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# THE SYSTEMATIZATION OF METHODOLOGICAL TOOLS OF THE COST MANAGEMENT SYSTEM OF THE ENTERPRISE

## ABSTRACT

The article presents the main components of the methodological tools, which made it possible to systematize it for effective cost management. The main purpose of the study is to improve the functioning of the cost management system of the enterprise by systematizing the tools depending on the methods of cost management.

The research of literary sources and scientific approaches to solving the problem of determining the effective methodological tools of the cost management system of the enterprise showed that this issue remains unresolved and requires systematization of tools interacting with the methods and elements of the cost management system, which will improve its efficiency of its operation.

The relevance of solving the scientific problem is that the optimal combination of methods and tools of cost management will increase the efficiency of the functional components of the cost management system, which affects the increasing the competitiveness of enterprise products on the basis of cost optimization.

The most common cost management methods are listed, including ABC-method, direct-costing, standard-costing, absorption-costing, CVP-analysis, target-costing, cost-killing, LCC-analysis, benchmarking, VCC-method, kaizen-costing. The substantiation of the proposed classification of cost management tools depending on the specified methods is proved.

In addition, it is proposed the grouping of cost management tools into general, which have a wide range of applications and specific, applied mainly in the process of cost management. Keeping such grouping, the interaction of tools and elements (functional components) of the cost management system of the enterprise is shown.

The results of the study may be of practical importance for managers of manufacturing enterprises from the standpoint of forming a cost management system.

**Keywords:** cost management methods, cost management tools, tools, systematization of tools, functional components of cost management systems, enterprise

**JEL Classification:** G30, M40

## INTRODUCTION

Modern enterprises have to operate in conditions of rapid development of new information technologies, fierce competition and dynamism of the external environment. The ability to systematically and rationally manage costs will not only increase the level of profitability of the enterprise, but also increase its competitive position. In view of this, it is important to consider and group the methodological tools of the cost management system, which will increase the effectiveness of individual tools application within different methods of cost management.

## RESEARCH ANALYSIS AND PROBLEM STATEMENT

The issue of systematization of methodological tools of the enterprise cost management system were considered in the scientific works of Bezugla Yu. Ye. [1], Breus S. V. [3],

Denisenko M. P. [3], Haustova Ye. B. [3], Partina G. O. [4], Skripnik M. I. [5], Voronkova T. Ye. [5], Telovata M. T. [7], Bezverkhyi K. V. [7], Webser J. F. [8], Skuratovich I. [9], Lytvyn N. [9], Panova I. [9], Ovcharenko I. [9], Grigorevskaya O. [9].

They consider the methodological tools of the cost management system of the enterprise from the standpoint of a means of improving its efficiency. In this context, the aim of the article is to study the interaction between cost management methods and tools and the systematization of methodological tools to improve the efficiency of the cost management system of the enterprise.

## RESEARCH RESULTS

The cost management tools of the enterprise are disclosed through a set of specific cost management methods and tools for their implementation. The most common cost management methods were selected for the study (ABC-method, direct-costing, standard-costing, absorption-costing, CVP-analysis, target-costing, cost-killing, LCC-analysis, benchmarking, VCC-method, Kaizen costing). We consider it is expedient to dwell on a more detailed study of the tools for their implementation (*Table 1*).

Table 1. The cost management tools of the enterprise	
Cost management methods	Tools for implementing cost management methods
Cost-killing	Budgeting, monitoring, formation of information base, automation, reporting, classification
Target-costing, CVP- analysis, VCC-method	Budgeting, calculation, classification, controlling, formation of information base, automation, value creation chain, reporting
ABC-method, k/Kaizen-costing, LCC-analysis, SCA-method, direct-costing	Budgeting, calculation, information base formation, automation, optimization, classification, controlling, value creation chain, reporting
Benchmarking	Monitoring, formation of information base, automation, optimization
Normative method, standard-costing	Budgeting, drawing up plans, norms, standards, classification, formation of information base, reporting, automation, optimization, calculation

