Stebliuk N.F.
Candidate of Economic Sciences, Associate Professor,
Senior Lecturer at Department of Business
Management and Administration,
Dneprodzerzhinsk State Technical University
Volosova N.M.
Candidate of Engineering Sciences, Associate Professor,
Senior Lecturer at Department of Higher Mathematics,
Dneprodzerzhinsk State Technical University

ACCEPTANCE OF ADMINISTRATIVE DECISIONS BY FACILITIES OF THEORY OF CONSTRAINTS AND FUZZY LOGIC IN STRATEGIC MANAGEMENT SYSTEM

The article considers the formulation of the problem of strategic management at enterprise. It is suggested a mathematical model with the use of the Theory of Constraints (TOC) by Eliyahu Goldratt and the theory of fuzzy set. Technologies on the basis of the brought theories over give an opportunity adequately to formalize a weekend given for analytical tasks to the concrete operating of enterprise conditions. Primary purposes are considered for introduction of strategy: accordance of products with the international standards; high level of trust of products' consumer; high efficiency of the sale system of enterprise. Together with indexes that are characterized by quantitative values, description of the state and analysis of quality indexes are executed by means of the use of special methods of presentation and processing of unclear data.

On the results of undertaken study it is established that for the achievement of the put aims of enterprise the quality changes of production technology level and innovative activity are needed. These changes will carry out corresponding influence on the estimation of other parameters of environment that will allow to attain the indicated level of trust of consumer to quality of commodity that answers the value indicated in a strategic vector 0,7. With the indicated transformations minimum influence on an enterprise, at which selected strategy can be realized and indicated strategic aims attained, comes true.

The solution of strategic management task with the use of the Theory of Constraints (TOC) by Eliyahu Goldratt and the theory of fuzzy set connection allows determining of external and internal aims, taking into account influence of parameters with the different degree of definiteness, getting the quantitative criteria of development on the basis of quality descriptions analysis.

The main task of strategy estimation is creation of model that will allow defining the state and co-operation of resources, their effective use and further prospects of development. There is not simply a reliable and exact method of strategy estimation, so as it will be accept administrative decisions in the conditions of vagueness, deficit of resources, information and time.