

Application of Decision Support Systems (DSS): The Case of Energy Company*

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Abstract

The article aims to substantiate the relevance of the application of technology optimization based on the use of methods of the current state analysis of the enterprise's activity and the accumulation of knowledge and their integration into the decision support system (DSS) on the example of the service component of an energy enterprise. The RCA method was used to analyse the critical causes of deviations, and the KRCA to accumulate knowledge for integration and use in the DSS and the change control map method. The article uses the method of correlation-regression analysis to determine the root problem and investigate the relationship and influence of factors on service results. The result is the determination of the root problems and the construction of a problem hierarchy scheme based on the dependence and priorities of factors affecting the cost of equipment maintenance on the results of the application of correlation-regression analysis. It is concluded that the application of the SPPR technology, based on the management of knowledge about the specifics of the enterprise's activities, expands the enterprise's ability to analyse, accumulate, and use information about the state of activity, factors affecting this state, and integrate the acquired knowledge. empower and manage change.

Keywords: decision support system, optimization, energy enterprise, RCA and KRCA methods, root problem.