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CRITERIAL APPROACH TO ANALYSIS OF THE COST MANAGEMENT SYSTEM OF BUSINESS STRUCTURES

Abstract. The article presents the basic principles of a criteria-based approach to the analysis of the cost management system of business structures. The expediency of analysis for each stage of the cost management process is indicated. The stages of cost management are determined: development (adoption) of a solution, implementation of a solution and control. The method for calculating complex and resulting criteria for analyzing the effectiveness of the cost management system on the example of sewing enterprises is proposed. Among the main results of the proposed criterial approach, the assessment of the effectiveness of the cost management system of a business structure in the context of each stage of management and the possibility of comparing the effectiveness of cost management systems at different enterprises are determined. For each stage of management, the six local criteria have been developed and their quantitative characteristics are indicated to analyze the level of efficiency of the cost management system. Local criteria can take values from 0 to 1. For each of them, there are three options for the accepted value: the most and least effective and intermediate value. Local criteria are combined into a complex criterion. The complex criteria for each stage of management constitute the resulting criterion for assessing the cost management system of the business structure. The closer the obtained value of the resulting criterion is to 1, the more effective the cost management system at the enterprise becomes.

The analysis of indicators of five leading domestic enterprises of the garment industry was carried out according to the given methodology. It was found that the performance indicators of each of the studied enterprises are almost half of the optimal result. It is noted that the researched enterprises need to focus on improving the existing cost management systems. Moreover, each enterprise has the cost management system with the different operating efficiency at each stage of management. That is, the proposed methodology allows enterprises to identify problematic aspects in the context of management stages and to make changes to the cost management system in order to increase its efficiency.

Keywords: cost analysis, cost management system, management stages, local criteria, complex criteria, resulting criterion, business structure, sewing enterprise.

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КРИТЕРІАЛЬНИЙ ПІДХІД ДО АНАЛІЗУВАННЯ СИСТЕМИ УПРАВЛІННЯ ВИТРАТАМИ БІЗНЕС-СТРУКТУР

Анотація. Представлено основні засади критеріального підходу до аналізу системи управління витратами підприємства. Зазначено доцільність аналізування за кожним етапом процесу управління витратами. Етапами управління витратами визначено: розроблення (прийняття) рішення, реалізація рішення і контролювання. Запропоновано методіку обчислення комплексних і результуючого критеріїв для аналізу ефективності системи управління витратами на підприємстві. Серед основних результатів запропонованого критеріального підходу визначено оцінювання ефективності системи управління витратами на підприємстві в розрізі кожного етапу управління і можливість порівняння ефективності систем управління витратами на різних підприємствах. Для кожного етапу управління розроблено по шість локальних критеріїв і зазначено їхні кількісні характеристики для аналізування рівня ефективності системи управління витратами. Локальні критерії можуть набувати значень від 0 до 1. Для кожного з них передбачено три варіанти прийнятого значення: найбільш і найменш ефективне для підприємства та проміжне значення. Локальні критерії поєднуються в комплексний критерій. Комплексні критерії кожного етапу управління складають результуючий критерій оцінки системи управління витратами підприємства. Що ближче отримане значення результуючого критерію до одиниці, то ефективніша система управління витратами на підприємстві.

За наведеною методикою проведено аналізування показників п'яти провідних вітчизняних підприємств швейної промисловості. Установлено, що результативні показники кожного з досліджуваних підприємств майже удвічі менші від оптимального результату. Зазначено, що досліджуваним підприємствам варто зосередитися на поліпшенні чинних

систем управління витратами. Причому в кожного підприємства система управління витратами має різну ефективність функціонування на кожному етапі управління. Тобто запропонована методика дозволяє підприємствам виявити проблемні аспекти в розрізі етапів управління і внести зміни до системи управління витратами з метою підвищення її ефективності.

Ключові слова: аналізування, система управління витратами, етапи управління, локальні критерії, комплексні критерії, результуючий критерій, бізнес-структура, швейне підприємство.

