as they recurrent) between the unity and the environment consist of mutual perturbations. In this kind of interactions, the structure of environment only starts the structural changes in the autopoiesis unities (but does not define them), and vice versa, the structural changes in the autopoiesis unities cause structural changes in the environment. As a result, we get the story of mutual congruent structural changes, continuing until as long as autopoiesis unity and surrounding environment did not disintegrate: structural coupling occurs [4, p. 67-68]. According to R. Vitakera, "changes in the environment can only cause the environment to change the State of a system but

does not define it, it defines its own organization and structure of the system" [2]. Thus, external factors and the impacts just only run the changes in autopoiesis systems, but do not define their structural changes and do not manage them. It legitimizes the thesis of not applicable to poly subjective environments joint axiogenesis cyber schemes of the operating system.

The main distinctive characteristic of autopoiesis structures is their organization, which raises as the quality of their own product, without the division of manufacturer and product. Neurobiologists H. Maturana and F. Varela used the notion of "autopoiesis machines" when describing the key property of a live system - is a continuous regeneration and support of their own identity. Unlike the "autopoiesis machine" the allopoietic machine builds organized structures, which is something other than herself [4].

The traditional process of private axiogenesis used within the enterprise is an example of an allopoietic machine, focused on creating innovative values, materialized the needs of others, based on incomplete information about its required properties. In contrast, autopoiesis structure can restore the ties damaged by external influence, as reflected on the subjective level in actions on the improvement of an object or his "reinvention" directly by his consumer. Consumers know about shortcomings of objects and can restore the integrity of the object with the least expenses, through the improvement of their structure. The integration of innovative and active consumers within the poly subjective environments of the joint value creation allows us to create autopoiesis system that can comprehensively coordinate orientation of processes of axiogenesis of enterprises, based on their own views about the properties and characteristics of the created objects, which focus on specific conditions of functioning. This process allows for the subject of managing fix a number of reasons, which describes low effectiveness of R&D that is inherent in the private axiogenesis, among which: the generation of "empty" object properties (increase the price of products, but not its value to the end user); leveling low adaptation to the operation of the facility; an increase in the level of consonant object by its approximation to the master image

of value; Tuning characteristics of an object under significant consumer psychological and ergonomic requirements, etc.

Transformation of management technologies in social and humanitarian directions led to the shift in management from normative to behavioral accents. As a part of the process of value creation, functioning in accordance with the normative approach, it is assumed that the subjects of science and engineering, driven by scientific and technological advances and their own pro-innovativeness generate "ideal" products not requiring its improvements. In this view of the subjects of science and engineering on the needs and expectations of end users, usually obtained from the subjects of marketing activity by reports, which appear in the form of special knowledge. However, as the process of private axiogenesis in general and marketing function are structurally undetermined relatively to the authentic market trends. R. Whitaker defines structural determination, as the principle, the direction of change of the system of pooling is controlled by its structure (the combination of the different components, the individual and synergistic properties within the established order of which they constitute the system) instead of the direct environmental impact of its environment"[2].

The main conclusion from this principle for processes of private axiogenesis -opportunities for value creation process is limited by its Constitution. In the aspect of traditional axiogenesis, a structural determination should not be a strict causal determination, in which the establishment of a consonant values is impossible. However, cognitive space for effective axiogenesis is significantly limited. Pole subject axiogenesis do not create the concept of the object that represents its greatest value, but describes the range of necessary changes through which the object can evolve without losing its functionally-trust identity. According to R. Vitaker, "Structural determination does not restrict the set of interactions in which the system can participate- it is only the set that the system supervises itself" [2]. As noted by H. Maturana: If the living system starts to participate in interactions, not prescribed by her organization, she participates as a unit of interactions defined by their organization... and this interaction remains

outside its area of cognitive [6, p. 11]. This position is key in the understanding of the limitations of the process of private axiogenesis. Subjects of engineering and science, billing themselves as "external observers" in relation to market trends, can adequately reflect consumer images only when they cross the field of research and their own subjective values. In addition, behavioral surveillance of subjects of private axiogenesis in this "crossing zone" may be interpreted incorrectly or may not be meaningful in relation to the values of consumers that will lead to the creation of dissonant values.

