
Editors' Foreword

This issue presents the paper cycle devoted to complicated area of knowledge which operates with imprecise values and boundary conditions. In this case, one must operate with values characterizing the behavior of individuals and their teams in the economical activity process. Impossibility of precise estimation of the individual state, transforms into the problem of impossibility of precise definition of teams state, which never the less often succeed in their economical activity. Management is an activity area connected in a considerable degree with state valuation and economical strategy of market entities imputing in market relation. This valuation are done on the base of the analysis of the behavior of all participants. The solution of such problems is possible only with using the knowledge of market activity competitors obtained on the base of interdisciplinary researches.

From this standpoint, the global problems considered in the P. Pachura paper are very interesting. It are connected with the representation of social and economical systems as complicated systems. The author presents own point of view on the development of these systems on base of theoretical and conceptional analysis executed by Western Europe and the United States of America scientists. The main point the specificity of evolution defining social and economical structures is their network character. Taking that into account the author proposes to consider the phenomenon which characterize the contemporary world: the globalization problems, the transnational corporation domination and other aspects connected with the theory of the world market development and the world system of science research.

The most of the presented papers are dealt with computer technologies of the activity analysis for organizations, which have the network structure, and inter relations. To such technologies one can relate: the approach to the analysis of supporting decision processes in the contemporary logistics based on mathematical modeling (J. Grabara), application of fuzzy logic to elaborate a fuzzy strategy in problems of choice of paths on the graph (A.Ptak, M.Machura, U.Górnik), the development of computer simulation of technological processes in gas

and oil industry for more effective work of the branch (S. Brzeziński), the analysis of ecological problems of power engineering based on the research of using the wind energy in the European countries and in the world (L. Kurzak), organizational methods analysis for information streams in network structures and its efficiency estimation (A. Mesjasz-Lech), analysis of decision support in manager systems based on the shared base data (J. Urbańska), application of Data Mining Techniques in customers behaviour analysis and definition of management decision strategy (D. Jelonek) and also analysis of innovative process in enterprise and business which is strongly connected with Open Source Development Software – innovative creating process of generating computer programming with open code (A. Pachura). The S. Kot's paper presents background of B2B exchanges and review of their forms and functionalities. E. Wyslocka study represents basic rules of IT systems performance in supporting accounting in business entities.

The paper O. C. Ibe (University of Massachusetts, USA) is devoted analysis and optimization of the server working in Internet by means of queuing theory. The server is represented as M/G/1 Vacation Queueing Systems with Timeout.

In the paper A. Katkow and A. Ulfik presents simulation of selection elements of portfolio applying classical Markowitz's portfolio analysis theory using parallel computational environment — cellular automata. Simulation model and results of modelling for parallel computational environment are presented.

The paper of H. Piech and M. Spiewak is devoted to problems of using neuron network structures for estimation of an optimal robot movement trajectory in conditions of mobile obstacles.

This issue will be interesting for specialists using methods of contemporary management and production engineering organization with specific network structure in market.

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