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Introduction. Among the topical problems of the development of business structures, the most important is the analysis of the effectiveness of the cost management system, which has a direct impact on increasing the level of profitability. Traditionally, in the domestic and foreign literature, sufficient attention has been paid to scientific and methodological developments on cost analysis. A large number of studies devoted to various aspects of monitoring and analysis of the cost management system shows the importance and urgency of this problem. Taking into account the high workload of enterprise managers, the proposed criterial approach, which makes it possible to understand which stage of cost management should be paid more attention to in order to improve management efficiency, is relevant. Taking into account the modern features of the market environment, it is necessary to adapt the accumulated scientific and methodological experience to applied solutions in relation to the effective analysis of the cost management system of business structures.

Research analysis and problem statement. The issue of analyzing the cost management system of business structures is being investigated by such scientists as V. V. Pryadko [5], Ye. A. Belyukov [6], N. A. Beznoshchenko [6], T. S. Gaiduchok [7], V. A. Mostepanyuk [7], A. V. Zinchenko [9], R. Kaplan [10], R. Cooper [10], M. I. Skripnik [11], T. Ye. Voronkova [11], J. M. Roche-Anderson [12], S. M. Bragg [12], criterion approach to increase management efficiency was considered by S. A. Tkachenko [2], L. V. Oliynyk [8], certain aspects of using the Balanced Scorecard (Balanced Scorecard — BSC) with a corresponding assessment of its efficiency is revealed in the works of domestic researchers [13; 14].

They consider the analysis of the cost management system from the standpoint of increasing its efficiency, the ability of the cost management system to timely identify reserves for optimizing costs and reducing the cost of production. In this context, the **purpose** of the article is to provide methodological support for analyzing the effectiveness of the cost management system of business structures using a criteria approach in the context of each stage of the management process.

Research results. The analysis of the cost management system should be aimed at determining the ways to effectively achieve the desired results according to the existing system, as well as identifying key problems and areas for improving the cost management system. For this, it is advisable to apply the criteria approach for each stage of the cost management process.

Criterion — is an indicator, a feature on the basis of which an assessment of the quality of an economic object, process is formed, a measure of such an assessment [1, p. 154]. So, for each task, a measure of efficiency is determined, which shows the advisability of choosing a solution from alternative options. The criterion must meet the following requirements: be weighty and be critical in relation to the variable indicators, that is, it must be promptly changed when the parameters change depending on the decision made. In real conditions, as a rule, it is necessary to use not one, but several criteria, grouped for a complex analysis of indicators at each stage of management. It is especially important to take into account the relationship of individual criteria and the assessment of their impact on the growth or reduction of the generalizing criterion [2, p. 85].

For the study, two methods were combined: a method based on the determination of numerical indicators, which characterizes the functional components of the stages of cost

management, and an empirical method, which takes into account expert assessments of specialists from leading sewing enterprises in Ukraine. This made it possible to conduct research taking into account the assessment of experts of the appropriate level of qualification and to reduce the subjectivity of respondents.

To assess the cost management system in the garment industry, it is advisable to analyze each stage of cost management using a number of criteria. As a result of the calculations, the complex criteria will be obtained:

$$KK = \sum_{i=1}^n a_i K_i, \quad (1)$$

where KK — complex criteria;

a_i — coefficient of significance of local criteria's;

K_i — local criteria's;

n — number of local criteria for the relevant stage of cost management.

Source: generated by the author considering [3, p. 119].

The weighting coefficients can take values from 0 to 1. They are determined using the hierarchy analysis method developed by the American mathematician T. Saaty as a mathematical tool for a systematic approach to solving complex problems in the decision-making process [3, p. 128]. Local criteria can take values from 0 to 1. For each of them, there are three options for the accepted value: the most and least effective for the enterprise and an intermediate value (respectively $K = 1$, $K = 0$ and $K = 0.5$). Thus, the complex criterion can be in the range from 0 to 1. Herewith, the closer the value of the complex criteria to 1, the more efficient the cost management system exists at the enterprise.

