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The technique of evaluating the efficiency of controlling adjusted for confectionary enterprises

Abstract. The present situation of uncertainty and instability requires that an enterprise should increase efficiency and competence of management, which might be achieved by means of controlling. The authors consider various approaches to the definition of «controlling» as a management control system that can provide an integrated evaluation of the achievement of the goals set before the enterprise. The approach based on a rating (integral) score most fully reflects the condition of the enterprise and its accomplishment of short-term, medium-term and long-term goals. The author-developed technique is based on a Balanced Scorecard and was implemented and tested in December 2015 at a large Russian confectionary «KONTI-RUS», CJSC, whose accounting (financial) and management statements of 2014 served as a basis for the analysis and evaluation. The aforementioned confectionary is a part of «KONTI» international corporation that unites three confectionaries in Ukraine and one in Russia. The undertaken analysis of the controlling integral factors showed, firstly, that the confectionary has no Controlling Department, with the controlling functions being distributed among the existing subdivisions of the enterprise, and, secondly, controlling integral factors need improving. The improvement of controlling integral factors resulted in the increased efficiency of management, which is reflected in the findings of the research. Thus, the implementation of controlling increases the efficiency and competence of management. The technique helps evaluate the efficiency of controlling adjusted for the specific enterprise activity.

Keywords: Controlling; Confectionary; Controlling Efficiency; Balanced Scorecard (BSC)

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Методика оцінки ефективності контролінгу з урахуванням специфіки діяльності кондитерських підприємств

Анотація: У статті розглянуті різні підходи до поняття «контролінг» і методики оцінки ефективності його застосування. Наведена розроблена авторами методика оцінки ефективності використання контролінгу, що базується на збалансованій системі показників з використанням рейтингової (інтегральної) оцінки. Методика враховує специфіку діяльності кондитерських підприємств. Апробація запропонованої методики проведена на прикладі великого російського підприємства кондитерської галузі.

Ключові слова: контролінг; кондитерська промисловість; ефективність контролінгу; збалансована система показників (ЗСП).

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Методика оценки эффективности контроллинга учетом специфики деятельности кондитерских предприятий

Аннотация: В статье рассмотрены различные подходы к трактовке понятия «контроллинг» и методике оценки эффективности его применения. Приведена разработанная авторами методика оценки эффективности использования контроллинга, основанная на сбалансированной системе показателей с использованием рейтинговой (интегральной) оценки. Методика учитывает специфику деятельности кондитерских предприятий. Апробация предложенной методики проведена на примере крупного российского предприятия кондитерской отрасли.

Ключевые слова: контроллинг; кондитерская промышленность; эффективность контроллинга; сбалансированная система показателей (ССП).

1. Introduction. The present situation of environmental uncertainty and instability requires that an enterprise should increase efficiency and competence of management, which might be achieved by means of controlling. However, the existing techniques of evaluating the efficiency of the latter are not adjusted for specific enterprises.

2. Problem Statement. Nowadays, there is a diversity of definitions given by scholars to the term of controlling. Although originally controlling dealt with accounting, it currently includes planning, accounting and management accounting, analysis and control.

Due to the long history of the concept development and a great variety of conceptions that appeared as a result of multiplicity of its interpretation, when constructing the management control system (MCS), management professionals select the one that suits best the goals set before the enterprise. The activities of enterprises, including confectionaries, determine the

choice of the applicable conception and affect the evaluation of controlling efficiency.

The proposed technique helps assess, first, the goal attainment connected with the results of the enterprise activities and, second, the controlling efficiency.

3. Brief Literature Review. Many scholars pay special attention to the study of the role controlling plays in the management theory and practice. Among them are such prominent foreign researchers as Deyhle A. Steigmater (1991), R. Mann (1992), A. Mayer (1990), D. Hahn (1997), J. Weber (1991), P. Horvarth (1993) etc. [1-5] and the Russian ones: E. A. Anankina (2001), S. V. Danilochkin (2001), N. G. Danilochkina (2001), S. G. Falko (2014), M. A. Vakhroushina (2014), A. M. Karminsky (2006), S. Ya. Yusoupova (2008) etc. Some of them belong to the Russian Controllers' Association.

At present the nature of controlling is being explored by N. N. Yaksanova (2013), V. V. Berdnikov (2013), M. A. Ostashkin

(2013), N. S. Netchekhina (2012), L. P. Korolyova (2007), A. N. Zotov (2013), N. S. Shevtchenko (2014), A. A. Ivanov (2014) and other scholars [7-13] who are searching for techniques to evaluate its efficiency.

The purpose of this research is to substantiate the necessity to employ controlling at confectionaries, as well as to elaborate, and test and try the technique of evaluating its efficiency.

4. Results. The historic development of the controlling theory gave rise to a variety of definitions of «controlling» related to management accounting, management information system, control functions, management control system and coordination in decision-making [14]. In some cases, controlling is equated to control. The term «controlling» is widely used in the theory and practice of corporate management. In contemporary manufacturing businesses, including confectionaries, controlling is oriented towards « ... the goals, the future and the bottlenecks ... » [15].