In the context of obtained knowledge about the consumers' requirements to the created value, it should be noted that their interpretation by the subjects of axiogenesis can have infinite split, often incomprehensible entity in relation to its original meaning, which laid by the carriers of needs. This is partly explaining the low effectiveness of R&D, due to the complexity of the process of interpretation of derived constructs, when combined with the complexity of the products. It initiates a review of the number of possible combinations of the desired properties of the generated values, which tends to infinity. In this aspect abstract constructs of knowledge about an object, because of marketing researches, are opposite to specific properties and characteristics which are assumed by a respondent is unable to express them in verbal form, more accessible for adequate perception and interpretation of the researcher. Therefore, the effectiveness of results of axiogenesis based on marketing information buffers has probabilistic nature. Results, which gathering and transmitting in the system of value creation the consumer's pseudo-claims, embodied in the form of an add-in constructs of knowledge, towering over the dynamically changing reality. According to the author, only at the intersection of heterarchical consumer and research environments may occur reflexive-axiological field in which created objects will deploy their consonant structure.

Explicating the idea of autopoiesis in collaborative axiogenesis cutaway, you can make the following assumption: everything that happens in the autopoiesis system, such as the poly subjective environment of joint value creation, is the

expression of the properties of the system that responds to external disturbances in intrinsic to its way. This idea eliminates the traditional idea of a private process of axiogenesis which is capable of perceiving information images of values through marketing activities. Autopoiesis concept is fundamentally incompatible with the information model of cognition. In this regard, H. Maturana said: "... We must not fall into the trap of doom that is coming to suggest that the nervous system operates with images of the world. This is really a trap, because such an assumption dazzles us, making it impossible to realize that the nervous system is functioning all the time as a specific, operationally closed system" [4, p. 118].

The concept of autopoiesis axiogenesis asks the epistemological frameworks within which possible explanation of many non-trivial phenomena of innovation enterprises. Traditional marketing Diagnostics of the image of object value involves a researcher consumer survey (respondent). The survey usually does not involve determining the level of involvement of the respondent in the investigation, his motivation, and awareness, not to mention the fact that often the rationalization as a tool of consciousness generates answers unrelated to the true intentions and actions. Denying the metaphor of communication channel, H. Maturana said: "... from the point of view of biology in communication does not exist "transmitted information". This metaphor is fundamentally wrong. ... Even in everyday life, the situation with communication is different: everyone says that says or hears what he hears, in accordance with its own structural determination. From the point of view of an observer in communicative interaction, there is always uncertainty. The phenomenon of communication does not depend on what is communicated, and from what happens to those who passed, and it takes something very, very different from "transmitted information" [4, p. 173]. Therefore, effective communication is determined by the structural determination of the subject and requires special methodological efforts supporting the coordination of structural coupling behavior of autopoiesis systems of the respondent and researcher.

Traditionally intersubjective communication is presented as information transfer on certain channels. This view suggests that "information" is a quantum product and shifts the point of view of interacting to the assumed commerce in this product space [2]. According to H. Maturana, such an approach is based on the "denotative system of symbolic communication, composed of words that denote an entity without a scope in which these entities may exist" [5, p. 50]. Marketing diagnostics, which is implemented overlooks the fact that "Designation... requires the consensus on specifications of tile and labeled "[5, p. 50]. Because the commodity space of quantum "information" is not set on the structure of the respondent (s), focusing on issues of form, which generates the first level of distortion in the process of diagnostics of the image of innovative value. At the second level, associated with the interpretation of the subject of private axiogenesis, data distortions are amplified, which eventually materializes in unclaimed properties of the object.