For a more complete analysis of the effectiveness of cost management at enterprises, we suggest using the resulting criterion:

$$PK = \frac{\sum_{j=1}^m KK_j}{m}, \quad (2)$$

where PK — resulting criterion;

KK_j — complex criterion of j -stage;

m — the number of subsystems of the cost management system.

Source: generated by the author considering [3, p. 121].

The resulting criterion can also be in the range from 0 to 1. The closer the obtained value is to 1, the more effective the cost management system in the enterprise. The results of the proposed criteria-based approach are:

- defining the role of each stage in the overall cost management system at the enterprise;
- evaluation of the effectiveness of the cost management system at the enterprise,
- the ability to compare the effectiveness of cost management systems at different enterprises [4, p. 154].

Let's consider each stage of cost management using the example of garment industry enterprises.

The stage of *development (making) a decision* is key in cost management system. Its implementation is carried out by top and middle managers of the enterprise [5, p. 267].

The effectiveness of the final decisions can be assessed only taking into account the final financial results in comparison with the actual data that existed before the decision was made [6, p. 9]. The ratio of the number of effective solutions to their total number is an indicator of the effectiveness of a particular system. Its functioning should be considered positive even in the presence of decisions that lead to unprofitableness, if this damage is covered by a positive value of the financial result obtained thanks to other decisions and is strategically justified [7, p. 57; 8, p. 280].

Criteria for evaluating the effectiveness of the cost management system at the stage of development (decision-making) was developed (*Table 1*) taking into account the peculiarities of the enterprises of the garment industry, which are associated with a constant change in the range of products due to the need to follow fashion trends in the sewing market:

- 1) Types of planning that are used in the enterprise.
- 2) Frequency of negative deviations between planned and actual indicators.
- 3) Evaluating the effectiveness of the planning process in the enterprise.
- 4) Quality of internal information base.
- 5) Completeness of application of the budgeting process.
- 6) Timeliness of revision of standards and norms.
- 7) Frequency of updating the regulatory regulatory and legal framework of the enterprise.
- 8) Systematic expenses on demand research and development of new fashion models.
- 9) Regularity of forecasting demand for new fashion models.
- 10) Forecasting environmental threats.
- 11) Timeliness of providing the necessary information on costs.

Table 1

Quantitative characteristics of local criteria for evaluating the cost management system at the stage of development (making) decision

Criterion	<i>K</i> = 1	<i>K</i> = 0.5	<i>K</i> = 0
1. Types of planning used in the enterprise	Combination of operational, short-term and long-term planning	Operational and short-term planning	Mostly short-term planning
2. Frequency of negative deviations between planned and actual results	Not often	Periodically	Every month
3. Evaluating the effectiveness of the planning process at the enterprise	High level of efficiency	Middle level of efficiency	Low level of efficiency
4. Quality of internal information base	Regular maintenance and updating of the information base	Updating the database once a month	Updating the database from time to time (periodically)
5. Completeness of application of the budgeting process	Applied in full	Used in separate divisions	Individual elements are used
6. Timeliness of revision of standards and norms	Standards and norms are reviewed systematically	Several times a year	Once a year or less
7. Frequency of updating the regulatory and legal framework of the enterprise	Regular operational updating of regulatory and legal framework	Held monthly	Once a year
8. Systematic expenses on demand research and development of new fashion models	Such expenses carried out systematically	Such expenses are carried out from time to time (periodically)	Such expenses are not carried out
9. Regularity of forecasting demand for new fashion models	Carried out for each seasonal group of new models	Periodically carried out on separate models	Once a year or less
10. Forecasting of environmental threats	Environmental forecasting is carried out regularly	Carried out several times a year	Carried out once a year or less
11. Timeliness of providing the necessary information on costs	Information is provided monthly, adjusted immediately if necessary	Information is provided once a quarter	Information is usually provided twice a year

Source: generated by the author.