On studying various approaches to the definitions of the controlling goals, it is possible to point out two most significant ones: achieving the enterprise goals and providing the high quality of decision-preparing and decision-making processes.

It is worth mentioning that the aforementioned goals are urgent issues of today's confectionary industry. According to the conducted research, the confectionary branch is a highly competitive business with sophisticated consumers. Very few manufacturers are on the frontline of the confectionary market, which is characterized with a keen competition, and concentration of production as well as dependence on the imports of raw materials necessary for manufacturing confectionary goods (hereinafter CG).

The necessity to implement controlling at confectionaries may be explained with the following:

- The economic conditions related to CG and the raw materials used for their production demand that all the changes in the internal and external environment should be constantly tracked and responded to by providing the administration with the exhaustive processed information.
- A short production cycle and a comparatively short shelf life of the raw materials and finished foods call for prompt coordination of the enterprise management system.
- The intense competition demands that the CG quality should be improved and the product-line policy of the enterprise should be promptly changed.
- The unstable economic environment requires the increase of the salability of the company's produce.

Following S. G. Falko (2014) [16], we think that controlling used at confectionaries makes it possible to:

- Substantiate pricing and improve the calculation quality;
- Perfect the calculation of the inputs;
- Improve the budgeting system;
- Use the indicators to measure the effectiveness of the company;
- Develop the management information system;
- Improve the business processes.

Grounded on the aforementioned ideas is the assumption that controlling implemented into the management system of confectionaries is an urgent near-term managerial challenge. In our opinion, controlling must reveal the potential for intensive growth in order to improve the performance results of the company.

It is worth mentioning that most modern enterprises have no controlling. However, they perform its separate functions. The latter may be [17; 18]:

- distributed among specialists of different departments, without creating a controlling one;
- entrusted to one of the departments of the company (the accounts department, the planning department or the finance department);
- entrusted to the controlling department created particularly to perform the controlling functions.

The problem of evaluating the efficiency of controlling is extremely complicated and controversial. We point out two major approaches to assess how

efficiently controlling is implemented and performed. The first one implies evaluation based on financial figures, whereas the second one presupposes using both financial and non-financial assessment criteria [13].

The implementation of controlling takes the form of an investment project, as it is an expensive process requiring a lot of long-term financial contribution. We propose to calculate its efficiency on the following indicators: the payback period, the discounted payback period, the average rate of return, net present value, the profitability index, the internal rate of return, the modified internal rate of return [13]. The aforementioned figures without discounting may be used to determine the efficiency of controlling, along with the financial and non-financial indicators integrated into a scoring system [11].

It should be noted that not only do scoring systems help assess the efficiency of controlling but they also turn out to be a controlling tool, which provides the managerial staff of all levels with information and analytical support necessary to fulfill day-to-day and strategic tasks.

We believe that the most universal scoring system is a Balanced Scorecard (hereinafter BSC) [19; 20]. As the efficiency criterion, BSC chooses a control system of four integral factors including a financial integral factor (finance), a customer integral factor (related parties), a business-process integral factor, a development and professional training integral factor, with each of them containing a certain set of indicators. Comparing their standard and actual values, «one may both estimate the performance of day-to-day and strategic tasks in these branches and assess how efficiently the whole enterprise has realized its strategic plan» [12].

We have worked out a technique of evaluating the efficiency of controlling implemented at confectionaries, which is based on the BSC and the calculation of a rating (integral) score. The indicators reflected in the four integral factors of the modified BSC are presented in Table 1.

The integral factor «Finance» presents such financial indicators as return on costs and sales of the CG, as they seem to be the most relevant for the management of an enterprise. The return on costs shows the profit share per one ruble of the operating expenses, while the return on sales reveals the profit share per one ruble of the proceeds of the sale [21]. The growth of returns is a positive trend. However, what also matters is the cause of the growth, particularly, whether the latter was not provoked by an unreasonable change in the CG cost value. The integral factor «Related Parties» contains goals regarding the

Tab. 1: Indicators of Implemented Controlling Efficiency

BSC Integral Factors	Indicators
Finance	return on costs of the in-house CG (by name); return on sales of the purchased CG (by name); cost value of selling the in-house CG; cost value of selling the purchased CG; proceeds from selling the in-house CG; proceeds from selling the purchased CG; accounts receivable for CG; expenses of selling the in-house CG; expenses of selling the purchased CG; accounts payable to the suppliers and contractors; managerial expenses for the in-house CG; managerial expenses for the purchased CG; managerial expenses / general manufacturing expenses ratio.
Related Parties	the company's reputation; the level of confidence towards the company; the amount of target customers; the amount of reliable suppliers; the renewal of the produce assortment during the given period; the purposefulness and quality of information and analytical support; the quality of decision-preparing and decision-making processes.
Internal Processes	the CG production volume (of sugary, chocolate and farinaceous products); raw materials and CG in the storehouses; accomplishing the plan of raw material and CG procurement; deviations of the actual expense item figures from the scheduled ones.
Development and Professional Training	the powers and responsibilities of the staff; the degree of satisfaction with the work the staff members are doing; the quality of the personnel work; the employees' possibilities for self-realization; the employees' professional development.