Cost management in the implementation of management functions involves the use of various management tools, with help of which they study costs, investigate their behavior and have a targeted impact on costs. Given the above, we believe that as part of the tools of the cost management system of the enterprise should be distinguished: classification, monitoring, controlling, automation, information base formation, reporting, optimization, calculation, budgeting and value creation chain. In addition, it should be noted that cost management tools should be divided into common and specific. Common tools used to implement cost management methods are used not only to solve cost management problems. Among the common tools are: classification, monitoring, controlling, information base formation, automation, reporting, optimization. The specific tools used only in the cost management system: calculation, budgeting, creating of value chain (*Figure 1*).

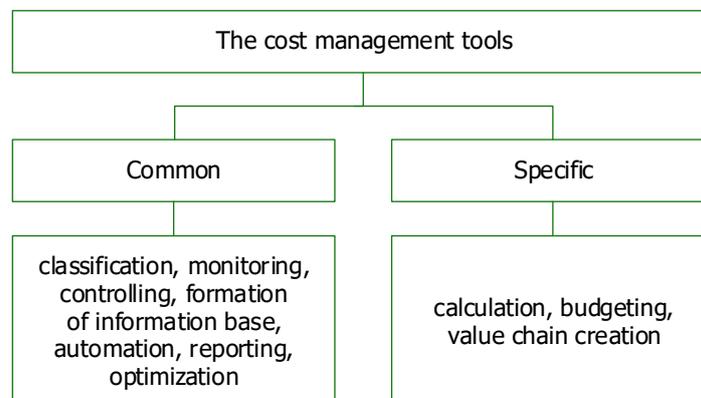


Figure 1. Grouping of cost management tools

Classification as a system of grouping costs, shows their various characteristics. The purpose for which the classification

is carried out, determines its methodology and composition of individual cost groups [1, p. 35]. Thus, classification of costs according to the way of their inclusion in the cost, by economic elements and calculation items, by technical and economic content and by volume of production is used in such cost management methods as cost-killing, ABC-method, kaizen-costing, LCC-analysis, SCA-method, direct-costing.

Monitoring as a system of constant observation of phenomena and processes taking place in the external environment [2, v. 2, p. 475], the results of which serve to justify management decisions, is a valuable tool for implementing methods of cost-killing (which provides maximum cost reduction in the shortest possible time) and benchmarking (based on the implementation of the experience of successful competitors).

Controlling covers organizational and economic aspects of the enterprise work [2, v. 1, p. 828].

This tool should provide information and analytical support to management processes to guide management's actions to form and achieve long-term goals, which determine the tactical goals that guide the work of all employees of the enterprise. Controlling should be used for the implementation of target-costing, CVP-analysis, VCC-method, ABC-method, Kaizen-costing, LCC-analysis, SCA-method, direct-costing. Such a tool as the formation of an information base is necessary for every method of cost management, because without the necessary information it is impossible to carry out the management process [247, p. 72]. However, it should be noted that the existing forms of financial reporting have not enough information on the status of expenses in terms of activities and individual items of expenditure, which does not allow for an effective cost management process. This makes it appropriate to use internal management accounting reports, which are used by many large and medium-sized enterprises to justify rational management decision makings.

In modern conditions, the effective formation of the information base for cost management is difficult to imagine without automation, which provides an opportunity to increase management efficiency [2, v. 1, p. 14]. Today, automation is also seen as a tool that is necessary for every method of cost management, as it is one of the areas of scientific and technological progress, which involves the use of technical means and information systems to receive, convert, transmit and use information.

Reporting provides data for analytical research [19, p. 18] and is a necessary tool for methods that are based on the principles of maximum savings, target cost price, cost control at each stage and compliance with planned standards. It should be noted that reporting we understand not only forms of financial reporting. Internal management reporting, as a system of generalized and interrelated economic indicators for analysis and decision-making is used by such methods as cost-killing, target-costing, CVP-analysis, VCC-method, ABC-method, Kaizen-costing, LCC-method, SCA-method, direct-costing, benchmarking, normative method, standard-costing.

