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THE BASES OF THE FINANCIAL ANALYSIS OF THE INFRASTRUCTURE OF ORGANIZATION
BASED ON THE COGNITIVE MODELING TECHNOLOGY

The cognitive modeling technology is intended for the realization of the financial analysis of the certain object of research in the arbitrary environment of its functioning, includes the technique of its using, the algorithm of formation of the structure of the cognitive model, the innovative models of representation of the structure of the cognitive model, the technique of formation of the regulatory-legal basis of the financial analysis, the technique of formation of the information basis of the financial analysis, (the technique of additional check of the information basis of the financial analysis), the technique of formation of the model of accounting, the technique of formation of the working plan of accounts, the techniques of carrying out of the horizontal, vertical and trend financial analysis based on the formed (reconstructed) system of analytical coefficients, the parametrical cognitive models block for the horizontal, vertical and trend financial analysis based on the analytical coefficients system, the technique of research of the parameters of the cognitive model for the financial analysis and the algorithm of processing of a posteriori data (results) of the financial analysis.

The algorithm of formation of the structure of the cognitive model realizes the possibility of formation of the cognitive models on the basis of the classical or innovative (the graph, combining the theory of sets and the multilevel structural scheme) models of representation of data.

The technique of formation of the regulatory-legal basis of the financial analysis allows to realize the analysis of a set of existing laws, decrees of government and regulatory acts, which belong to the federal level, the level of the subject of the federation or the body of municipal unit, have been ratified and put into force in the territory of RF.

The technique of formation of the information basis of the financial analysis allows to analyze the main registers of the accounting and financial reporting for the realization of formation of the conclusions about the financial condition of the organizational structure.

The technique of formation of the model of accounting allows to realize the analysis of the input and output flows of the financial-material assets and the sources of their acquisition, and also the principles of formation of the primary reporting documents in the organization.

The technique of formation of the working plan of accounts allows to create and analyze the plan of accounts of the accounting in the organization of certain type (state, credit or commercial), which contains the exhaustive list of synthetic accounts of the first and second orders sufficient for the formation of the working plan of accounts.

The technique of carrying out of the horizontal financial analysis allows (for the revealing of tendencies and regularities) to realize the comparison of the nominal values of items and aggregates, which are obtained in the result of the synthetic and analytical accounting and are formed on the basis of the primary different-time registers of accounting.

The technique of carrying out of the vertical financial analysis allows (for the revealing of tendencies and regularities) to realize the comparison of the nominal values of items and aggregates, which are obtained in the course of the synthetic and analytical accounting on the basis of one from the primary registers of accounting on the certain date.

The technique of carrying out of the trend analysis on the basis of the system of analytical coefficients allows to realize the calculation of the nominal values of coefficients, characterizing the results of the financial-economy activity of the organization on the basis of the nominal values of items and aggregates, which are directly contained in the various primary and auxiliary registers of accounting and financial reporting compiled on the different date (the point of relevance).

The parametrical cognitive models block includes the parametrical cognitive models.

The cognitive model of the financial condition of the organizational structure acts as the (re)constructed (in width and depth) repertoire of parameters, echeloned into a set of portraits (PR_i) and stratified into a row of sets, located on the two levels of selected hierarchy: the first level – the kinds of properties (KP_j) and properties (Pr_k); the second level – the vectors of parameter (VP_l) and elementary parameters (P_m), which are characterized the liquidity, solvency, returnability, financial and business activity.

The cognitive model for the financial analysis and audit of the financial condition of the organizational structure (of the enterprise or organization) contains the three independent portraits: “The horizontal analysis”, “The vertical analysis” and “The trend analysis”.

The first portrait “The horizontal analysis” includes the several KP_j and Pr_k , VP_l and P_m .

The second portrait “The vertical analysis” includes the several KP_j and Pr_k , VP_l and P_m .

The third portrait “The trend analysis” includes the several KP_j and Pr_k , VP_l and P_m .

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On the 11.09.2020 y. all materials of the scientific report were passed the reviewing with the mark “7”, so the full text of the scientific report, annotation and multimedia presentation are available on the official scientific-educational portal www.vetrovan.spb.ru (in the national Russian language – RUS and the international foreign English language – ENG).

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