

ABSTRACTS

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STATE AND DYNAMICS OF THE SOCIAL AND ECONOMIC DEVELOPMENT OF THE ENTERPRISE ASSESSMENT

The necessity of state and dynamics of the social and economic development of the enterprise was ascertained. It was found that the most accurate methods are those of multidimensional scaling and cluster analysis. To conduct the research a group of six enterprises was selected.

To assess the state and dynamics of the social and economic development of the enterprise the two major steps should be fulfilled, which are based on the systemic use of multidimensional scaling and cluster analysis methods:

1. Formation of the temporal series of quantitative parameters of the integral index of social and economic development of the enterprise quality state in different time periods;
2. Assessment of social and economic development of different enterprises dynamics as well as its qualitative and special assessment.

The algorithm of multidimensional scaling while assessing the social and economic development of different enterprises dynamics and qualitative special evaluation was conducted with statistical data processing package.

The research design meant to conduct the cluster analysis using the tools of SPSS application program which used the hierarchical taxonomy method resulting in proximity matrix and the dendrogram with the help of between group links with Euclidean distance as correlation measure.

To obtain the results of cluster analysis the author worked out the heuristic algorithm to find out and interpret the difference between dynamics of social and economic development of different enterprises.

According to the suggested heuristic algorithm we found and identified the four fundamental different non-crossing clusters which characterize the dynamics of social and economic development of an enterprise.

Thus, the present study helped to develop the algorithm of quality metering integral quantitative assessment of the quality state of assessing the social and economic development of an enterprise. The distinctive feature is metering of all the analysed enterprises while rationing their initiative activity indices.

Furthermore, the quality assessment of the social and economic development of the enterprises dynamics was conducted. The novation is in the systemic use of multidimensional scaling and cluster analysis methods to enhance the statistic adequacy of the major factors set interpretation, in which the enterprises differ.