Since the next tool-optimization is to find the best option out of many possible [2, v. 2, p. 630], we consider it is important for each method of management. Cost management is a complex process of developing and implementing management influences on costs, taking into account their large number and variety, which requires the allocation of specific tools (among which are calculation, budgeting and value creation chain), which will be considered in more detail.

Calculation (from the Latin. *calculatio*) is a settlement and cost tool, which calculates the cost of manufactured products production, work performed, services rendered, purchased tangible assets. In the modern economic literature, calculation is defined as a method of calculating, grouping and distribution of costs in physical or value terms to determine the total cost of products, services [3, p. 192]. The results of calculation are used in the analysis of performance, development of business plans, forward planning (forecasting) and others. In the process of calculating the unit cost is determined by allocating production costs to production of manufactured products. Therefore, calculation as a process of determining the cost of production is to accumulate production costs in order to attribute them to the finished product. The key element for cost allocation is the costing object. Depending on the technological features of the enterprise, the objects of calculation can be: one type of product by individual redistributions, stages of production or production as a whole; a group of products in terms of manufactories, sections, teams or by enterprise; type of works, services by structural subdivisions of the enterprise; semi-finished product; details, units.

The most common ways of calculating the cost of production in the modern economic practice of industrial enterprises are based on the following principle: all costs are collected in the appropriate accounting accounts, followed by their attribution to calculation objects. Herewith, the division of costs into direct and indirect is of fundamental importance [4, p. 19]. Direct expenses are debited directly into the object of calculation, and indirect costs are allocated in proportion to the selected distribution base. The main task of calculation is the distribution of costs per unit of output, order, service, work, intended for sale, as well as internal use. Among the methods of calculation are simple, out-of-order and normative.

At the final stage of calculation are planned, estimated and actual calculations, which reflect in terms of costing items for

the production and sale of a unit of a particular type of product. On the basis of the norms and estimates operating at the beginning of the period the planned calculation is made. The calculation of the estimated calculation is done when designing new types of work or designing new products [5, p. 186].

The actual (reporting) calculation reflects the totality of all expenses incurred by the company for the production and sale of products. It is the data of the actual calculation are used to monitor the implementation of planned tasks to reduce the cost price of various types of products, as well as to analyze and dynamics of the cost of manufactured products.

Among the methods that are used calculation, we highlight target-costing, CVP-analysis, VCC-method, ABC-method, Kaizen-costing, LCC-analysis, SCA-method, direct-costing, normative method, standard-costing.

An important management tool is budgeting, which is considered as a process of planning future operations of the enterprise and registration of its results in the form of a system of budgets [6, p. 244]. Budgeting is a specific tool for cost management as a standardized process of determining the amount and composition of expenses associated with the activities of individual departments of the enterprise.

On the basis of budgeting are determined: the number of resources (labor, working capital and non-current assets in kind and in monetary terms), deadlines and responsible for the performance of works. It is possible to speak that by means of budgeting all process is modeled: research and development — delivery — manufacture — realization — obtaining of financial result.

Budgeting provides increasing of managers' responsibility of different levels of government for the financial performance of their structural units. Thus, budgeting is designed to ensure control over all types of expenses, for which a particular manager is responsible [7, p. 201]. Budgeting should be considered as a universal tool that can be combined with most existing cost management methods, namely: cost-killing, target-costing, CVP-analysis, VCC-method, ABC-method, Kaizen-costing, LCC-analysis, SCA-method, direct-costing, normative method, standard-costing [8, p. 34].

The value creation chain is a set of activities that create value [9, p. 244]. The emphasis is not only on the production processes that take place in enterprises, but also on the processes that take place outside it and are considered as components of the value chain. This tool should be used in the methods of target-costing, CVP-analysis, VCC-method, ABC-method, Kaizen-costing, LCC-analysis, SCA-method, direct-costing.

Summarizing the above, we note that the cost management tools are interrelated with the elements (functional components) of the cost management system (*Table 2*).

