

# DECISION MAKING METHODS IN PROJECT MANAGEMENT

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The aim of the article is to demonstrate the importance of the production efficiency increase, and as a result, improvement of product quality. Such efficiency will be provided by implementation of project management methodology [1].

One of the instruments for ensuring the projects quality is the application of decision-making methods. Decision-making (DM) methods are mainly focused on the economic projects evaluation, and they do not account for the completeness of work (functions) required for implementation of design process.

The analysis of the modern project management systems [2], as well as scientific works on decision-making method has shown that there is no decision making method to implement the requirements and changes in projects. It is possible to say with confidence that in projects quality management it is not enough to apply the traditionally used expert methods. So, the following goal was set: to develop the DM method based on information approach and methods of design functions structuring.

Thus, it is necessary to construct a model of decision making when implementing changes in the draft, which would allow to take into account certain requirements (depending on the particular production), as well as take into account the specific production technology.

The author of this article has developed the stratified representation of the decision-making method of realization of requirements and changes in projects.

Stratum1. Requirements Analysis. At the first stage, all requirements are defined and detailed.

Stratum2. The selection of technological stages of production and the definition of requirements from the side of production . Each particular requirement matches the specific production stages.

Stratum3. Selection of computer-designed tool (Fig.1). Each

particular tool matches the corresponding requirements. The relative importance of costs for each tool is calculated.

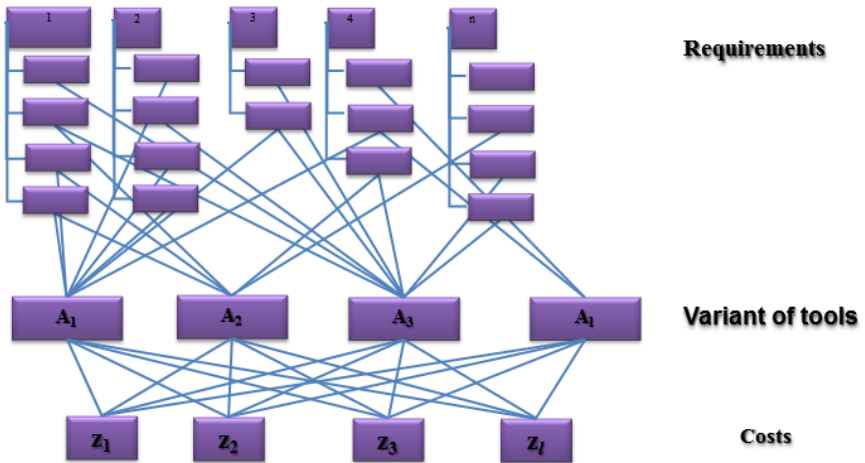


Figure 1

On the basis of this research the author has developed:

1. the decision-making method to implement the requirements and changes in projects;
2. the multilevel structure providing decomposition of requirements when analyzing the changes in projects;
3. the method of requirements analysis;
4. the model of complex expertise organization on the basis of information approach which allows to unite Diverse criteria and opinions of particular experts.

The developed techniques and algorithms are applicable for the enterprises focused on the release of high technological individual production.

1. О.В. Заговора, В.Г. Концевич, *East.-Eur. J. of Ent. Techn.* 1/7, No49, 8 (2011).
2. О.В.Заговора, В.Г.Концевич. Формализация выходов процесса управления изменениями в жизненном цикле информационной системы управления как источника новых знаний. - Материалы конф. «Информационные процессы и технологии. Информатика – 2011». – Севастополь: “”, 2011.

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