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TO THE ISSUE OF ECONOMIC CYBERNETICS

Economic Cybernetics is a branch of science that studies methods and tools for cybernetics to study and organize economic processes [3]. It is a science that emerged at the junction of mathematical and computer sciences. Economic cybernetics helps to attract economic theory through mathematical modeling and programming in computer systems.

The theory of economic cybernetics develops in the following areas: the methodology of system analysis of the economy and its modeling, reflection of the structure and functioning of economic systems in models; questions of classification and construction of complexes of economical and mathematical models; problems of economic regulation, correlation and mutual harmonization of various incentives and actions in the functioning of economic systems; questions of behavior of people and groups [3].

Studying these problems, first and foremost, is based on political economy and the general theory of systems, as well as sociology and theory of regulation, generalizes the results of the development of economic and mathematical methods and models [3]. Particular attention is paid to: management functions, development of internally coordinated complex of economic, administrative, legal and other incentives and standard of management, construction of organizational structures of public administration; study and accounting of the human factor in the processes of economic management, the interaction of man and machine in the ASA (Automated systematic control) of problems.

An important question is the methodology of economic cybernetics. Methods of economic cybernetics standardize, rationalize the receipt, transmission and processing of economic information. There are three main areas of methods:

The first is mathematical programming. It is a mathematical method that studies the theory and methods of solving problems in a set of finite-dimensional vector spaces determined by linear and nonlinear constraints (equality and inequality).

The second direction is a mathematical method for investigating operations. It is a method of developing and applying methods for finding optimal solutions based on mathematical modeling and statistical modeling in various fields of human activity.

The third direction is econometrics. Econometrics investigates quantitative and qualitative economic relations using mathematical and statistical methods and models.

Currently, economic cybernetics is the science that develops. It combines the innovation of computer technology and of economics. This science is an integral part in the field of innovations in economic theory and methods of application in various spheres of the economy.

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