Analyzing the Classic Methods of Organizing the Administration Accountacy Used in the Carboniferous Mining Industry

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ANALYZING THE CLASSIC METHODS OF ORGANIZING THE ADMINISTRATION ACCOUNTACY USED IN THE CARBONIFEROUS MINING INDUSTRY

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Abstract

Information regarding production costs occupy a central slot, determined by their implications regarding the present and future evolution of a company. The value of information regarding the cost of production justifies its use both in decisions regarding the current activity and in the company's future strategy.

The efficient organization of economic activity in the carboniferous mining industry imposes a constant improvement of management methods, which also implies a reconsideration of administration accountancy methods and cost control, which have to become capable of offering information that can be compatible to the requirements for an efficient management of the production process, in a market economy.

1. Introduction

Information regarding production costs occupies a central slot, determined by their implications regarding the present and future evolution of a company. The value of information regarding the cost of production justifies its use both in decisions regarding the current activity and in the company's future strategy.

The calculation methods of costs in coal extracting units activity sphere are, usually, the traditional methods, based on effective production costs, such as: the step-by-step method and the global method.

These methods endured the test of time and will continue to exist in the future, due to the existing technical structures and due to the technologies generated by these methods. After the scientific process they've been constantly modified and adapted, but always keeping their essence.

Another general characteristic of these methods is their universal type of organizing the costs informational system, which includes all the methods and procedures for forming, calculating, controlling and analyzing costs.

2. Facts regarding the use of representative methods for calculating costs in the mining industry

The most used method for calculating costs in the carboniferous mining industry is the ***step-by-step method*** which is used, usually, in companies based on mass production, where there are several phases to obtain the final products.

The method previously mentioned is determined by the particularities in the technological process, which is divided in phases of production, which leads us, first and foremost, to an analysis of each production phase, of their position and role in calculation, control and assessment of costs. Production phases are parts of the costs centers and the products or services obtained from these are the carriers of costs and expenses. In order to create an information source for analyzing costs, there is a problem of not only calculating the

final cost, but also of determining the contribution of each production phase to these overall cost, or the assessment of partial costs.

A critical analysis of this step-by-step calculation method will also show us its limitations, namely the fact that this method only permits having a post-operative control of respecting a pre-determined level of costs.

Also, the step-by-step method will make it harder for us to see the deviations from the normal production process. Therefore, the information obtained does not allow us to foresee uneconomical expenses or different difficulties that may arise during the production activity. It also fails to consider facts regarding optimizing and minimizing costs.

The main expenses are carefully observed during this method, via the consumption and work norms and they have mostly a statistical value, rather than an information for the decision act. Information obtained from this method can be used in the management process on a long term, since the production processes that they cover are already over. However, using the step-by-step method does not establish an adequate system of observing the production expenses and of managing the data from these expenses to meet with the requirements from every company level.

Other disadvantages are generated by the method of calculating and discounting the effective cost in multiple phases: any error in the calculation and discount costs from one section will trigger a complete recalculation of all the other sections that are 'downwards' from it, in the production process. Thus, operations such as observing and assessing the budget and costs at the subunit levels are very hard.

Another method of costs calculation used in the mining industry is the **global method** which basically requires a full cost assessment of all products and services.

This is an absolutely necessary tool in determining and analyzing the marginal profitability of a product or service. The complete costs need to include four components: raw materials, direct manual labor, unit maintenance costs and marketing costs.

The need for information regarding the marginal profitability of a product grows exponentially with the diversification of the services offered. Diversity brings with it, however, difficulties regarding the relevance of the maintenance costs and resulting products relation.

Direct costs are known to drop, when we are talking of higher technical standards in a unit, but the indirect costs, or maintenance costs are not influenced by this, since they are not directly tied to the final product or the service offered.

3. Particularities of the administration accountancy in the carboniferous industry

A similar situation to the classic methods also presents the classic procedures of forming or calculating costs, out of which four are more representative: the supplement procedure, the simple division procedure, the left-over value procedure and the equivalent coefficient procedure.

The traditional calculation of cots is a calculation of effective costs and its objective is assessing the costs that appeared in a certain administration period, aiming to ensure after a very short period of time:

- ~ determining costs per unit (products, services that are to be sold, projects);
- ~ determining results (profits or loses).

The calculation of effective costs is governed by two ***principles***:

- ✓ the principle of complete costs;

- ✓ the translocation principle (the transfer from calculation based on costs placement, based on the composition of the organizing structure that's consuming the resources, to be able to create, in the end, the costs per unit)

By respecting these principles we can ensure a complete assessment of costs from every production unit.

Theoretically, the two principles are respected in a mining exploration because:

- ➢ the mining exploitation is the cost location where a single product emerges – raw coal;
- ➢ the translocation of costs from the costs variables can be made directly, without moving from cost location to cost location;

The three elements of the traditional cost assessment methods are – types, locations and costs carrying units.

a) Calculation based on types of costs

- emphasizes on documents regarding the production costs (materials, salaries);
- a separation between costs and expenses (based on content, values);
- a classification based on individual and common costs.

b) Calculation based on cost locations

- the allotment of common costs to each cost location;
- discount of the company's internal achievements (consumptions);
- setting the allotment ratio of common costs per costs carrier.

c) Calculation of costs per cost carrying unit

- determining the costs of material, manual labor, production, marketing (complete) per cost carrying unit;
- obtaining a solid point of reference for developing prices;
- determining the analytical results (profits or loses) per cost carriers on short term;
- offering production costs for evaluation in the financial accountancy of the production process;

d) Temporarily calculation of costs per carrying unit

- determining the company's results on short terms, structured on types of products, groups of products and units of the company;
- preparing and ensuring the necessary data for the management personnel regarding the price policy of the company.

A particularity of the mining production systems is the fact that the largest part of costs are supported in cost locations that are 'producing' for internal use (preparations, transporting services, maintenance projects and repairs, water clearing, metallic confections, preparing the wood etc.).

This particularity raises special problems in discerning between costs and expenses, between income and achievements. The fact that in the current administration accountancy such separations are not used leads to a false appreciation of subunits' performance and of their respective managing teams (exploitation managers and sector chiefs). In the mining industry performance at an exploitation level is determined by the amount of resulting product. But this product is almost exclusively the result of the hewing process (the production from some of the preparation projects is, in most cases, negligible). The success of hewing processes is directly and indirectly determined by the preparation effort and by the exploitation methods.

Concentrating efforts for a short term on hewing processes has always ensured a short-lived success for each sector chief or exploitation manager and not in a few cases has brought them consistent financial rewards and even promotions within the company's ranks. However, if they remained in the office and continued the same policies of concentrating their efforts on mass production, with any cost, the secondary effects were not hard to spot. All that was set on a secondary priority have begun to manifest negatively. Delays, instable transport routes are just some of the examples well known by mining managers. These complications have reflected negatively on the performance of many managers after a period of "outstanding successes" and have frequently generated their replacement from office.

The efficient organization of economic activity in the carboniferous mining industry imposes a constant improvement of management methods, which also implies a reconsideration of administration accountancy methods and cost control, which have to become capable of offering information that can be compatible to the requirements for an efficient management of the production process, in a market economy. An efficient management is impossible without the ensuring a corresponding informational system, based on modern production requirements, which can offer the possibility of taking decisions and operative measures well founded and in the right moments.

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