

# Conceptual Model of Accounting and Analytical Subsystem of Management Costing

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**Abstract**—Under the current economic conditions, the operating efficiency of any organization is primarily determined by the quality and timeliness of management decisions. To develop them, managers of various levels must have complete and accurate information about the property status and financial results of the organization activity. The most important source of such information is the accounting system. It provides elaboration and systematization of the information required for taking management decisions. The adoption of well-grounded and effective management decisions is ensured by the use of a systematic approach, by the efficiency to regulate the financial and economic activity at all levels of agricultural organization management. In this regard, the formation of accounting and analytical support for cost management is updated.

**Keywords**—*management accounting; costs; responsibility center; analysis; reporting; management decisions.*

## I. INTRODUCTION

The globalization of economic relations, the use of modern information systems and relevant information processing technologies apply special requirements to provide the management system of organizations of the agro-industrial complex with the necessary information in the context of business processes, types and segments of activity. Making strategic decisions in a dynamic, unstable and uncertain environment requires not only analysis, assessment and forecasting of the internal development of economic entities, but also ensuring compliance between the external macroeconomic environment, the internal microenvironment and the results of economic activity. In this respect, the development of theoretical and methodological guidelines and practical recommendations for the introduction of advanced management technologies, tools for accounting and cost analysis of organizations seems to be relevant and well-timed at the present stage of the sectoral economy development.

The actuality and reasonableness of costs management is determined by the role they play in the economy of the business unit, their direct participation in the formation of financial results of the organization activity. It is profit that ultimately acts as the main condition for competitiveness. Therefore, for the majority of organizations the main task is to keep a certain level of profit (in the short term) and to maintain the profitability potential (in the long term). Costs determine in

monetary form the amount of resources for a certain period used for the production and sale of products, and they are transformed into its net cost.

## II. RESEARCH METHODOLOGY

The purpose of the study is to substantiate and develop methodological approaches and practical recommendations for improving accounting and analytical support for cost management.

The scientific hypothesis of the study consists in the assumption that for the most effective management of organizations, objective and timely estimation of financial results, it is necessary to improve traditional methods of cost accounting and analysis.

While building up the system of accounting support for expense and net cost management, it is required to take into consideration the national plan of accounts, industry-specific features of accounting the expenses and net cost of production (works, services) and application of different schemes, the size of the organization, basic elements of methodical aspect of accounting policy in the part of costs formation, efficiency of the accounting system [1].

Cost management in the organization is aimed at solving the following key tasks:

- determination of costs of the basic management functions;
- calculation of costs by segments, by production departments of the organization;
- estimation of necessary costs per unit of production (works, services);
- preparation of the information base allowing to estimate expenses when choosing and taking management decisions;
- determination of technical means and methods to measure and control expenses;
- search for cost reduction reserves at all stages of the production cycle and in all production departments of the organization;
- choice of methods to value costs;

- selection of cost management system that meets the conditions of the organization [2].

Cost management tasks need to be considered in totality. Only such an approach is the most effective, contributing to

the growth of economic efficiency of the organization activity [3].

The procedure for implementing the system of management cost accounting in order to increase its efficiency is recommended to be carried out in 3 stages (Fig. 1).

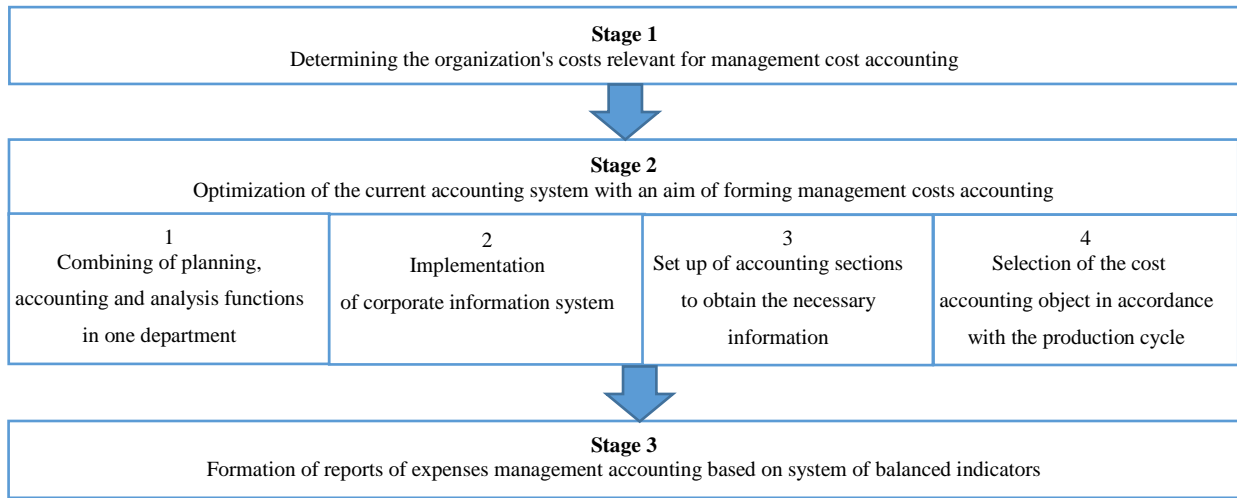


Fig. 1. Stages of implementation of the management cost accounting system

At the first stage, it is necessary to define the costs that are relevant for management cost accounting, the impact on them will allow to influence the results of financial and economic activities of the organization most effectively. The manufacturing charges for goods are determined which occupy the largest part in the sales revenue and give the greatest profit from sales.

