EVALUAREA PERFORMANȚEI ÎN FABRICAȚIE

EVALUATION OF MANUFACTURING PERFORMANCE

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Abstract: The majority of the manufacturing companies faced difficult market conditions as a consequence of the decrease of manufacturing sector registered at global level. The last researches illustrated that there is a strong correlation between manufacturing performance and organization profitability. The past preference was for cheaper products and generated a pressure for cost reduction. Nowadays the effort is centered on the decrease of lead time. The manufacturing performance has to be approached from the sustainable point of view at all levels. This study used the method of second additive Choquet integral for the evaluation of overall manufacturing performance of a Romanian company using the unipolar aggregation model. The method was selected because it allows taking into consideration the horizontal interaction between the elements that define the global performance. The manufacturing performance was analyzed according to P_1 the number of nonfunctional machines and P_2 the number of delayed orders. The calculation of Shapley parameters and interaction parameters in a mathematical manner can be done as further research. In the second step, the model can be improved by adding new elements of performance in its aggregate expression. The usage of scientific methods for the evaluation of overall performance is specific for the companies ranked in the first positions.

Keywords: aggregation, evaluation, manufacturing performance, unipolar scale