

HIGH-QUALITY CHANGES IN SYSTEM OF SKILLED UPDATE OF ORGANS OF STATE ADMINISTRATION: TO QUESTION ABOUT FORMING OF NATIONAL HUMANITARIAN-TECHNICAL ELITE

By an author the main reason of success of change of situation in the questions of skilled update of the system of organs of state administration, which is maintenance and quality of preparation of future leaders, is certain, managers, managers, since a school bench, continuing in Institute of higher and not completing this process to ending of labour activity. In the article the actuality of the explored problem is proved, and also the necessity of high-quality changes in the system of education is shown, is special in relation to the personnel training of state administration

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PRIME COST ESTIMATE FOR THE PURPOSES OF CONTROLLING

1. Introduction

The most important measure of financial health of the manufacturing organization is its money resources and potential. The quantity of money is real, tangible item, providing unambiguous information about the ability of the production organization and its effectiveness. In this train of thought Neely¹ assumes that money is a necessary condition and when they are in a sufficient quantity are irrelevant, but if they are insufficient – nothing else matters. But funds are only one of many measurements that are used to check the financial situation of the production organization. So when taking investment decisions, money had a minor part because of the already critical return on investment and its rate, the amount of profits and investment costs. This determines the enduring need for the development and maintenance of a centralized accounting system in the production organization to facilitate and evaluate:

¹ Neely, A. Measuring business performance; The Economist Books; 1998

- control and coordination of operations in horizontal section;
- long-term development planning.

2. Importance of prime cost in the accountancy of controlling

The controlling system is targeted-adaptive management and the production organization in need of control numbers for information which satisfies the achievement of strategic objectives in the enterprise, such as profitability, productivity, liquidity. In controlling – the system is planned, predictive, accounting and gives control information as well as information analysis and forecasts. All information flows reflect past and current states of the manufacturing organization, processes and operations. The purpose is on this basis to be formed indicators, conclusions and estimates of future state.

At the heart of controlling as a management system stands the establishment, monitoring and adjustment of financial indicators – outlay, prime cost, liquidity. Key issues in the production organization is what kind of method of outlay accounting and cost to be applied. Two different systems are distributed principally in practice:

- traditional expense accounting system, developed by General Motors before seventy years, according to which the total production cost is the sum of the cost of each particular operation;
- determination of the prime cost of production, based on activities.

From the point of view of competitiveness and profit the most important thing is the price of the entire process, which is the subject to pricing based on the activity. The main premise is that the product life cycle is an integrated process that starts when a person supplies materials and components and continues even after the final product reaches the end users. The purpose of controlling is to manage the organization through expenses control and financial indicators. Key issue is the choice of method for their calculation. It all depends on management decisions about prices, assortment, capacity, distribution. The method for calculating the outlay is reflected in the budgeting system of the production organization.

3. Calculation of the prime cost for the purposes of controlling

Formulations of the controlling system require the formation of a special flow of information, called controlling-accountability. This data flow should be a medium of information not only for the development of financial stability and viability of the manufacturing organization, but the trends in its production activities. The purpose of the information database, determined by the accumulated database in the controlling and financial system, is to create a real possibility of controlling:

- the financial performance to adapt to changing environmental conditions;

- to coordinate operational and strategic financial and production parameters;
- to coordinate and integrate the operational financial performance in the real production process;
- to establish a system of a financial information for various levels of government in optimal intervals of time;
- to build up a system for monitoring the implementation of planned financial parameters, adjusting the scope and terms;
- to adapt the organizational structure of management, related to the financial performance of the organization in order to increase its flexibility and ability quickly to respond to changing environmental conditions.

By calculating the prime cost, the controlling of the manufacturing yield target organization structured information in different temporal and spatial dimensions². This is primarily operational information, which directly serves the management of the production organization. This information is recorded and is in a sense, novelty character, it refers to different moments of time, that are always determined by need. The controlling-reporting is about specific cases, for specific situations, for specific locations and needs of specific management functions are determined by its composition and time of receipt.

Calculation is a method of calculating the prime cost and is an element of accounting methods, that complements the controlling and evaluating. It serves to:

- determine prime cost and price formation;
- monitoring and controlling the phases of the manufacturing process;
- monitoring of results;
- to control layout;
- presentation of new industries;
- building a marketing strategy;
- justify investment decisions;
- justify changes in the technological processes.