Daily, operational control is carried out by the head of the lowest management level. To achieve this, it needs to have detailed, analytical information which is formed in the management accounting with respect to the responsibility centers.

The second stage is the optimization of the current accounting system with an aim of forming management costs accounting. At this stage, the issues faced by management costs accounting are solved. Solution of ideological and organizational problems is made by combining accounting department and planning-and-economic department. The integration of cost planning, accounting and analysis functions in the job responsibilities of a single department or specialist contributes to the provision of qualitative information for the cost management.

The third stage is the formation of reporting on the results of management cost accounting, which contains a system of balanced indicators and includes four modules: finance and economy; market and customers; business processes; infrastructure and employees. This stage allows to solve the issues connected with involvement of organization management into the process of expenses management and control.

Thus, measures to improve the management cost accounting permit to create an effective decision-making

system taking into consideration the technological features of the industry. Compliance with all the principles of cost management creates the basis for competitiveness of the enterprise and for its winning the leading positions in the market.

### III. RESULTS

The principal feature of management accounting is the need to determine the costs not only for the enterprise as a whole, for the centers of responsibility, but also for the costs centers [4].

The organization of accounting by cost centers and centers of responsibility allows to decentralize cost management, to observe their formation at all levels of management, to use specific methods of cost control taking into account the peculiarities of each department activity, to identify specialists guilty of wasteful expenditures and, in the long run, to significantly increase the economic efficiency of management [5]. The administration of the enterprise decides itself in what context to classify costs, to what extent to specify cost centers and how to link them with the centers of responsibility [6].

Cost management by responsibility centers and places of organization origin can be considered as a way of entrepreneurship within the enterprise, because their principles are similar:

- compliance with technical and technological features of a particular industry;
- granting autonomy to structural departments by delegation of the rights and responsibility for formation of expenses, reception of the income, use of investment resources

(granting to them the status of the certain type responsibility centers);

- personification of all elements of the intrapreneurship system (identification of controlled items of costs and revenues);

- selection of approved and estimation indicators.

The necessary conditions for the construction of an effective system of management cost accounting in the centers of responsibility are the reasonable allocation, in relation to adequacy of the enterprise organizational structure, and

rational documentary securing of the cost management process.

In order to integrate information on costs in the management accounting system within the structural departments, the author proposes to implement a cost management model in the system of management accounting of agricultural organizations, which defines the main elements that serve as the basis for the formation of operational information on costs for business processes, responsibility centers and cost centers (Fig. 2). In this model, the information base for cost analysis is generated within the framework of the management accounting system.