The quantitative characteristics of local criteria, depending on the survey participants' answer options, are summarized in *Table 1*.

The results of the cost analysis are used to prioritize various possible solutions in the following areas:

- operational cost management;
- pricing and development of an assortment policy;
- making effective management decisions [9, p. 125].

15 experts (economists, accountants, marketers, managers) working at domestic garment enterprises were involved in the expert evaluation: PJSC «Khmilnyk clothes factory “Lileia”», JSC «Sewing factory «Zoryanka»», JSC «Santa Ukraina», JSC KVTF «Kremteks», JSC «Uzhhorod sewing factory».

On the basis of expert assessments, the coefficients of the significance of local criteria for sewing enterprises at the stage of development (adoption) of a decision were calculated (*Table 2*).

As can be seen from the data of the *Table 2*, the criteria «Timeliness of providing the necessary information on expenses» and «Types of planning used in the enterprise» received the greatest significance, according to experts. The lowest score is given to the criterion «Consistency of spending on demand research and development of new models», which is unacceptable for sewing enterprises, considering the specifics of their products.

Table 2

Significance of local criteria evaluating the effectiveness of the cost management system at the stage of developing (making) decisions

#	Criterion	Significance
1	Types of planning used in the enterprise	0.13
2	Frequency of negative deviations between planned and actual results	0.07
3	Evaluating the effectiveness of the planning process at the enterprise	0.09
4	Quality of internal information base	0.10
5	Completeness of application of the budgeting process	0.08
6	Timeliness of revision of standards and norms	0.07
7	Frequency of updating the regulatory and legal framework of the enterprise	0.09
8	Systematic expenses on demand research and development of new fashion models	0.05
9	Regularity of forecasting demand for new fashion models	0.08
10	Forecasting of environmental threats	0.07
11	Timeliness of providing the necessary information on costs	0.20
Total		1.0

Source: calculated by the author based on the results of expert evaluation.

The quality of the cost management system functioning at the stage of *solution implementation* can be assessed by the number and volume of the detected deviations of actual costs from planned ones, as well as the share of these deviations in the total planned costs in the context of: cost centres; cost items; cost carriers [10, p. 216].

To assess the cost management system of the sewing enterprises at the stage of implementing the solution, it is advisable to apply the following criteria:

- 1) frequency of identifying the reasons for deviations of actual costs from the standard;
- 2) monitoring of the current organizational structure of the enterprise;
- 3) presence of an organizational structure for cost management;
- 4) degree of detailing of the information on expenses by places of their occurrence;
- 5) presence of information links between structural units;
- 6) communicating the tactical and strategic goals of the enterprise to employees;
- 7) improving the level of qualification of employees;
- 8) use of various methods of influence on employees in the event of negative deviations;
- 9) application of methods to stimulate employees based on the results of their work;
- 10) provision of the cost management process with appropriate software products.

Quantitative expression of the criteria for the second stage of enterprise cost management is shown in the *Table 3*.

Table 3

Quantitative characteristics of local criteria for assessing the cost management system at the stage of implementing the solution

Criterion	<i>K</i> = 1	<i>K</i> = 0.5	<i>K</i> = 0
1. Frequency of identifying the reasons for the deviation of actual costs from the standard	Detected regularly	Carried out from time to time	Not carried out
2. Monitoring of the current organizational structure of the enterprise	Carried out regularly	Carried out from time to time	Not carried out
3. Presence of an organizational structure for cost management	According to the organizational structure of the enterprise, a cost management structure has been created	Each structural unit is a centre of responsibility	No organizational structure for cost management
4. The degree of detailing of the information on expenses by places of their occurrence	Centres of responsibility	Separate divisions of an enterprise	Enterprise as a whole
5. Presence of information links between structural units	Presence of two-way information links between all divisions of an enterprise	Presence of links on specific issues	No system connections
6. Communicating the tactical and strategic goals of the enterprise to employees	Carried out regularly	Carried out from time to time	Not carried out
7. Improving the level of qualification of employees	Carried out every 3 years	Carried out periodically	Absent
8. Use of various methods of influence on employees in the event of negative deviations	Monetary and moral influence	Monetary influence	Moral influence or lack of measures
9. Application of methods to stimulate employees based on the results of their work	Surcharges and allowances, bonuses, awarding with certificates of honour, valuable gifts	Cash bonuses	Lack of stimulation methods
10. Provision of the cost management process with appropriate software products	Standard accounting programs	Software of own development	Software is not used

Source: developed by the author.

