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## MODELLING INSTRUMENTS IN RISK MANAGEMENT

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### Abstract

*Methods of modelling risks can be considered as a kind of simulation of the future in laboratory conditions. Since the program chooses the values of input variables from random probability distributions, each resulting result reflects the possible state of affairs in the future. Each of these combinations can actually be realized, and with the same degree of probability. Therefore, the results are also possible in the future and are equally likely. The proposed method allows to select, according to certain criteria, the necessary risk indicators for their further study. The economic interpretation of various aspects of the results of managerial analysis obtained during the calculation of indicators is based on an integrated factor model for assessing the efficiency of the enterprise, and the visualization of the results of the analysis of indicators is carried out using such a tool as a managerial monitor. The second instrument – simulation method – allows obtaining more accurate results of calculating the influence of factors in comparison with the methods of chain substitution, absolute and relative differences, integral, logarithm, index and proportional distribution, and allows avoiding ambiguous evaluation of the influence of factors, because in this case the results does not depend on the location of the factors in the model, and the additional increment of the effective indicator, which is formed from the interaction of factors, decomposes between them proportions It is also an indicator of influence.*

### Author Keywords

Modelling, risk, risk management, three-factor model, two-dimensional space

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