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Resource methodology of institutional management of organizational reforms in the catastrophe theory

Abstract: Fundamental changes in the government structure and sectors of the national economy of the USSR and the Russian Federation in the 1980-2000s showed an extreme lack of scientific knowledge on managing reforms of economic entities in the transition economy. The reforms are intended to establish a new level of regulatory management of the entire set of industry objects and require an appropriate institutional management infrastructure. This work examines the problems of interaction between airlines, national aviation administrations, international institutions - associations in research, standardization and regulation. The solution to the problem is proposed in the direction of resource methodology in the interpretation of the theory of disasters.

Keywords: organizational reforms, institutional management, standardization and regulation, catastrophe theory

Introduction

The relevance of the topic is determined by the following questions, which are not clear in known studies. (1) The role of institutionalization in the specific activities of an organization - a corporation, a business enterprise. (2) The method of formation and emergence of the institution and participants dependent on the IS. (3) The role of institutions in organizational changes (reforms). (4) Mutual responsibility of institutions and members in rule-making and implementation of regulatory and management standards. The solution to the problems of the theory of institutional management of organizational reforms is proposed below. To formulate the problem, the content of the catastrophe theory (V.I. Arnold [1]), the theory of morphogenesis (Rene Tom (1923-2002), the institutional economics is used - the rules of

interaction between the economy and society (Ronald Coase, Douglas North [2]). Institutional management consists of “reducing uncertainty, creating order in society” [2], “targeted influence on the restrictions and norms of activity of participants in organizational systems” (D.A. Novikov [3]). This work is considered as a norm-forming environment intended and necessary for: a) theoretical research and applied *developments*, b) normative regulation and standardization of activities. Theoretical issues of organizational change are explored.

Task statement

The rules of interaction between the economy and society are formulated in the following content: A) informal cultural norms - codes, rules of conduct, traditions, customs; B) formal limiting norms - constitutions, laws, treaties, standards; C) compulsory - police, court, penitentiary departments. This paper examines the formulation and solution of problems (A) - establishing normative restrictions on the preferences of members of institutions through the development and introduction by institutions of codes of professional conduct (CPC) and (B) - normative regulation and standardization of activities. The following definition is introduced. *Institutional management* (IM) is defined as the normative regulation by institutions of the activities of organizational entities (individual or legal entity).

The subsequent solution to the problem includes: a) comparing the actions of a member of the institute and the compliance of these actions with a finite number of CPT norms, b) establishing the economic benefits (reason for existence) of a member of the institute and the absence of such (a mandatory condition of the Charter) of the institute itself. Condition (b) also considers that ethical standards of behavior are axiologically accepted above other behavioral preferences.

Axiomatics of reforms in the catastrophe theory

Let it be any object of socio-economic purpose. In the evolution of an object (system), the concept of “resources-time” in the mapping of logistic S-shaped functions is known. The characteristics of object changes appear depending on resource states. Changes in surfaces in the theory of singularities occur abruptly, which is called a catastrophe in the theory of catastrophes. Resource changes of an object are manifested in the structural asymmetry of S-shaped functions as a condition of stability

and equilibrium. An alphabet has been compiled and the axiomatics of organizational changes (reforms) are formulated as a variant of the mathematical catastrophe theory [1] as revised by the author of this work. Let objects be observed in changes in resource states.

Alphabet:

Objects - $[W], w_i \in W..$ Object movement in changes: $\downarrow w_i | c_i.$

Resources - $[R], r_i \in R.$ Resource by state conditions: $\downarrow r_i | s_i.$

Changes $-[C], c_i \in C;$ type: c_1 – transitional, c_2 – transformative, c_2 – reforming

Changes according to resource conditions: $\downarrow c_i | r_i.$

States - $[S], s_i \in S;$ s_1 - the bad, s_2 - the worst, s_3 - the most worst, s_4 – the best.

Axioms:

The transition of an object from a bad state (s_1) to a better state (s_4) is possible only through the worst (s_2) and the most worst (s_3):

$\forall C: (s_1 \rightarrow s_4) \Leftrightarrow s_1 | (s_2 \rightarrow s_3) \rightarrow s_4.$

Movement from a bad (s_1) to a better state (s_4) immediately leads to a deterioration, to a worse state (s_2):

$\exists! C: (s_1 \rightarrow s_4) \rightarrow s_2.$

When moving towards a worse state (s_2), the rate of deterioration increases and the resistance to system changes increases:

$\forall C: \leftarrow (s_1 \rightarrow s_2) | r_i.$

The maximum resistance occurs in the worst state (s_2), before the worst state (s_3):

$\exists! C: \max(s_1 \rightarrow s_2) \neg s_3.$

After passing through the maximum resistance in the worst state (s_2), the object's condition continues to deteriorate, but the resistance gradually weakens.