Prime cost calculation, based on activity and productivity, is based on the understanding that the traditional methods for determining the prime cost of production are outdated and do not adequately reflect the real production process. The method for determining the prime cost on base of activity, is focused on productive activities and the method for calculating the cost basis of performance targets to identify where in the production process the prime cost is formed. These calcula-

² **Temelkova, M.** A model for optimization of investment in the restructuring of production systems, 8th International Conference "Advanced machine processes"; 2008

tions determine the construction of the controlling system in the production organization, that is a system with a planning, reporting and controlling function, enabling analysis and forecasts, focused on its future development and operations.

The fundamental concept in accounting of the prime cost on the base of business is the concept of the bearer of the prime cost. Thus the formation of the prime cost is monitored by the production activity and its related ancillary activities to final products, deriving from these activities, that are needed to obtain a final product. Typical prime cost bearer to differentiate the controlling in the manufacturing organization are:

- time for preparation of the manufacturing process;
- the number of components;
- the frequency of orders for a product;
- the frequency of delivery.

In cost accounting, which is the traditional system for determining the prime cost, the total expense is determined on the basis of labor input required. Thus, in the amount of prime cost will be disregarded:

- the real input time:
 - ✓ tuning machines;
 - ✓ loss of technological time;
 - ✓ transfer of blanks from one place of work to another;
 - ✓ bottlenecks in the production process;
 - ✓ accidents;
 - ✓ the delays of suppliers;
- duration of each composing production process operations;
- the number of suppliers of materials for various products;
- the number of required labor resources and their qualifications.

The prime cost, based on activity, must be determined on the basis of "baskets" of the bearer the prime cost. Expenses are determined in accordance to its actual bearers, instead of the implicit basis of bearers – hard labor.

Accounting the prime cost based on insufficient emphasis on performance capacity, i.e. on bottlenecks. Arguments in support of this method are based on the perception of Eli Goldrat that critical resource for any production capacities are limited. In determining the cost of the product, the main issue is not limited to the amount of labor required, and to that portion of its production time passing in a "bottlenecks". If the organization does not take into account manufacturing productivity per hour pricing, runs into error for the actual size of the margins to produce and can not get an idea of the margins, which could realize.

The role of controlling in the manufacturing organization requires maintaining a constant link between finance and its production³. This interconnectivity results from the unity of the manufacturing organization and its characterization as a complex, hierarchically structured social system. On the basis of the ongoing bilateral information to the financial industry and the financial sector to the manufacturing area is a needful overall performance and a comprehensive scan of the production parameters at any time point and turn them into cash equivalents, to lay the cost calculation. Thus the characteristics of the production process, converted into monetary value of the cost will have type:

$$\text{Prime cost} = \sum_{j=1}^n [(\text{STM} + \text{LTT} + \text{COM} + \text{COE} + \text{SCL}) \cdot x_j],$$

wherever:

STM – spending time on the machines, estimated in money;

LTT – loss of technological time, estimated in money;

COM – cash outlays for materials;

COE – cash outlays for energy;

SCL – spending cash for labor;

x_j – number of output from the j -th species;

Or

$$\begin{aligned} \text{Prime cost} = & \left[\sum_{j=1}^n \sum_{i=1}^n \text{STM}_{ij} \cdot x_j \right] + \left[\sum_{j=1}^n \frac{(\text{APT}_j \cdot \mu \cdot (1 + k_j^2))}{(1 - \mu)^2} \cdot x_j \right] + \\ & + \left[\sum_{j=1}^n \sum_{k=1}^n \text{COM}_{kj} \cdot x_j \right] + \left[\sum_{j=1}^n \text{COE}_j \cdot x_j \right] + \left[\sum_{j=1}^n \text{SCL}_j \cdot x_j \right], \end{aligned}$$

wherever:

STM_{ij} – spending time on the machine i per unit of product j -th species (estimated in money);

APT_j – average production time per unit of j -th specie;

μ – missed an average capacity utilization in the industrial organization (medium gaps in%);

³ **Temelkova, M.** Adaptation of the Balanced Scorecard and Brown's scheme for the measurement process for the optimization of the restructuring of production systems; Seventh International Scientific Conference on Applied Strategic guidance in the 21 st century business and the quality of higher education; ISBN 978 -954-20 – 0426-4, Varna, 2008

k_j – coefficient of variation of production time per unit of product j -th species;

COM_k – cash outlays for material k per unit of product j -th species;

COE_j - cash outlays for energy per unit of product j -th species;

SCL_j – spending cash for labor per unit of product j -th species;

x_j – number of output from the j -th species.

