## СЕКЦІЯ 1. ІНФОРМАЦІЙНІ ТА УПРАВЛЯЮЧІ СИСТЕМИ

## AUTOMATION OF IT PROJECT RISK MANAGEMENT BASED ON EXPERT ASSESSMENTS

**Chirva T. A., Stratiienko N.K.**
*National technical university "Kharkiv polytechnic institute",*
*Kharkiv*

Risk management is one of the key directions and one of the most difficult processes of IT project management. Risk management includes risk assessment, analysis and monitoring [1-3]. Success of an IT project depends on efficiency of decision making. That maximizes positive and minimizes negative consequences of the risk event, and thus risk management automation is an actual point.

In the course of the study, an analysis of the state of the risk management problem was carried out. This led to the conclusion that IT projects were unstable and one of the reasons was ineffective risk management. Existing software solutions to support risk management processes were analyzed. Among these solutions were highlighted project management support systems that have a risk management module and standalone risk management software products.

Based on the performed analysis, the formulation of a software development problem was made. The main task of the system to develop is to automate processes of accumulation, processing, storage and transmission of information associated with the identification and assessment of risks, reporting and monitoring of secondary risks and modeling risk response scenarios.

Database, class, use case, activity, component and deployment diagrams were developed during the design process. The following technologies were used for software development: C#, WPF, Entity Framework, MS SQL.

Test case was formed based on the IT project "Development of logistics network of mass consumption goods distribution" for performance check of the software. The risks were identified, qualitative and quantitative assessments of the identified risks were given, and a response plan to the identified risks was drawn up. At the stage of monitoring and controlling risk management, the methods by which the monitoring takes place were described.

Research materials can be used to manage the software risks of various IT projects. In addition, the list of identified risks can be used in risks management of specific projects for further analysis, assessment and risk management.

**References:**
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