The generalized results of the calculating the coefficients of significance of local criteria for assessing the cost management system at the stage of implementing the solution according to the experts' data are given in the *Table 4*.

Table 4

The significance of local criteria for assessing the effectiveness of the cost management system at the stage of implementing the solution

#	Criterion	Significance
1	Frequency of identifying the reasons for the deviation of actual costs from the standard	0.14
2	Monitoring of the current organizational structure of the enterprise	0.04
3	Presence of an organizational structure for cost management	0.09
4	The degree of detailing of the information on expenses by places of their occurrence	0.21
5	Presence of information links between structural units	0.06
6	Communicating the tactical and strategic goals of the enterprise to employees	0.06
7	Improving the level of qualification of employees	0.07
8	Use of various methods of influence on employees in the event of negative deviations	0.14
9	Application of methods to stimulate employees based on the results of their work	0.09
10	Provision of the cost management process with appropriate software products	0.10
Total		1.0

Source: calculated by the author based on the results of expert evaluation.

At the *control* stage, information is collected for cost analysis with the mandatory observance of the following requirements:

- efficiency;
- quality;
- collection of information directly at the place of origin [11, p. 187].

The more accurately these requirements are met, the higher the efficiency and quality of the management decisions made on the basis of the information received [12, p. 195].

Correct organizing and control largely predetermines the efficiency of cost management by timely presentation of information on the state and movement of inventory items and other cost components [13, p. 107; 14, p. 179].

Based on the indicated at the control stage, the following criteria can be distinguished:

- 1) method used to analyze costs;
- 2) presence of an organizational unit dealing with cost analysis;
- 3) frequency of cost analysis;
- 4) completeness of cost analysis;
- 5) reliability of the information provided for cost analysis;
- 6) timeliness of providing of the analytical information;
- 7) depth of the cost analysis at the enterprise;
- 8) degree of automation of the cost analysis;
- 9) systematic search for cost optimization reserves;
- 10) operativeness of cost regulation.

The quantitative expression of the specified criteria of the subsystem of analysis and cost control for the options of experts' answers is summarized in the *Table 5*.

Table 5

Quantitative characteristics of local criteria for assessing the cost management system at the stage of cost control

Criterion	<i>K</i> = 1	<i>K</i> = 0.5	<i>K</i> = 0
1. Method used to analyze costs	Normative	Cost element analysis	Not carried out
2. Presence of an organizational unit dealing with cost analysis	Carried out by an employee of the cost management center	Entrusted to the economic department or accounting	There is no such unit
3. Frequency of cost analysis	Carried out monthly	Carried out quarterly	Not carried out
4. Completeness of cost analysis	Carried out at all locations of operations	Carried out selectively	Not used
5. Reliability of the information provided for cost analysis	All information provided is completely accurate	Existence of isolated cases of providing false information	Information provided is often inaccurate
6. Timeliness of providing of the analytical information	Information always provided in a timely manner	There are cases when information comes with a delay	Information usually arrives untimely
7. Depth of the cost analysis at the enterprise	Cost evaluation by summary indicators, analysis by items and cost elements	Analysis only by items and cost elements	Analysis not carried out
8. Degree of automation of the cost analysis	Cost analysis is fully automated	Automated individual operations (calculation of results, formulas)	No automation
9. Systematic search for cost optimization reserves	Carried out regularly	Carried out from time to time	Carried out not regularly
10. Operativeness of cost regulation	Carried out monthly	Carried out quarterly	Carried out every six months

Source: developed by the authors.

