TOWARDS MONITORING AND EVALUATION INFORMATION SYSTEM DEVELOPMENT

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The constant growth of the complexity of structure and processes in modern management systems leads to involvement of big volumes of data and, thus, to sophistication of models and methods of information processing. Despite the level of modern computer technologies development, the information used for management of complex systems is still characterized as incomplete, inaccurate, subjective and semi structured. This causes a low effectiveness of the formal models of data processing. On the other hand, the defined drawbacks of information do not allow to improve management performance based on the existing approaches.

Modern complex systems use different performance measurement systems for management purposes. This intends the existence of definite measurement criteria. However, usually the implementation of performance measurement systems has a formal or even mistaken character which may lead to wrong decisions and irreversible effects. The existing approaches are focused on the information that is collected inside the system. In this case data retrieved from external sources are used only for description of the external environment. This causes the need to explore the possibilities of using the external information for management purposes.

The suggested approach requires realization of monitoring and evaluation with respect to both types of data sources: internal and external. In particular we propose to complement the traditional monitoring system with a new technology of monitoring of data available on the web. As it was discussed in our previous works, the outcomes can be observed on the web [1, 2]. This information characterizes the results from outside of the management system. Therefore it should be taken into consideration while measuring the results. The involvement of external information may increase the completeness and relevancy of data. And the usage of web space as a data source provides new possibilities for automation of monitoring.

The concept of web-based monitoring was introduced. In the given research we represent the IT of web-based monitoring consisting of such key stages as data sources searching, data retrieval and performance indicators measurement. It allows to add value to business information used for decision-making.

Information gathered by monitoring system on the web has an unformalized, semi-structured character. It is stored in different formats and has a definite degree of incompleteness, inaccuracy, etc. this requires to solve the problem of integration of heterogeneous information taking into account its business value for management purposes.

References:
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