Source: Authors' elaboration based at Balanced Scorecard system

company's performance, and their achievement ensures the accomplishment of those in the integral factor «Finance». Its main function is to assess the work of the controlling department. The integral factor «Internal Processes» reflects goals related to the business-processes of the enterprise.

To assess the efficiency of controlling according to the indicators presented in the BSC, we propose to calculate the rating (integral) score by the following formula [22; 23; 24]:

$$R = \sum_{i=1}^n P_i * J_i \quad (1)$$

where R is the rating score of the confectionary performance; P_i is the value of the i (indicator of the rating score); J_i is the weight of the i (indicator of the rating score).

To conduct the rating assessment, the table should be filled in with figures reflecting the aforementioned scheduled and actual indicators and then, the deviations will be calculated. It is our opinion that the following rule should be observed to assess the received deviations of the cost indicators. If the scheduled indicator differs from the actual one by more than 5% (in the case of costs - less than 5%) (or its absolute value differs from the scheduled one by less than 5%), the indicator will equate to the relation of the actual figure to the scheduled one (or that of the scheduled figure to the actual one - in the case of costs). Otherwise, the indicator will equate to zero. If the scheduled relative value of the indicator deviates from the scheduled one by more than 5%, the indicator will equate to zero. Otherwise, it will equate to one. The qualitative indicators will be rated from one to five by Delphi approach.

Then, every indicator will be assigned a certain «weight». The more important the indicator is, the higher the weight is. In every set of indicators (an integral factor of the BSC), the weight will be 10.

The weight of the indicators multiplied by the corresponding values will give their rating scores with consideration for their weight. The sum of all the rating scores will give the final efficiency rate of controlling. For the calculation of the optimal efficiency of controlling, the rate of the quantitative indicators will equate to one, and that of the qualitative indicators - to five.

It should be noted that the higher the rating is, the better and the more efficiently the company performs its economic activity and the better controlling supports the major managerial functions and the decision-making processes.

In December 2015, the proposed technique was implemented and tested on the example of the Russian confectionary «KONTI-RUS», CJSC, whose accounting (financial) and management statements of 2014 served as a basis for the analysis and evaluation. The aforementioned confectionary is a part of «KONTI» international corporation that unites three confectionaries in Ukraine and one in Russia. Their major line of business is manufacturing confectionary goods and marketing. The confectionary realizes export-import transactions in

the countries of the Commonwealth of Independent States, the Baltic States and Mongolia.

In this company, the controlling functions are performed by representatives of different departments. We analyzed and assessed them on the basis of the survey conducted among the mid- and top-level managers of the confectionary «KONTI-RUS», CJSC. The results of the analysis are presented in Figure 1.

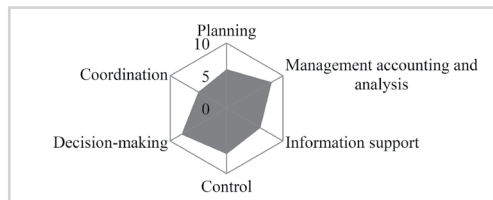


Fig. 1: Assessment of Controlling Functions in «KONTI-RUS», CJSC

Source: Authors' own research

Figure 1 shows that management accounting and analysis, decision-making and control were worth 8 points and 7 points correspondingly; planning and information support were worth 6 points each and coordination was worth 5 points (out of 10). The results of the survey show that the controlling functions need improvement. Thus, in our opinion, it is necessary to set up a controlling department in «KONTI-RUS», CJSC.

To evaluate the efficiency of controlling implemented in «KONTI-RUS», CJSC, we employed the technique developed for this purpose. According to the calculations, the efficiency of controlling amounted to 72.19 before the set-up of the Controlling Department and to 92.73 after the changes had been introduced to the company structure, with the optimal efficiency being 115.2. This figure points to the effective performance of the company as the rating of the achieved results is close to 115.2.

5. Conclusions. The implementation of controlling at confectionaries helps reveal working balances and improve the results of their activity, due to the increased efficiency and competence of management. To evaluate the efficiency of implemented controlling, one needs to employ a balanced system of indicators that takes into consideration the quantitative and cost criteria, the qualitative indicators and the specific activity of the enterprise.

The proposed evaluating technique based on the BSC was tested on the example of the confectionary. The research showed that the controlling functions currently distributed among the existing subdivisions of the enterprise are not performed fully and effectively. Thus, it is proposed that a special subdivision should be set up in the company structure - the Controlling Department. Its implementation, in accordance with the developed evaluating technique, led to a significant improvement in the results of the company's activity.

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