

New Approaches for Cost Grouping in Cost Management and Accounting

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Abstract. This article is devoted to resolving a relevant and objectively existing problem of information insufficiency formed in accounting and presented in reporting to identify factors and results of the impact on the cost value of management decisions. Therefore, the purpose of this article is to develop and justify a new, previously unknown to science, grouping of costs by factors of searching a reserve to reduce costs. To achieve this goal the following methods were used: analysis and synthesis, deduction and induction, grouping, detailing, thought experiment, classification. As a result of applying these methods, a new grouping of costs was developed consisting of 3 classes selected on the basis of the decision-making subject, subclasses were determined in each class on the basis of the objects of management impact. It was found out that it is most appropriate to form this grouping of costs in the conditions of applying the "Standard-cost" method or the normative method. The scope of cost management tasks was also identified; their solution is based on the use of the proposed grouping of costs. This article will be useful for both researchers engaged in the development of theoretical bases for accounting and cost management and for practitioners in the field of management accounting, as well as for managers at various levels.

1. Introduction

Costs are one of the most important objects of management in any economic entity, regardless of the industry profile. Therefore, in order to manage costs it becomes important to gather, group, summarize and present reliable information on both the costs amount and the reasons for their dynamics, which is to be accomplished in the accounting system.

As a rule, the result of the accounting system activity is to present costs grouped according to various characteristics in internal and external statements, depending on specific tasks solved in the cost management system. In theory and practice of cost accounting there have been developed and applied various groupings of costs. But, at the same time, there is no grouping of costs that makes it possible to identify and quantify the influence of various factors on the costs amount.

Thus, the following problem arise: the information on the costs generated and presented in the accounting system is not sufficient for management needs, since the reporting data, which contain the necessary information, are not supposed to provide information on the factors determining the costs amount, as well as their influence on the dynamics of costs. So, the information presented in the statements does not allow to give an unambiguous answer to the question: under which factors determined by a specific management decision have the costs changed?

The existence of the above problem determines the relevance and practical significance of the study.



The conclusion on the existence of this problem was made based on investigating both the practice of accounting and cost management of enterprises in various industries located in the Kirov region and the works of various authors. In particular, we studied the following works written by the authors in the field of accounting and cost management: Arora, M.N.[1], Brinker, B.J.[2], Brock, H., Herrington, L., Ramey, L.[3], Cooper, R., Kaplan, R.S.[4], Drury, C.[5], Gupta, K.P.[6], Hansen, D.R., Mowen, M.M., Guan I.[7], Harris, J.K., Datar, S.M., Foster, G.[8], Horngren, C.T.[9], Hilton, R.W.[10], Mehta, B.K.[11], Monden, Y.[12], Oliver, L.[13], Rainborn, C.A., Kinney, M.R.[14], Seuring, S., Goldbach, M.[15], Shank, J.K., Govindarajan V.[16], Shim, J.K., Siegel, J.G.[17], Tascher, A., Charifzadeh, M.[18], VanDerbeck, E.J.[19], Weil, R.L., Maher, M.W.[20].

However, the works of all above-mentioned authors lack approaches to the formation of the above-proposed grouping of costs.

Therefore, the purpose of the study is to develop and justify the necessity to compile a new, previously unknown to science grouping of costs.

2. Materials and methods

The basis or the research materials were scientific works of various authors, local regulations that determine the procedure for organizing and keeping costs accounting at enterprises of the Kirov region and the use of accounting data in management.

The following research methods were used: analysis, synthesis, deduction, induction, thought experiment, classification, grouping and generalization, detailing.

The study was carried out by successive solving the following tasks, ensuring the achievement of the goal:

- to develop a new grouping of costs,
- to determine the approaches to its formation in accounting,
- to justify the necessity to use the proposed grouping of costs for managerial needs.

3. Results

The following results were obtained when analyzing the problems to solve.

First, it is proposed to group costs by factors of searching reserves to reduce costs.

Secondly, the approaches to forming this grouping in accounting are determined.

It was revealed that the grouping of costs by the factors of searching reserves in the existing cost accounting system is difficult to form, because the same factors can influence different cost components or costing items, which can lead to a recurring account and costs distortion. Therefore, it is proposed to form this grouping only under conditions of applying the "Standard-cost" method, or the normative method.

Thirdly, the necessity to form this grouping is substantiated by using the costs information presented in the form of a recommended grouping for solving specific management tasks.

4. Discussion

In forming groupings of costs, it is, first of all, necessary to define clearly the feature of the grouping, to determine its composition and structure.

So, in forming a grouping of costs by factors of searching reserves, it is necessary to identify clearly and determine which factors impact the amount of costs. At the same time, the basis for determining these factors should be a possibility to influence their value through specific managerial decisions (groups of decisions) related to a particular sphere of management, as well as to specific subjects of management and ways to justify the decisions taken.

Therefore, the hierarchy of factors, as the basis for the grouping of costs, was constructed resting, first of all, on the feature of the management subject. On this basis, all factors are divided into three classes:

- external factors
- internal factors

- environmental and ecological factors.

