

**ENGINEERING ASPECT OF APPLICATION OF INFORMATION
REGISTERS IN MANAGEMENT OF EVOLUTIONARY SOCIAL
AND ECONOMIC DEVELOPMENT**

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Today management of open systems is based on untied among themselves conceptual positions and theories of various sciences. It leads to to inadequate management of parts of uniform system and periodic occurrence of critical situations that is expressed in social and economic explosions, geological cataclysms и.д. It is especially shown at the present stage of globalization which in **the technological plan is characterized by that extensive distribution of economic activities of mankind on a surface of a terrestrial land practically close to end**. Created by the person "the second nature" - industrial, power, transport, communication, housing, etc., it is **an infrastructure which** on scales of streams of energy becomes commensurable with spaces and энергиями an environment /**geospheres**/ .

In result there was a set of questions and contradictions between **rates** of growth of the population and use of resources, on the one hand, and **limitation** of terrestrial territory and its resources, with another.

It is natural, that definitely aggregated initial given and special mathematical models basing a small number of generalizing variables are necessary for management of open system ("*parameters about* ", *in terms of nonlinear dynamics (changes) or synergetics*), providing huge compression of the initial information. Three levels of the order are applied at high generalization.

The first - **quantity of people** living on the Earth.

The second - **the technological level** achieved by the world community (*fixed capital*).

The third parameter characterizes a ratio « **the purposes - resources** » and is determined by energyinformation resources of a planet.

Under open system within the framework of which study and predict evolutionary

development, understand the following:

«The person - his social systems - technologies (*funds*) - a natural environment»

The basic **purpose of research of such system is a revealing the general characteristic properties for it and qualitative characteristics of processes of its development.**

The question of existence of open systems within the framework of the uniform world always occupied minds of the greatest scientists of a planet. By seventieth years of the last century essential progress in thermodynamics, which was an incitement to occurrence of a new science - synergetics has been achieved. The synergetics has created a new image of the world based on ideas системности and integrity, on the general laws of development of all levels, materiality and spirituality, on interrelations of chaos and the order. The synergetics has allowed to assert (*approve*), that open thermodynamic systems are far from an equilibrium condition. And the probability *of a direction* of development is connected to a choice of a way.

For each of components of system the person already has learned to receive and quantitative estimations.. However for system as a whole, even especially quality standard of its (*her*) evolution while is not achievable almost

During becoming new approaches to management of open system 2 basic were completely precisely defined (*determined*) directions of use of the information about « parameters about »:

- Use of the information for a quantitative estimation and the control over dynamics of various processes in each of the basic components of system
- Application of the aggregated and **functionally compressed** information for management of risks of a macrosystem as a whole.
- The information aggregated in registers about « factors about »
- Considerably simplifies the analysis of mechanisms of such global events, as
- crisis of system. For example, an exhaustion of natural resources, environmental contamination, redistribution of a total global product, uncontrollable growth of the population
- results of carrying out of a rigid demographic policy (*politics*),
- A policy of use of the capital
- Restriction of scientific and technical progress
- Influence of indignations of different size on dynamics of the general process
- Thus, in the government the role of information registers consists, first of all, in granting an opportunity to politicians due to aggregation of the information on objects and compression up to a degree, suitable for fast decision-making, to operate dynamics of open system with the account of “the concept of the contradiction”. Thus the control over reliability of the initial data is automatically carried out.

- It is obvious, that already today Moldova has a unique opportunity, due to a strategic direction on formation of information registers, to realize an original control system of social and economic development of region.

Prigojin From being to becoming: time and complexity in the physical sciences San Francisco 1980

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