The coefficients of the significance of local criteria for assessing the cost management system at the control stage are given in the *Table 6*.

Table 6

Significance of local criteria for evaluating the cost management system at the control stage

#	Criterion	Significance
1	Method used to analyze costs	0.11
2	Presence of an organizational unit dealing with cost analysis	0.09
3	Frequency of cost analysis	0.11
4	Completeness of cost analysis	0.10
5	Reliability of the information provided for cost analysis	0.14
6	Timeliness of providing of the analytical information	0.10
7	Depth of the cost analysis at the enterprise	0.07
8	Degree of automation of the cost analysis	0.04
9	Systematic search for cost optimization reserves	0.11
10	Operativeness of cost regulation	0.12
Total		1.0

Source: calculated by the authors based on the results of expert assessments.

The data of the *Table 6* indicate that at each sewing enterprise, whose representatives acted as experts during the testing, considerable attention is paid to the reliability of the information provided. At the same time, the degree of automation of cost analysis at these enterprises is not at a sufficiently high level, although today the software market offers significant diversity of software not only for accounting, but also for solving the analytical tasks of management.

Performing analysis by help of the specified criteria at each stage of cost management should show the existing problems: technical — for the acquisition and installation of more modern analysis and control tools; organizational — regarding the allocation of responsibility centres in terms of the effectiveness of functioning of the cost management system.

It is necessary to analyze the indicators of the studied enterprises of the clothing industry according to this method.

As an example, let us consider the data on the operational activities of PJSC «Khmilnyk clothes factory “Lileia”». The company uses a combination of operational and short-term planning. According to the *Table 1* and *Table 2* the first local criterion has value 0.5; wherein the coefficient of the significance is equal to 0.13. Negative deviations from the planned indicators occur at the enterprise often, the second criterion is 0. Planning at the enterprise shows the average degree of efficiency, i.e. 0.5 and has significance coefficient 0.09. Due to the fact that the regulatory framework is updated periodically, the fourth criterion is equal to 0.5 and its significance is equal to 0.1. The enterprise does not apply budgeting, accordingly $K = 0$. The sixth local criterion is equal to zero, since the standards are revised once a year. At the enterprise, the regulatory and legal framework is updated monthly, so the corresponding criterion is equal to 0.5 and has a significance of 0.09. The expenditures on demand research and demand model development are carried out periodically, the information necessary for making a decision is not always provided on time, the eighth and eleventh local criteria acquire a value of 0.5 each (the significance coefficients are, respectively, 0.05 and 0.2). The regularity of demand for new models is carried out for each seasonal group, so the criterion corresponds to one, and its significance is 0.08. The company does not forecast environmental threats, and the appropriate criterion is zero.

The complex criterion (KK_I) for assessing the cost management system at the stage of developing (making) a decision for PJSC «Khmilnyk clothes factory “Lileia”» is calculated using the formula (1):

$$KK_I^{Lileia} = (0.5 \cdot 0.13) + 0 + (0.5 \cdot 0.09) + (0.5 \cdot 0.1) + 0 + 0 + (0.5 \cdot 0.09) + (0.5 \cdot 0.05) + (1 \cdot 0.08) + 0 + (0.5 \cdot 0.2) = 0.41.$$

The value of the complex criterion is equal to 0.41 out of a possible 1.0. Therefore, at the stage of development (decision-making) the cost management system of PJSC «Khmilnyk clothes factory “Lileia”» does not work effectively enough.