External factors are those that the organization management is not able to influence, because they are determined by decisions taken at a higher level, for example, by the state, and brought to the organization management through binding acts.

For example, increasing taxes and fees, introducing new mandatory payments by the state contributes to higher costs, and this factor cannot be influenced by a particular economic entity.

Unlike external factors, the organization is able to influence the internal factors through management decisions made by administration.

Examples of this factor may be changes in the product design or composition associated with the use of cheaper raw materials and supplies, reducing the product processing and manufacturing time, etc.

Environmental and ecological factors are those that are determined by natural conditions (climate, etc.). The humanity is not able to influence them yet. For example, heating and lighting costs, which are determined by the temperature, the duration of daylight, etc.

Further, the determined classes of factors were worked out in detail depending on the objects of management, which are directly influenced by a specific managerial decision. And since decisions are implemented within the framework of a specific policy, it is also possible to group factors in the context of a specific policy.

At the same time, there is a relationship between internal and external factors at the policy level since the change in external factors is to result in the management subject's reflection at the level of the economic entity. This is so-called forced solutions. For example, changes in technical regulations introduced by the state lead to making necessary changes in the product design or composition. Thus, in grouping factors and costs, it is necessary to exclude the impact of such forced changes by identifying the reasons for the decisions clearly.

In general, in detailing external factors, the following subclasses of factors were identified:

- factors of the state tax policy,
- factors of the state social policy,
- factors of the state technical policy,
- factors of the labor relations policy,
- factors of the customs policy.

Factors of the tax policy are primarily changes in the current tax legislation. Factors of the social policy are realized through changes in pension legislation, legislation on social security. Factors of the technical policy concern mainly changes in technical regulations, control and quality management policies at the state level, ensuring uniform measurements, and certification. Factors of the labor relations policy are related to the changes in the minimum wage, the length of the working day and the week, additional payments in favor of workers. The factors of the customs policy involve changes in the customs legislation, changes in the rates of customs duties, etc.

Internal factors, when detailed, can have a different content, depending on the industry profile of the economic entity. But, in a generalized form, the classification of internal factors may look like the following:

- constructive and technical factors of the product (composition and structure),
- technological factors,
- factors of the level of the equipment used,
- organizational factors,
- factors of the organization's marketing policy,
- factors of the company's environmental policy,
- factors of the policy of relations with suppliers,
- logistic factors,
- factors of depreciation policy,
- factors of the organization's social policy,

- factors of the organization's accounting and tax policy,
- factors of personnel policy.

Thus, in general, the grouping of costs by factors presented in statements will have the following form: the cost class is first given, then, within its structure, each class of costs is decoded according to subclasses indicated above.

At the same time, it was found that several factors can influence the same costs component. For example, the cost of raw materials and supplies can be affected by the product design (composition), manufacturing technology, machinery used, supplier relations policy, logistics factors and accounting policies. Thus, it was concluded that it is not possible to correlate a particular type of costs and one factor affecting it accurately.

This conclusion predetermined the approach of forming the grouping of costs by factors, or rather the impossibility of combining this grouping of costs with the groups formed in accounting and reporting. Therefore, as an approach of forming the grouping of costs in accounting, the "Standard-cost" method or the normative method were suggested to be modified by detailing the changes and deviations from the norms through specifying the causes and factors of deviations. This approach is based on the fact that it is the deviations or changes in norms that are the result of a decision taken at various management levels or caused by uncontrolled environmental processes.

To justify the necessity to use this grouping, three tasks have been put forward and formulated, the solution of which is based on the use of this grouping, namely:

1. Definition of the costs reflection on various management decisions.
2. Rationale for management decisions.
3. Search for reserves to reduce costs.
4. Clear identification of the factors affecting costs.

This grouping determines the reflection of the cost amount on various managerial decisions taken within the framework of various management objects in the organization, as well as decisions taken at a higher level of management and enshrined in legislative and regulatory acts. It determines the relevance of costs, depending on the decisions made in different areas of management decisions. In addition, normal values of factors, which were used as the basis for planning the cost of production and determining the standards, should eliminate changes and deviations in the cost value. In case of changes in the factors, compared with the previous period or with the plan, there may be deviations and changes of the norms. Therefore, it is possible to identify the real causes of changes and deviations, in order to determine the internal reserves for reducing costs and to develop measures for their mobilization. All this determines the practical significance of the obtained research results.

5. Conclusion

The purpose of this article was to develop and justify the necessity to apply the grouping of costs based on the search for reserves. To develop the grouping, we worked out a classification of the factors influencing the costs, without knowledge of which it is impossible to identify correctly the reserves of cost reduction, since the cause of their change will be unknown. As a result, three classes of factors were identified, based on the subject of management, as well as the subject without a goal - the natural environment. Further, all these classes were detailed in the areas of managerial decisions and specific management objects.

Approaches to forming the information on the proposed grouping of costs were also defined, and a set of tasks where the proposed grouping is possible to apply was identified.

At the same time, the research results can be used by various organizations, regardless of the form of ownership, the location of business, the industry profile. In general, the use of the research results will contribute to improving the management of the organization as a whole.

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