

**PLANNING, BUILDING UP AND DEVELOPING AN IT PROJECT TEAM
(ON THE EXAMPLE OF THE PROJECT "IMPROVING THE QUALITY OF
SOFTWARE DEVELOPMENT PROCESS BASED ON DYNAMIC
PROBLEM STATEMENT OF A CMMI MODEL")**

Pashko B.I., Stratiienko N.K.
*National Technical University
"Kharkiv Polytechnic Institute",
Kharkiv*

One of the most important success factors of an IT project is its team. Planning, building up and developing a team is a time consuming process, so its automation will allow project managers to implement it most effectively. Consequently, the development of software for solving problems of planning, building up and developing an IT project team is relevant.

In the course of the study, a state analysis for IT projects management problems was carried out. The existing principles, strategies and the process of building up and development of the project team were analyzed; the methods of planning and personnel formation were analyzed. Existing software solutions were analyzed to support team management processes. On their basis, a task was formulated for developing software for planning, building up and developing an IT project team.

Identified as a result of the study, significant relationships between the factors and the team's effectiveness allowed us to propose a model for an effective IT project team. Taking into account the model of an effective team, a methodology for building up the team has been developed.

A database, a use case diagram, a component diagram, and a deployment diagram were developed during the software design process.

The test case was formed based on the project team "Improving the quality of software development process based on dynamic problem statement of a CMMI model". Initially, the project roles were defined and the RACI responsibility matrix was built. Then functional responsibilities were assigned to the project supervisor, project manager, system architect and project administrator. The functional responsibilities for planning, managing the project team, organizing the execution of works and monitoring the implementation of the project were reviewed. Environmental factors and their influence on the planning of the project team were studied, after which a skills register was compiled for the project team. Four categories of skills are identified: technical, administrative, strategic and interpersonal and leadership skills. A scale of criticality and ability ratings has been compiled. A rating scale of technical competencies and skills was developed.

The research materials can be used to manage software project teams.

References:

1. Томпсон Л. Создание команды / Л. Томпсон; [пер. с англ. под ред. Е. Г. Молл]. – М.: Вершина, 2006. – 544 с.
2. Каннинг М. Как эффективно управлять командой / М. Каннинг, М. Тучински, С. Кэмпбелл; пер. с англ. М. С. Меньшиковой. – М.: Вершина, 2006. – 160 с.