In the same way the complex criterion for the stage of realization of the decision on PJSC «Khmilnyk clothes factory “Lileia”» is calculated:

$$KK_2^{Lileia} = 0 + (1 \cdot 0.04) + 0 + (0.5 \cdot 0.21) + (1 \cdot 0.06) + (1 \cdot 0.06) + (0.5 \cdot 0.07) + (1 \cdot 0.14) + (0.5 \cdot 0.09) + (0.5 \cdot 0.1) = 0.54.$$

According to the results of calculations at PJSC «Khmilnyk clothes factory “Lileia”», the complex criterion of the decision implementation stage is equal to 0.54, which shows higher results than the complex criterion of the decision-making stage, but it is still almost twice lower than the maximum possible value 1.0.

Similarly, it is necessary to calculate a comprehensive criterion for the stage of cost control:

$$KK_3^{Lileia} = (0.5 \cdot 0.11) + (0.5 \cdot 0.09) + (1 \cdot 0.11) + (1 \cdot 0.10) + (1 \cdot 0.14) + (1 \cdot 0.10) + (1 \cdot 0.07) + (1 \cdot 0.04) + (0.5 \cdot 0.11) + (0.5 \cdot 0.12) = 0.78.$$

The value of the complex criterion is calculated for PJSC PJSC «Khmilnyk clothes factory “Lileia”» for the stage of the cost control and it is equal to 0.83 out of a possible 1.0. Thus, it allows us to conclude that the cost management system at the enterprise works most effectively at the control stage.

To calculate the resulting criterion (PK) was used the formula (2):

$$PK^{Lileia} = (0.41 + 0.54 + 0.78) / 3 = 0.58.$$

The estimated value of the resulting criterion shows that the cost management system at PJSC PJSC «Khmilnyk clothes factory “Lileia”» can work more efficiently.

The management of the enterprise should pay more attention to the first stage of cost management.

Similarly, complex and resulting criteria were calculated for other enterprises, the activities of which were studied in the work. The results obtained are grouped in the *Table 7*.

Table 7

The results of the implementation of the criterion approach to the cost analysis systems of the garment industry, which were studied, scores

Criterion	PJSC «Khmilnyk clothes factory “Lileia”»	JSC «Sewing factory “Zoryanka”»	JSC «Santa Ukraina»	JSC KVTF «Kremteks»	JSC «Uzhhorod sewing factory»
1. Types of planning used in the enterprise	0.07	0.07	0.06	0.13	0.07
2. Frequency of negative deviations between planned and actual results	0.00	0.00	0.04	0.04	0.04
3. Evaluating the effectiveness of the planning process at the enterprise	0.04	0.05	0.00	0.00	0.09
4. Quality of internal information base	0.05	0.00	0.05	0.05	0.10
5. Completeness of application of the budgeting process	0.00	0.04	0.04	0.04	0.04
6. Timeliness of revision of standards and norms	0.00	0.06	0.04	0.07	0.07
7. Frequency of updating the regulatory and legal framework of the enterprise	0.04	0.05	0.00	0.00	0.00
8. Systematic expenses on demand research and development of new fashion models	0.03	0.00	0.03	0.05	0.03
9. Regularity of forecasting demand for new fashion models	0.08	0.08	0.04	0.00	0.00
10. Forecasting of environmental threats	0.00	0.00	0.03	0.07	0.04
11. Timeliness of providing the necessary information on costs	0.10	0.10	0.10	0.10	0.10
KK_1	0.41	0.45	0.43	0.55	0.58

Table 7 (continued)

