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Development of the Corporate Management System in the Modern Context

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Abstract: The present article analyzes the differential characteristics of various types of corporate management and determines the indicators of necessity to re-project the processes during the corporate management implementation on variances. The author suggests the economy-statistical model of industrial and business operations of corporations and develops the set of statistically valuable measures of the cost-effectiveness evaluation for production facility. In the conclusion to the present article the author suggests the model of the market capitalization of production facility from a viewpoint of effectiveness of obvious and hidden costs, the shares of the semi-constant expenses in bulk and profits margin.

Key words: Management · Corporate management · Production facilities

INTRODUCTION

Amidst formation of the steady trend of disproportional economy development growth in Russia providing the priority growth rates of the base material sector against the manufacturing activities the problems of the rational management system development for major business entities for their property owners' benefit emerge full blown, which first of all necessitate the workout of a model of corporate management for domestic production facilities adapted to the modern context.

The solving of a problem of production facilities' efficient development providing on a base of resources implementation efficiency improvement available for facilities' owners assumes the implementation of principles of consistency, complexity and balance in management on the one hand and the necessity to considerate the interests of such facilities' owners (including the public owners) on another hand, which in its turn shapes the demand for improvement of the current model of corporate management for industrial business entities.

The basis of the modern system of production facility's corporate management shall be the reasonable management of expenses, which will allow performing the maximization of effective use of labor, material, technical, financial and other resources of production system in favor of owners.

Currently, the assessment of the production facility's cost-effectiveness is a separate accounting and analytical unit of the production management's subsystem, as a rule, what does not contribute, first of all, to the implementation of the comprehensiveness and consistency principles in management and, secondly, does not allow performing the registration of anonymous costs due to managerial reasons, which assumes the possibility of concentration of manufacturing facility expenses in the invoice format, at that, the double excess of indirect costs over the direct ones is quite a common situation.

RESULTS

The study of existing approaches to the process of corporate management organization at production facilities has proven that there are three basic models (Anglo-American, German and Japanese) in the modern management. The distinguishing features of their implementation are the system of social values, the basic sources of financing, the basic economic units, the structure of share capital and the role of workforce and information asymmetry.

At the same time the significant features of corporate establishments of various type, as the qualitative analysis of their activity demonstrates, are the peculiarities of formation of managerial connections and intercompany

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Table 1: The differential characteristics of the module, network, hierarchical and adhocratical types of the corporate management

	Type of corporate management			
Characteristic	Module	Network	Hierarchical	Adhocratical
The level of the management authority centralization	High	Average	Very high	Low
The level of the management responsibility centralization	Average	Average	High	Low
The reliability of direct managerial connections	Average	Above average	High	High
The reliability of inverse managerial connections	Average	Above average	Low	High
The quality of horizontal connections	Average	Below average	Low	High
The type of management arrangement	«High» corporate organization	«Flat» corporate organization	«High» corporate organization	«Flat» corporate organization
The quality of the intercompany connections	Average	Above average	Below average	Average
The rate of information transfer in communicational networks	Average	Above average	Low	High

communications, which in a wide extent determine the effectiveness of corporate management in strategic prospect.

The lookback analysis of operation and development of the Russian companies has stated that the basic tendencies of the corporate management system development are determined by the key characteristics of intercompany managerial connections, as well as by the quality and effectiveness of intercommunication impact, which allowed us defining the following types of corporate management: module, network, hierarchical and adhocratical managements, which can be determined similarly with the typical managerial structures projected on production facilities, their distinctive features are classified and given in Table 1.

As the above table shows, each of the described types of corporate management has its specific distinctive features determining the level of quality and balance of intercompany interaction. Thereat it should be noted that these characteristics, as the analysis of practice of corporate management and results of financial-economical activity expressed by the financial indexation demonstrates, determine in a wide extend the share of imputed costs occurred as a result of forced and non-forced errors of management.

Thus, the minimal share of imputed costs, which are the most balanced ones, appears in the systems of corporate management of adhocratical type, while in the corporate structures of hierarchical type the share of imputed costs in a result of increase of the management errors' share in some cases can exceed the share of explicit costs. This circumstance dictates the necessity to re-project the system of corporate management taking into account the level of combined costs' efficiency, including the explicit and imputed ones.

