THE RISK MANAGEMENT MODELLING IN MULTI-PROJECT ENVIRONMENT

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The paper proposes a method for modeling risk management in multi-project environment. Simulation was conducted and the example was provided in the article.

The goal is to identify a risk modeling algorithm for optimal decision making suitable for a specific situation. This aspect can be seen as static and dynamic models, which in turn describe deterministic or stochastic informational situation accordingly. However, in the course of project activity, when the decision affects a large number of factors, it is advisable to pay attention to dynamic models only.

In the majority of cases, in order to set the probability of the set of elements of events an analytical method is used, that is giving the law of the distribution of the random variable. Among its advantages is the absolute probability of formalization and ordering of certain values of a random variable depending on the two main factors that are taken into account when modeling uncertainty: dispersion of possible values of a random variable from its expected value and the deviation of a random variable values from the expected value. When dealing with probabilities analytically, the choice of the distribution of the random variable is crucial.

The risk is a difficult objective- subjective category, influenced by both external circumstances and internal parameters of the project and the subjective perception of the risk of a person who makes a decision.

Depending on the specific conditions, the availability of information and the goals of the project risk can vary significantly. Therefore, the risk estimates are useful methods, sensitivity analysis, alternative methods of decision making. Using the results obtained we can achieve a corresponding prediction, compare it with the intended purpose of and shape administering information and the necessary action.

Keywords – multi-project environment, project, risk, simulation, risk management.