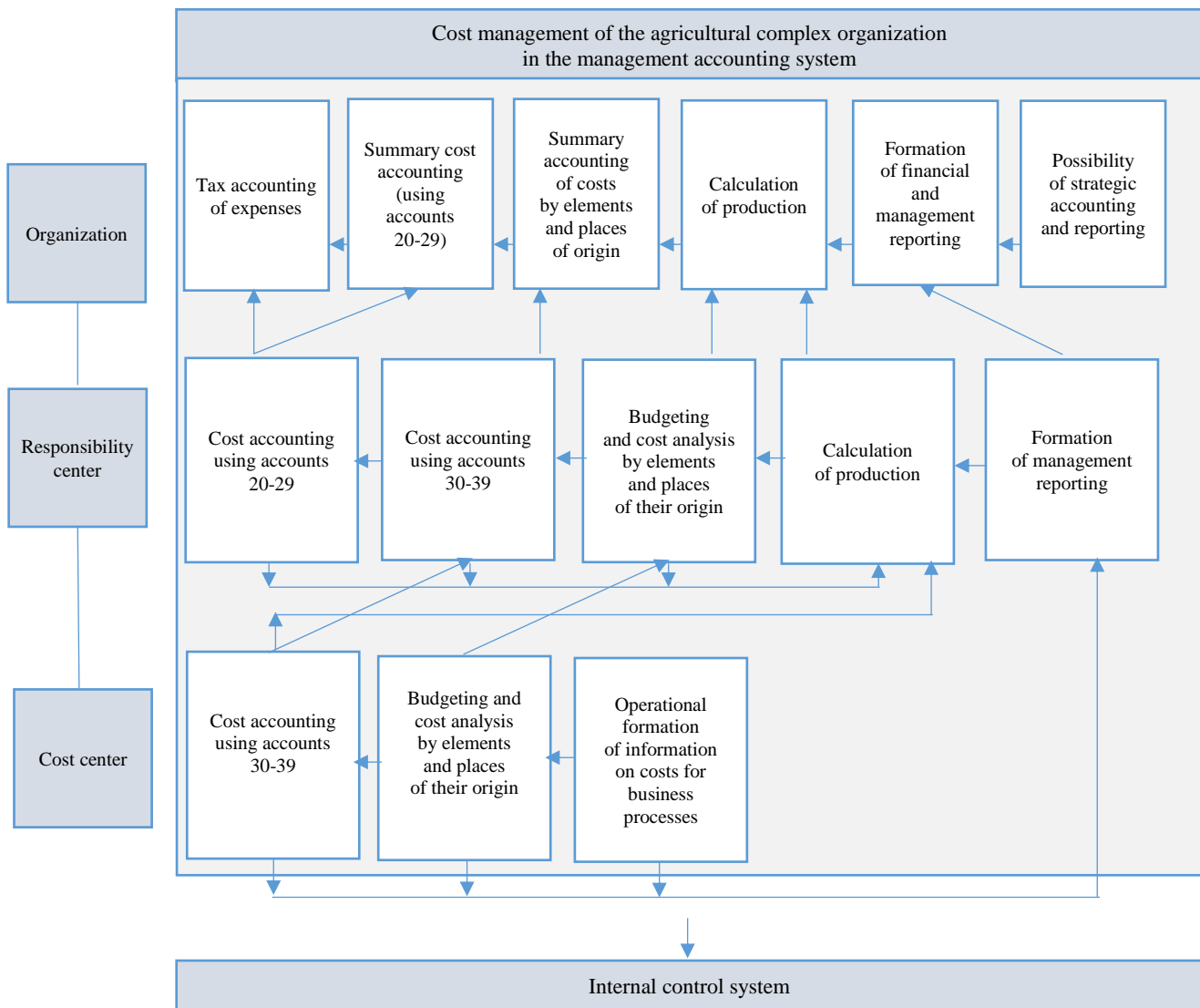


Fig. 2 - Cost management model in the system of management accounting of agricultural complex organizations

The author defines factors that influence operation of the accounting and analytical costs system in the organizations of agricultural complex:

- 1) effective mechanism of regulating economic relations;

- 2) disparity of prices for agricultural products, state support for the industry;

- 3) development of business infrastructure;

- 4) qualitative agricultural policy, WTO programs;

- 5) organizational and legal form, type of activity and technological features;
- 6) taxation scheme;
- 7) current contractual policy;
- 8) organizational, technical and methodological elements of accounting policy.

Thus, in modern conditions of developing market relations the role of costs accounting and analysis in the organization of business activity is significantly increased. This is due to the fact that the accounting and analytical information does not meet the sufficient requirements necessary for cost management.

For managing the economic entity, a competently organized accounting and analytical system of production costs is the basis of objectivity and rationality of analytical procedures, it allows to determine the factors that affect the final financial result of the organization work and to make effective management decisions.

The information, generated in the accounting and analytical system of organization costs, is considered by users of economic information as a basis for determining the actual financial results of economic activity of the enterprise, making effective management decisions [7].

The mechanism of accounting and analytical system of an economic entity is ensured by the interaction of main elements of this system - accounting and analysis [8]. The organization of rational accounting involves a number of analytical procedures that allow the accountant to choose the most suitable option for him.

The methodological basis of cost analysis in the accounting and analytical system is a set of specific analytical procedures combined in a certain logical sequence to achieve a specific management goal.

Depending on the existing level of expenses and net cost, specific tasks assigned to management personnel and responsibility centers, the analysis can be carried out simultaneously in all or several directions, covering the entire production cycle or its separate stages and processes. To achieve the set goals in terms of cost reduction, the analysis should be systematic, ensuring frequency of formation and systematization of information and improving the quality of the obtained analytical data and on the basis of its results.

Accounting and analytical system of costs in agricultural production operates on the basis of economic efficiency relative indicators set, which are grounded on the indexes of unit costs, formed in accordance with industry and statistical recommendations and with consideration to theoretical developments in the field of agricultural activities analysis.

An important element of the accounting and analytical system of agricultural organizations is the analysis of produced goods quality indicators. Under the conditions of Russia's membership in the World Trade Organization and a rapidly

changing situation in agricultural market, it is advisable for economic entities not only to analyze internal activities in relation to the quality of produced goods, but also to accumulate and analyze information about the specialization of the market, dynamics and system of competitive prices, contractual terms etc.

Methodically, the accounting and analytical system of agricultural organizations is connected with the choice of reflection method and systematization of information data. For organizations of agro-industrial complex, qualitatively organized accounting and analytical system of costs allows to determine the factors that affect the final result of activities and the adoption of effective management decisions.

#### IV. CONCLUSION

The system of management accounting by responsibility centers and cost centers is created with the purpose of management decentralization, it is aimed at meeting information requirements of internal management, it allows to quickly control the costs and results at different levels of responsibility and evaluate the work of individual managers on the basis of the primary analysis of deviations; it also serves as a signal system. Methodically, the accounting and analytical system of agricultural organizations is associated with the choice of method of reflection and systematization of information data. For such type of organizations, a qualitatively organized accounting and analytical system of costs allows to determine the factors affecting the final result of activities and adoption of effective management decisions.

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