As the performed analysis has shown, the effective corporate management of the enterprise development or the integrated production establishment involves the implementation of the fluctuation management system, which, in its turn, dictates the necessity to identify the key performance indicators of a business entity recommended for use as indicators of the fluctuation corporate management system [2]. The set of corresponding indicators in view of type of corporate management and types of processes implemented at production facility are given in Table 2. It can be seen clearly from the below table that the implementation of the fluctuation management concept under the corporate management assumes the use of the various basic fluctuation indicators sets according to the type of the corporate management model, which determines the priority objectives of the production facility development.

Thereat the increase in the decentralization level of the industrial business entity's management assumes the necessity to focus on imputed costs and market position of the company as the indicators of necessity to re-project the processes [6], while the concentration of substitutes and responsibility in the management company within the frames of the corporate management, quite oppositely, assumes the use of average aggregate indicators during the implementation of the fluctuation management principles.

During the study of peculiar properties of the corporate management implementation at the production facilities we have found out that one of the key indicators used during the implementation of the fluctuation management principles is the factor analysis of the unit costs, the results of which allowed us to define the priority directions of regulation of the basic, support and management processes for the purposes to improve the efficiency of operation and development of the production facility [7].

This circumstance has defined the necessity to form the multifactorial economy-statistical model of the unit costs' impact onto the single cost of goods, which in the most general aspect has the following form:

$$SC = a_0 \Pi (x_i^{ai}), i = 1 \quad (1)$$

Table 2: The main indicators of necessity to re-project the processes implemented under the system of fluctuation corporate management

	Type of corporate management			
Type of process	Module	Network	Hierarchical	Adhocratical
Main	1. The share of hidden combined unit expenses on main processes implementation 2. The balance of the process resources	1. The share of hidden semi-variable expenses on main processes implementation 2. The level of defect during the main processes implementation	1. The growth rate of production expenses on main processes implementation 2. The growth rate of time expenditures on main processes regulation	1. The share of hidden semi-variable expenses on main processes implementation 2. The level of reliability of main processes organizational connections
Auxiliary	1. The share of hidden combined unit expenses on auxiliary processes implementation 2. The resources steady supplies ratio for main processes	1. The share of hidden semi-variable expenses on auxiliary processes implementation 2. The share of non-forced errors during the auxiliary processes implementation	1. The growth rate semi-constant unit expenses of production 2. The profitability of spending on auxiliary processes implementation	1. The share of hidden semi-variable expenses on auxiliary processes implementation 2. The level of defects identified during the resources supply for main processes
Managerial	1. The share of hidden combined unit expenses on managerial processes implementation 2. The growth rate of the company's shares cost	1. The share of hidden semi-constant expenses of the company 2. Investment profitability	1. The growth rate of combined unit expenses of production 2.Sales profitability calculated on net profit	1. The share of hidden semi-constant expenses of the company 2. The market capitalization of the company

Table 3: The set of indicators of cost-effectiveness assessment for the production facility

	Explicit costs		Hidden costs	
Stage of the cost assessment	Indicator	Correlation ratio	Indicator	Correlation ratio
The assessment of direct material costs and direct costs on remuneration of labor	The ratio of the gross profit to the explicit part of material costs on production of goods	+0.7121	The ratio of the gross profit to the hidden part of material costs on production of goods	-0.7462
	The ratio of production per employee to the unit explicit direct costs on remuneration of labor	+0.8634	The ratio of production effectiveness per employee to the unit hidden direct costs on remuneration of labor	+0.8923
The assessment of the field overheads and general running costs	The ratio of the sales profit to the explicit part of the field overheads	+0.7002	The ratio of the sales profit to the hidden part of the field overheads	+0.7716
	The ratio of balance of profit and expenses from the non-core activity to the explicit part of the general running costs	+0.8144	The ratio of balance of profit and expenses from the non-core activity to the hidden part of the general running costs	+0.7501
The assessment of investment, commerce and management costs	The ratio of profit before the taxation to the explicit part of investment costs	+0.8507	The ratio of profit before the taxation to the hidden part of investment costs	+0.8222
	The ratio of the company's market share (in absolute terms) to the explicit part of the commerce costs	+0.7385	The ratio of the company's market share (in absolute terms) to the hidden part of the commerce costs	-0.8328
	The ratio of increment in undistributed profit and balance of gross profit and expenses of the current year to the explicit part of the management costs	+0.8136	The ratio of increment in undistributed profit and balance of gross profit and expenses of the current year to the hidden part of the management costs	+0.9312

