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BUILDING THE KNOWLEDGE BASE CAPACITY OF AN INDUSTRIAL ENTERPRISE

ABSTRACT

In the current difficult circumstances, in order to implement all the established state programmes that will ensure the sustainable development of Ukraine, it is necessary to resolve the problem of intensifying the reproduction processes in industrial production, building and effectively utilizing its potential. In order to manage these processes, it is necessary to have an objective and reliable knowledge base of industrial potential, which implies taking into account the multidimensionality of objects in the economy and is provided by the joint and incompatible measurement of metrics and non-metric features, as well as the incorporation of multi-criteria in capacity-building and utilization processes. Such a methodological principle should be taken into account in the development of both information and mathematical models of the potential of enterprises. For reliable monitoring, diagnosis and monitoring, qualitative indicators of capacity should be introduced in information systems of accounting and reporting; these are non-metric values. A new knowledge base of industrial potential ensures the introduction of the digital economy into production; an updated theory of the measurement of attributes of objects in an economy makes it possible to form a system of complex and elementary attributes, capacity criteria and its information space; a new mathematical method of data analysis provides a means of monitoring the qualitative parameters of the effectiveness of the use of the potential, identifying the main trends and influences on the state of capacity, systematically monitoring the change of these states, forecasting of changes in the values of the core attributes; updated iterative methods of multi-criteria optimization make it possible to determine real optimum levels of potential parameters for ensuring the economic sustainability of enterprises, there is a need to develop it and to identify underutilized opportunities.

KEYWORDS: capacity (potential) of the enterprise, knowledge base, methodological principle, metrics and non-metric features, measurement theory in the economy.

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