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Forecasting of the Enterprise's Social and Economic Potential

COMMEMORATIVE MEDAL FOR YOUNG RESEARCHERS

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What is a potential? It means, resources, supplies which are available and can be mobilized and used to achieve the required objectives, to realize the plans, and to solve some tasks. Thinking of the definition of 'potential', one cannot use the unambiguous approach because the means, resources, and supplies also can potentially exist, but they also can be absent.

There are a number of different kinds of potentials but we will study only some of them which directly affect the activity of the enterprise.

When considering the potential as the social category one should note that for the enterprise this issue will be devoted to the problem of human potential calculation, demand in labor force, efficiency assessments of human resources, rise of labor productivity, employee turnover and their stability.

The calculation of the production potential (production resources) efficiency is based on equipment employment indicators, use of production capabilities, marketability, return on property plant and equipment.

After detailed study of statistical information on the enterprise activity during some years, one can develop the mathematical model of forecasting of both labor and production potential of the certain enterprise, and the information system of data forecasting with the use of economic and mathematical methods can be created. The first researches of data forecasting were conducted at the regional level (Primorsky Krai) and then the forecasts for the enterprise were made.

Due to such methods as questionnaire survey, time-series analysis and forecasting, statistical methods (correlation, multivariate regression), extrapolation method, analysis with the Cobb-Douglas production function, there were developed adequate models of forecasting of production potential and number of the enterprise labor resources.

Having generalized the studied methods and models of projection data assessment the author developed the forecasting system of the enterprise's social and economic potential due to which PJSC AAC 'Progress' has reduced its expenses more than 528 thousand rubles. The program product of forecasting of the enterprise's social and economic potential made in Delphi object-oriented environment was highly estimated by the Federal Service for Intellectual Property of the Russian Federation confirmed by the Certificate of State Registration for the program of ECM.

Summarizing the above I would like to mention that the forecasting of the production processes is the necessary direction of the strategic management. The researches of both the production and labour potential are the part of the large research project the further direction of which is an assessment of the enterprise's export potential and the development of the forecasting model of this potential.