

## СЕКЦІЯ 4 СУЧАСНИЙ СТАН ТА ПЕРСПЕКТИВИ РОЗВИТКУ ОБЛІКУ, АНАЛІЗУ, АУДИТУ, ЗВІТНОСТІ І ОПОДАТКУВАННЯ В УМОВАХ ЄВРОІНТЕГРАЦІЇ

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### **BASES OF MODELING ACCOUNTING PROCESSES OF THE ENTERPRISE**

From the position of market relations, the system of management at the enterprise sets new requirements to accounting as an information basis for making decisions.

Modelling is a general scientific method of research, which plays an important role in the development of specific branches of scientific knowledge. Accounting, as a science and practice doesn't stand aloof general development trends and actively uses the possibilities of the modelling method in shaping its theory and adapting it to changing conditions of accounting. Thus, the application of mathematical modelling methods in accounting, in market conditions, becomes a prerequisite for its development in scientific and practical dimensions.

The economic mathematic model is a description of an economic process or a phenomenon through mathematic expressions (equations, functions, inequalities, identities) that simulate the behaviour of a modelled object in given or possible conditions of its performance [1, p. 39].

Any economic-mathematical model should be adequate to reality, reflect the essential aspects and connections of the object under study, have a simple form and structure. Modelling is the only systematized way of seeing the options for the future and determining the potential effects of alternative solutions that enables their relevant comparison. Yet, economic-mathematic modelling remains an auxiliary tool in the system of production and management. The results obtained with the help of models are mainly used as consulting means. It is the manager's function to make final decisions. This is because of the complexity and insufficient knowledge of the economy complex and the drawbacks of modeling, the most typical of which are:

- entering into the model indices and standards insufficient for the problem solving;
- withdrawal from the model relevant for the given object features and variables;
- inaccurate evaluation of the parameters of the modelled object;
- drawbacks in the model structure, i.e. incorrect or inaccurate definition of functional dependence of the accepted criteria on the managed and linked variables;

- excessive model simplicity that does not fully embrace the main parameters and variable objects in their dynamics;
- excessive model complexity that hinders or complicates the analysis of the variables and is mostly time- and resource-consuming.

As a conclusion, it should be noted that, accounting information systems are critical to the production of quality accounting information on a timely basis and the communication of that information to the decision makers. Existing literature offers evidence of the relationship between these accounting information systems and organizational effectiveness; though it is important to highlight that an in-depth study is required to examine other factors that may influence this relationship. The information value generated by accounting information systems to shareholders and stakeholders in making investment decisions is invaluable. Financial managers need the financial and accounting data provided by accounting information systems to evaluate the firm's past performance and to map future plans [2, p. 190].

Secondly, to choose the accounting policies of an enterprise, it is advisable to model future performance outcomes proceeding from the past events and allowed alternative accounting methods. The choice of accounting policy should be based on modelling with the system of accounting and analytical support in the centre.

Finally, modelling the process of choosing accounting policy incorporates the accounting data, statistical data, and marketing information. This proves the indissoluble connection of accounting and managerial decision making. Hereby, the studied information is the subject of transformation through its analytical processing. Modelling the choice of accounting policy implies the resources and methods of their use.

Management accounting plays an important role in enterprise and public institutions and provides important bases for management decision making, risk control and organization development planning. Mathematical models can provide management accounting with important management carriers and scientific basis [3, p.580]. Different organizations can apply mathematical models for systematic and scientific management in management accounting or other management processes.

#### **References:**

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