

METHODS AND TOOLS OF INFORMATION PROCESSES MODELING

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The article presents the sense of modeling that is an investigation method of various phenomena and processes, development of management decisions variants. The issue of modeling role in the process of enterprise activity is discussed. It is based on replacement of real objects by their conditional samples, analogues. The article describes the use of modeling method for the description of the object structure (static model), the process of its functioning and development (dynamic model). Also, the publication presents models properties, connections, trends of the studied systems and processes that allow evaluating their condition make predictions and a reasonable decision. Modeling forms depending on structural models types and applications sphere are highlighted. The article considers the subject and symbol modeling. The subject one concedes the creation of models, that provide spatial-temporal, functional, structural and other properties of the original (concrete scientific models). By the symbol one means a representation of the object parameters using symbols, diagrams, formulas, language sentences (logical-mathematical models). Epistemological sense of modeling forms the basis for the transference of results obtained in the process of models study on the original. The aim of this article is to compare the features of existing modeling methods and tools and determine how to use them to build a methodological basis of information processes study.

Examples of the use of management and production activities to name modeling objects in a modern modeling practice are presented. For this purpose the term "information process" is suggested. The article analyzes the ways of information processes modeling in practice for a wide range of tasks, which is an important part of their reorganization projects. Nowadays there is a problem of choosing adequate methods and modeling tools that generate their diversity and lack of common standards, tools and modeling techniques.

The article proves theoretical concepts, proposes methodological and practical recommendations that can improve the effectiveness of information system functioning. Analysis of the basic principles and methods of information processes modeling and methodology of information system formation are presented. System approach that allows to take into account the overall strategic association objectives and to generate models and restrictions for receiving and interpreting decision support system are formed.

Keywords – methods, tools, methodology, modeling, information, information processes, information systems, systems approach.