The controlling in the manufacturing organization has functions, related to coordination of the planning cost, achieving it in the course of production activities, the tasks related to its efficiency, control elements and forming it to provide information, dictated by it and take management decisions. In addition, however, the controlling provides a methodological basis to be realized the implementation of management functions in the body and regulates production tolerances through the development of corrective measures to eliminate them. On this basis, the organization of production is needful to apply the method by which to determine whether it generates value or capital.

Traditionally generated capital and profits are measured without taking into account the capital costs. So the developed the manufacturing of a product in the manufacturing organization can demonstrate the presence of an accounting profit, but not to be holding a real economic gain. This is due to the fact that return on capital in this production is less than the returns, the industrial organization that would receive if the alternative was invested in other productive activities with the same risk.

In current practice, this problem is removed by application of the controlling system for measuring the value created. This is based on the use of indicators determining the cost of the action in the industrial organization:

- economic value added;
- market value added.

Economic value added is the net operating profit after tax conversion, minus the appropriate deduction of the additional costs of all capital invested in industrial organization. Economic value added, taking into account and capital expenditure, measured more accurately the magnitude of profits and focus on analyzing the activity in terms of whether it creates value for the manufacturing organization.

On the basis of calculation, the study and analysis of economic value added, the controlling discloses alternatives to improve the operation of the manufacturing organization. This set of alternative options supports management decision-making in the field of finance in the production organization and is limited to:

- increase profits without additional input of capital;
- using a small amount of capital;

- reduction of capital costs;
- investing in projects that ensure a higher yield than the amount of capital expenditures;
- reduction in investment in projects with low profitability of the amount of capital expenditures.

Market value is closely linked with economic and recognizes the difference between the market value of the manufacturing organization, known as the coefficient of Tobin and the economic cost of capital, which the organization operates.

The controlling mechanisms apply economic and market value in almost all areas of manufacturing organization. The objective is to maximize the yield constant j . This is achieved through precise observation of the development of both indicators at the time of recording of conditioned trends, analysis and integration of:

- strategic planning;
- figures of potential outcomes;
- set of proposed remedial measures;
- assessment of the work of teams and departments;
- strategies for quality improvement;
- assessment of actual and potential production activities;
- possibilities for the creation of new industries.

4. Conclusion

Lowering of production costs is particularly important in conditions of market economy to increase competitiveness of products on the market. This is the main task of controlling, which must seek and find mechanisms to achieve the optimality of the financial activities of the manufacturing organization. By lowering the cost of production is achieved in offering goods at lower prices. Controlling should pre-screen, detect and implement continuous reserves to reduce costs. These reserves derived from it:

- rising labor productivity, which affects the reduction of the conditional-fixed costs;
- rational use of raw materials, fuel and energy;
- observance of expenditure norms for resources;
- qualifications of staff;
- optimal organization of production;
- optimal organization of labor;
- optimal organization of government.

PRIME COST ESTIMATE FOR THE PURPOSES OF CONTROLLING

Strategic purposes of the organization of production in reference to profitability, productivity and liquidity require rapid and effective management of changes to it and adapt it to a dynamically changing environment. This is achieved by means of controlling mechanisms leading to exact, correct and adequate estimate of the prime cost in the manufacturing organization. Thus, production and financial parameters in the organization of binding global and comprehensive, and require profound research and analysis of prime cost as a key indicator in the reporting system of controlling.

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РАСЧЁТ СЕБЕСТОИМОСТИ ДЛЯ ПОТРЕБНОСТЕЙ КОНТРОЛИНГА

Стратегическая система производственной организации по отношению рентабельности производства и ликвидности требуют эффективного управления и изменения внутри ее и адаптации к быстро изменяющейся среде. Это можно осуществить при помощи механизмов контролинга, которые ведут точный расчет себестоимости в производственной организации. Таким образом, производственные и финансовые параметры в организации требуют глубокого исследования и анализа себестоимости как ключевых показателей отчетности системы контролинга.

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РОЗРАХУНОК СОБІВАРТОСТІ ДЛЯ ПОТРЕБ КОНТРОЛІНГУ

Стратегічна система виробничої організації по відношенню рентабельності виробництва і ліквідності вимагають ефективного управління і зміни усередині неї і адаптації до середовища, що швидко змінюється. Це можна здійснити за допомогою механізмів контролінга, які ведуть точний розрахунок собівартості у виробничій організації. Таким чином, виробничі і фінансові параметри в організації вимагають глибокого дослідження і аналізу собівартості як ключових показників звітності системи контролінга.

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