Criterion	PJSC «Khmilnyk clothes factory “Lileia”»	JSC «Sewing factory “Zoryanka”»	JSC «Santa Ukraina»	JSC KVTF «Kremteks»	JSC «Uzhhorod sewing factory»
1. Frequency of identifying the reasons for the deviation of actual costs from the standard	0.00	0.07	0.07	0.07	0.14
2. Monitoring of the current organizational structure of the enterprise	0.04	0.04	0.04	0.02	0.02
3. Presence of an organizational structure for cost management	0.00	0.00	0.00	0.09	0.09
4. The degree of detailing of the information on expenses by places of their occurrence	0.11	0.11	0.11	0.21	0.11
5. Presence of information links between structural units	0.05	0.03	0.03	0.03	0.06
6. Communicating the tactical and strategic goals of the enterprise to employees	0.06	0.00	0.06	0.06	0.03
7. Improving the level of qualification of employees	0.04	0.08	0.04	0.04	0.07
8. Use of various methods of influence on employees in the event of negative deviations	0.14	0.07	0.14	0.07	0.14
9. Application of methods to stimulate employees based on the results of their work	0.05	0.09	0.00	0.00	0.00
10. Provision of the cost management process with appropriate software products	0.05	0.06	0.05	0.05	0.10
<i>KK₂</i>	<i>0.54</i>	<i>0.55</i>	<i>0.54</i>	<i>0.64</i>	<i>0.76</i>
1. Method used to analyze costs	0.06	0.06	0.11	0.11	0.06
2. Presence of an organizational unit dealing with cost analysis	0.05	0.05	0.05	0.09	0.09
3. Frequency of cost analysis	0.11	0.11	0.11	0.06	0.06
4. Completeness of cost analysis	0.09	0.05	0.10	0.05	0.05
5. Reliability of the information provided for cost analysis	0.14	0.14	0.14	0.07	0.00
6. Timeliness of providing of the analytical information	0.10	0.10	0.10	0.00	0.10
7. Depth of the cost analysis at the enterprise	0.07	0.04	0.04	0.04	0.07
8. Degree of automation of the cost analysis	0.04	0.04	0.02	0.04	0.00
9. Systematic search for cost optimization reserves	0.06	0.11	0.06	0.11	0.11
10. Operativeness of cost regulation	0.06	0.06	0.05	0.12	0.06
<i>KK₃</i>	<i>0.78</i>	<i>0.76</i>	<i>0.78</i>	<i>0.69</i>	<i>0.60</i>
<i>PK</i>	<i>0.58</i>	<i>0.59</i>	<i>0.58</i>	<i>0.63</i>	<i>0.65</i>

Source: developed and calculated by the author.

The main conclusion, that can be made by analyzing the data in the *Table 7*, is in the fact that the cost management system does not work efficiently at the studied enterprises of the garment industry. Even the most successful enterprise in terms of the resulting criterion JSC «Uzhhorod sewing factory» did not achieve the maximum result (1.0).

The analysis of the resulting criteria of each of the surveyed enterprises shows that their performance is almost half the maximum result. The difference in cost management systems in the sewing factories is negligible. If according to the resulting criterion for JSC «Uzhhorod sewing

factory» the better indicators at the stages of decision-making and implementation (is equal to 0.76), but at PJSC «Khmilnyk clothes factory “Lileia”» the highest indicators were achieved at the control stage (is equal to 0.78).

The analysis of the above data clearly proves that these enterprises need to focus on developing ways to improve existing cost management systems. The application of the proposed criterion approach will allow companies to determine which stage of cost management should be paid more attention.

Conclusions. The proposed criterial approach to the effectiveness of the cost analysis takes into account each stage of control and is based on the study of local criteria, the indicators of which are used to calculate the resulting criterion. The study conducted on the basis of data from enterprises in the garment industry showed the feasibility of the proposed approach to the analysis of the effectiveness of the cost management system of enterprises (on the example of sewing enterprises).

At the same time, the research carried out has shown that the problems of the effectiveness of the cost management system are relevant for domestic sewing enterprises. This is due to a number of aspects:

- firstly, cost reduction along with an increase in production is one of the main sources of profit at the enterprise, but due to the specifics of sewing products, they cannot be made in large quantities;

- secondly, the analysis indicates a high share of costs per 1 UAH of production volume;

- thirdly, in modern conditions it is necessary to keep separate accounting and planning of variable and conditionally fixed costs, which is associated with their different role in the formation of profits due to the independence of the latter from the volume of production, which is unstable in modern conditions;

- fourthly, the share of conditionally fixed expenses is high;

- fifthly, not all sewing enterprises have an effective cost management mechanism.

The above is a promising area for further research.

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