The main challenge in portraying the innovation value is not the transfer of information, through a marketing function, but "co-adaptation" and "co-thinking" of subjects of axiogenesis and consumption inside poly subjective environment of joint creation, arising because of their interaction. "Communication" becomes a way of mutual orientation of research subjects and subjects of consumption, starting with the possibilities and needs of each other and secondary relative to the object being created, but through elementary orientation.

The Work of G. Spencer-Brown reveals the mechanism of interaction of observer with the surrounding environment, under which the basic operation is the distinction [8]. The concept of "object" and "subject" are replaced by "the observer", which has only the ability to produce distinction by which reality is converted into personal meanings. The initial state author refers to as "nothing," which where the distinction is. The observer can discern just what the label is supplied, the lack of tags leaves consciousness indifferent to the difference, it does not exist in the mind. The tool of the form is a "blind spot", unavailable for monitoring. What we call "meaning", G. Spencer-Brown refers to as "spontaneous

communication mechanism of past decisions and present, which means as a self-construction structures of something" [8]. This self-selection of elements during self-construction was named as autopoiesis.

Acts of thinking produce meaning, creating it from the set of signals of homogeneous reality, in which the entity makes the distinction and launches the mechanism of construction of meanings. The coherence of decisions enables to make a collaborative community, which can be determined by the resonance of the differentiate systems, thus forming the axiological common subjects of co-creation. In Modern cognitive approaches, this interaction is described, according to R. Vitaker, as "semantic pairing. It is the process by which each of the observed calculates the appropriate state based on the informative sign from another" [2].

The poly subjective environment of joint value creation provides interaction of actors, with the requisite level of structural determination, which forms an intersystem complex that helps increase cognitive field, specifying a range of necessary structural transformations of object values. Actors launch a dynamic process in which all objects of knowledge are translated into a synergistic image of values, by placing due to poly subjective environments of joint value creation their cognitive-affective system in the reflexive-axiological field. Thus, the transformation of the explicit and implicit knowledge of the subject in a detailed image of the values is carried out. This allows to conclude that objects of knowledge are perceived by the subject is no longer in the paradigm of exclusion but in its own enhancing entity paradigm. In this case, the subject's requirements that built into the poly subjective environment of joint value creation presented as acts of communication, in which the need is objectified in a specific manner of innovative value. Representation serves as a desire of replenishing for shortage completeness of properties in already operated or conceptual object. In the poly subjective environment of joint value creation, the attributive chains crystallize which represents the dissatisfaction of consumer and determines the direction of the vector of needs. The process of axiogenesis at the stage of idea generation acquires focus on unanticipated free reflection by potential mapping of object

properties of permanent values and needs of the subject which are hiding in the infinity of his unconscious. The effects of perceived lack of completeness of object property values, which brings the subject which is involved in the process of joint axiogenesis for such action sequences triggered. This allows to reflect and actualize their own interests and needs, recreating the integral image of innovative values and identities.

Thus, collaborative axiogenesis is understood as targeting important consumer characteristics and properties of the object. The relationship between the existing scientific and technical capacities and needs is the relationship between contingent continuum and its sequencing configuration. The existence of various axiological codifications of consumers does not allow speaking about the possibility of the existence of some universal value which created in isolation from the exploitation of the object values where current needs forms. Axiogenesis should be placed in the collaborative field, which through communicative convention can form the consonant image of innovative values, satisfying consumer requirements and appropriate scientific and technical capacities of the enterprise. Interaction within the poly subjective environment leads to double axiological result: 1) creating of the holistic image of a relevant object value; 2) forming the axiological context within which a multi-level social assessment of the impact of a newly created object to the various spheres of life is carried out. Value creation process is more likely to scan the various aspects of the functioning of the generated values and identify its contradictory characteristics that require its permission and reflection in the properties of the image of the innovation.

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