where SC means the single cost of goods, RUB;
x_i means the i-element of the unit costs for production and implementation of goods;
a_i means the elasticity ratio at i-element of the unit costs;
a_0 means the constant identified on the base of regression dependence analysis

It should be noted that the value of the elasticity ratio in the offered multifactorial economy-statistical model has a fundamental importance from the point of view of ensuring the corporate management efficiency, which target setting is to provide the cost-effectiveness. Thus, if the value a_i is positive, it means the reduction of the unit costs for this component provides a reduction of the single cost of production in general proportionally to the elasticity ratio [4].

In case if the value of the a_i elasticity ratio is negative, the high-quality, comprehensive reorganization of the management by the corresponding main, auxiliary or management processes [8] shall be performed.

A multifactorial economy-statistical model of impact of the unit cost's elements onto the single cost of goods built with the use of materials that characterize the production and economic activity of one of the largest corporations in the Republic of Tatarstan – the OAO "Tatneft", CJSC.

The evaluation of the corporate management implementation based on the assessment of the cost-effectiveness has stated that in order to comply with the efficiency principle during the execute of the analysis of the like indicators it is necessary to form a set of criteria for the assessment of the cost-effectiveness in a view of indicators' types, as well as with a due regard to the nature of the analyzed costs (explicit or hidden).

The set of the cost-effectiveness indicators was formed on the basis of the results of the correlation analysis demonstrated a strong dependence between the dynamics of particular indicators given in Table 3 and the growth rate of the production facilities' market capitalization performed on the basis of data on the activities of 22 corporations of production sector.

Basing on the results of the cost-effectiveness assessment of particular indicators shown in Table 3 we have formed a group indicators of the cost-effectiveness assessment for the hidden and explicit costs defined as the weighted average of the corresponding particular indicators, while the indexes calculated on the basis of the value of the separate criteria given in the table serve as the weights amidst.

After that we have made a convolution of received group indicators into the integral indicator by a weighted summation of indicators of explicit and hidden costs' effectiveness, while the proportion of the group criteria of the hidden cost' effectiveness is 0.5113 and the proportion of the same indicator at the level of the explicit costs is 0.4887 amidst, what indicates the necessity to perform the implicit costs accounting as a part of the fluctuation corporate management.

CONCLUSIONS

Following the survey of the market capitalization dynamics as concerning the production facilities selected for the usage in the present article we have set up the multiple regression equation characterizing the dependence of the market capitalization of the production facility on the explicit and hidden costs effectiveness, the share of the semi-constant costs in the total amount and the profits margin, what allows applying this model in forecasting of the market capitalization dynamics for the companies of the kind:

$$MC = -183764.3793 + 179769.03\,E_{hc} + 75608.81\,E_{ec} + 55538.26\,S_{scc} - 300475.84\,PM, \quad (3)$$

where MC - means the market capitalization of production facilities, millions of RUB; E_{hc} - means the group indicator of the share of the hidden costs effectiveness of the production facility; E_{ec} - means the group indicator of the share of the explicit costs' effectiveness of the production facility; S_{scc} - means the share of the semi-constant costs in the total amount of the production facility; PM - means the profits margin of the production facility.

The given model allows forecasting the market capitalization dynamics of the production facility depending on the expected changes in the composition and structure of expenses of the production facility, as well as the prospects for the changes in the efficiency of its resources usage, what, in its turn, forms the methodological basis of the ranking measures for the reduce of the production facility's expenses implemented in the framework of the corporate management.

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