At the point of the worst state (s_3), the resistance reaches zero and changes sign - a force appears that attracts to the best state (s_4):

$\exists C: (s_1 \rightarrow s_3) \rightarrow s_4.$

When investing in an object resources commensurate with the assets of the object, deterioration of conditions ($s_1 \rightarrow s_3$) and resistance to change are minimized or disappear:

$$\forall C: (s_1 \rightarrow s_4) | (r_i | s_4) \neg (s_2 \rightarrow s_3). \quad (1)$$

Continuous development in reforms ($s_1 \rightarrow s_4$) is characterized by catastrophic jumps from one S-curve to another. During transitional, transformative type changes, the object can be rebuilt without significant deterioration in its condition. The area of catastrophic transition is located at the junction of the discontinuities of the curves, marked in the figure on the left by a small circle, enlarged by a large circle on the right “under a magnifying glass”.

The provisions of the axiomatics are the basis for: 1) definitions and tasks of organizational changes, 2) development and application of qualitative methods, calculations and calculations of organizational changes using the principal component method (figure 1).

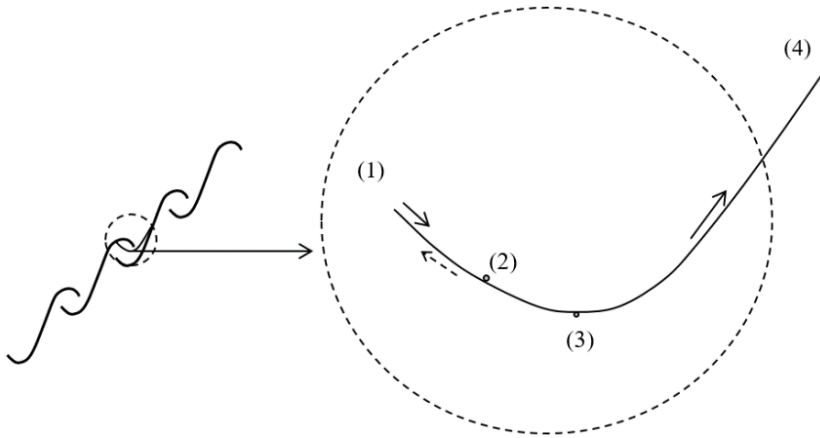


Figure 1 – Area of catastrophic transition (reform) of the object

Change management

Thus, organizational changes are classified depending on their magnitude: (1) transitional, (2) transformative, (3) reformative. A distinction should be made between objects: a) object management, b) object change management.

Change management is defined as the design and creation of new properties and states of an organization with added value (AV). AV is also called management profit.

Change management is determined by the following reasons: (1) functional structuring of properties by specialization: for example, in

business - commerce, administration, production, finance, personnel, logistics; (2) the scale of objects: individual, group, enterprise, corporation, industry, region, state; (3) management process: planning, organizing, directing, controlling (PODC); (4) subjects of management: external agent of influence (manager) – object (managed).

Reforms. Reforms are changes of an object, which include: a) restructuring of functions; b) creation of new functions; c) creating a new purpose for the activity. Other organizational changes are called transitional, are carried out by the internal resources of the object and are not reforms.

So, reform is change management accompanied by functional restructuring of the organization: fundamental changes in mission, strategic choices, goals, consolidation of existing functions, emergence of new functions.

External intervention. Managing changes in an object requires a fundamental distinction between the localization of the subject of management. The volume and content of external influence requires an appropriate theoretical, methodological and technological description. The tasks are structured as follows: 1) formation of the content of subject-object relations in the process of AV transmission; 2) identification of a subject - an external agent: a) an individual, b) a professional organization (firm) of which the individual is a member, c) the institutional environment regulating the activities of organizations; 3) content, volume and structure of the object of influence: individual, organization, environment; 4) content, volume and structure of AV: classifications of products and services [4].

Conclusion

The following doctrinal theses (axiomatics) of reforms are derived. Organizational objects “objectively” undergo changes according to the cyclical functions of the life cycle stages. Based on them, trends in forecasting and activity planning are determined. Reforms of organizational objects are possible only with the external influence of an organized institutional environment and infrastructure. Reforms are impossible with the internal resources of the object and require external intervention (influence) of the agent of change - the managing object in relation to the managed object being reformed. The organization of an agent of change - external intervention for the implementation of reforms

requires the creation of an institutional environment: A) subject - educational, project, research; B) object - individual, company, institution (association).

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Об устойчивости, страхования инвестиций и займов в микрофинансировании

Аннотация: Рассматривается простая модель функционирования микрофинансовой организации, обсуждаются проблемы со страхованием займов, а также вопросы инвестирования в микрофинансирование.

Ключевые слова: микрофинансирование, заёмщики, процентные ставки, страхование инвестиций и займов, инвестор, устойчивость, модели страхования

Функционирование микрофинансовых организаций (МФО) тесно связано с их финансовыми возможностями (собственными и привлеченными средствами). Нерешенные проблемы с привлечением инвестиций связаны с осторожностью инвесторов – на сегодняшний день не существуют механизмов полного возвращения вложенных средств. Возникает вопрос страхования привлеченных средств инвесторов для МФО с одной стороны, и аналогичный вопрос страхования выданных МФО займов