

EVALUATION OF IT PROJECT RISKS: PROCESS AUTOMATION

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Risk management tasks play one of the most important roles in the process of IT projects management since the success of an IT project as a whole depends on timely response to risky events (maximizing positive and minimizing negative consequences) [1-3]. This allows us to conclude that the automation of this process is relevant. State of the risk assessment problem was analysed in this study [4-7] and the advantages and disadvantages of existing software solutions for risk management were highlighted. Based on the analysis, a task was formulated to automate the risk assessment process of IT projects. The main tasks of the developed system are automating processes of accumulation, processing, storage and transmission of information related to the qualitative and quantitative assessment of risks, as well as modeling scenarios for responding to identified risks. Choice of software development tools was grounded, a brief description of tools capabilities is given, the structure of the software for solving the problem and the structure of the database are described. To test the software's performance, a test example was formed on the basis of the IT project "Improving the quality of the software development process based on the dynamic setting of the task of the SMMI model". First of all, the risks for this project were identified based on various sources. The following sources were used: hypotheses and assumptions of the project, archives of previous IT projects in the company, a variety of information from public scientific work and marketing analytics. Approaches such as expert interviews and brainstorming have also been used to collect risk information.

A qualitative risk analysis was carried out. As a result, the probabilities of risk realization and the risk ranks were determined using the matrix "probability - consequences". For risks with a high and medium rank, a quantitative analysis was carried out on the basis of sensitivity analysis methods and a decision tree. The results were analyzed and recommendations were given for responding to risks.

The materials of this study are valuable for project managers, as they can facilitate the process of analysis, assessment and risk management of IT projects.

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