**Table 2.** The interrelation of tools and elements (functional components) of the cost management system

Elements (functional components)	Cost management tools									
	Common							Specific		
	Classification	Monitoring	Controlling	Automation	Formation of information base	Reporting	Optimization	Calculation	Budgeting	Value creation chain
Forecasting	-	+	-	+	+	+	-	+	-	+
Planning	+	-	+	+	+	+	+	+	+	+
Rationing	+	-	+	+	+	-	+	+	+	+
Organizing	+	+	+	+	+	-	+	-	+	-
Accounting	+	-	-	+	+	+	-	+	+	-
Motivating	+	+	+	+	+	-	+	-	+	-
Analysis	+	+	+	+	+	+	+	+	+	+
Search for reserves to reduce costs	+	-	+	+	+	+	+	-	+	+
Regulation	-	-	-	+	+	-	+	-	+	+

Presented in the *Table 2* information makes it possible to establish a correspondence between the elements (functional components) of the cost management system and common and specific tools that should be used in performing the relevant functions.

## CONCLUSIONS

The conducted research made it possible to identify the interrelations between the most common methods of cost management and tools for their implementation. The cost management tools are classified into groups of common, which have a wide range of applications, and specific, which are used mainly in the process of cost management. The interrelation between cost management tools and elements (functional components) of the cost management system is shown. This made it possible to find out that some of these tools affect all elements equally (for example, automation is an important tool for the operation of each element of the cost management system). Other tools relate only to individual cost management elements (for example, reporting is the final document for accounting and the starting point for analyzing and finding cost optimization reserves). The results of the study allow to increase the level of efficiency of the functional components of the cost management system by optimally combining the cost management tools with management methods used in the enterprise.

This is a promising area for further research to improve the efficiency of the cost management system of the enterprise.

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## СИСТЕМАТИЗАЦІЯ МЕТОДИЧНОГО ІНСТРУМЕНТАРІЮ СИСТЕМИ УПРАВЛІННЯ ВИТРАТАМИ ПІДПРИЄМСТВА

Представлено основні складові методичного інструментарію, що дало можливість його систематизації для ефективного управління витратами. Основною метою проведеного дослідження є підвищення функціонування системи управління витратами підприємства шляхом систематизації інструментів залежно від методів управління витратами.

Дослідження літературних джерел і наукових підходів до розв'язання проблеми визначення ефективного методичного інструментарію системи управління витратами підприємства засвідчила, що це питання залишається невирішеним повною мірою і потребує систематизації інструментів у взаємозв'язку із методами та елементами системи управління витратами, що сприятиме підвищенню ефективності її функціонування.

Актуальність розв'язання наукової проблеми полягає в тому, що оптимальне поєднання методів та інструментів управління витратами сприятиме підвищенню рівня ефективності функціональних складових системи управління витратами, яка впливає на підвищення конкурентоспроможності продукції підприємства на засадах оптимізації витрат.

Зазначено найбільш поширені методи управління витратами, серед яких: ABC-метод, директ-костинг, стандарт-костинг, абзорпшн-костинг, CVP-аналіз, таргет-костинг, кост-кіллінг, LCC-аналіз, бенчмаркінг, VCC-метод, кайзен-костинг. Здійснено обґрунтування запропонованої класифікації інструментів управління витратами залежно від зазначених методів.

Крім того, пропонується угруповання інструментів управління витратами на загальні, які мають широкий спектр застосування, і специфічні, що застосовуються переважно у процесі управління витратами. Зберігаючи таке угруповання, показано взаємозв'язок інструментів та елементів (функціональних складових) системи управління витратами підприємства.

Результати проведеного дослідження можуть мати прикладне значення для керівників виробничих підприємств щодо формування системи управління витратами.

**Ключові слова:** методи управління витратами, інструменти управління витратами, інструментарій, систематизація інструментів, функціональні складові системи управління витратами, підприємство

**JEL Класифікація:** G30, M40