FUZZY LOGIC FOR SOLVING ECONOMY TASKS

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The fuzzy logic is one of the lines of new information technologies. These systems are used in DMS-system, in processing of financial information, in medicine, training, psychology, legislation, jurisprudence. The use of fuzzy logic is typical of spheres where the data is characterized by the ambiguity of interpretation, subjectivity.

At present there is a series of applied systems on the base of fuzzy logic for processing of financial information. However the use of already made applied systems is not always possible as far as the high price is typical of these programmed products. They are aimed at exploitation of real-time problems and are not effective during the process of learning. Therefore the problem of developed the applied systems on the base of fuzzy set aimed at their use in the process of learning is very important.

The development of such a system has the definite demands to its interface, functional possibilities and structure.

It is necessary to foresee intuitionally understandable interface for effective use of system in the process of learning. It is necessary to include to its structure the following components: training module, fuzzy processing module, alternative processing module and help module.

Training module is destined for acquaintance the user with the main notions and elements of fuzzy logic. Such divisions of fuzzy logic as fuzzy set and its elements, methods of defining fuzzy set and its elements, main operations over fuzzy set data are examined on the base of interactive examples.

Immediate processing of financial data is performed by the fuzzy processing module. The realization such operations as forecasting, planning and analysis of financial data is used here.

Alternative processing module is used for comparison of received results. It allows to realize the processing of initial data with the help of traditional methods without the use of fuzzy set. The comparison of results is performed by the time of data processing and the precision of calculations.

Help module divisions dealing with the work of the system besides help module includes all the necessary theoretical information about the fuzzy logic and the methods of processing of financial information with the help of given fuzzy set method.

Taking into consideration the described functional possibilities of training system, specific character of initial data and the demand to interface, the system is being developed on the base of tabular processor with the use of VBA language. The of standard package for the development of the system will allow to put into practice its exploitation with the minimal demands to hardware and software (Pentium 100, Windows 95).

In this way the training system of processing of financial information possesses intuitionally understandable and known interface of tabular processor and its functional possibilities are aimed at the user who gets acquainted both with the fuzzy set method and with the principles of processing the financial information.