

The Evaluation Budgeting System at the Electrotechnical Enterprises of Perm Territory

¹T.G. Sheshukova, ²G.S. Klychova and ³E.R. Mukhina

¹Perm State National Research University, 614990 Perm, Russia

²Institute of Management, Economics and Finance,
Kazan Federal University, 420008 Kazan, Russia

³Perm National Research Polytechnic University, 614990 Perm, Russia

Abstract: The study discusses the problems of management accounting in the firms for the production of electrical products. Besides it does diagnostic quality of the using of elements of management accounting (budgeting, calculation, internal reporting). A number of measures to address the identified limitations are formulated. Taking into account the factors that distinguish the system of budgeting on the electrical company, the researchers developed the budgeting system. The benefits of the proposed method are formulated. The scientific novelty consists in the development of methodological issues, development of methods of budgeting including the totality of inter-levels of budget management with using of specific coding information to quickly analyze any deviations. By using a number of indicators, reflecting the basic stages of budgeting techniques, an assessment of budgeting system is given.

Key words: Budget, budgeting, responsibility centers, financial structure, performance evaluation

INTRODUCTION

Issues related to management accounting cause a lot of discussion because every company has its own specifics. We are talking about the organizational and functional management structure and the methods managerial impact on the solution of functional tasks of the organizations, technical, economic particularities of production influencing organization of management accounting (Reddy, 2004; Neluheni *et al.*, 2014). These issues can be fully attributed to the companies that produce electrical products.

In order to make right managerial decision every enterprise must constantly monitor its current state. But the accounting systems used by companies in Electrical Engineering Industry (EEI) can not always submit necessary for management information. Features of the organizational aspects of management accounting at the enterprises of the EEI are still poorly understood, there is no comprehensive approach to the formulation of the problems of practical functioning, of the management accounting system of these organizations, especially in the field of methodological and information support. Besides the technology electrical engineer's technical production has its own specifics. That fact also has an impact on the organization of accounting and the formation of the cost of electro-technical products.

MATERIALS AND METHODS

Theory: The researchers sponsored study in the form of a survey of managers of the 11 largest firms (with a gross volume of revenue of over 1 billion. rub.) with the purpose of determination the problems of management accounting in the enterprises electrical industry. The researchers made the questionnaire. By using the questionnaire we diagnosed using such elements of quality management accounting as budgeting, costing, internal reporting. The results of interview identified some problems, such as: lack of qualified specialists, absence at most enterprises of accounting of the costs organized by the centers of financial reporting, documenting with significant time lag, absence of motivation of division managers for reduction of costs, the problem of organization of analytical accounting of non-complete production and absolutely undeveloped mechanism of budgeting and control over realization of plans (Mukhina, 2014).

So, the quality of management accounting of EEI firms does not correspond to the requirements of modern management. These problems can be solved by implantation single automatized control system at the enterprise, using the financial structure of the enterprise and organization of the centers of financial responsibility. In addition, the important role play the development, formulation and implementation of the budgeting system as one of the most effective tools of management.

Theory and practice of budgeting were considered in foreign literature by researchers such as Ackoff (1985) who identified key types of orientation in planning; Brealey and Myers (2003), they formulated principles of corporate finances; Kaplan and Norton (2006), they analyzed the balanced system of indicators; King (2007) who focused on the process of budgeting, etc. We think the budgeting should be considered as an element of resource provision of management accounting, the method comprising the development, implementation, monitoring, review and adjustment of the budgets of the centers of financial responsibility (Mukhina, 2014). The researchers interpretation affiliethe budgeting to management accounting as an element of resource maintenance (procedures, tools and methods of management accounting) (Bulgakova, 2006). More of this, the proposed definition reveals the essence of budgeting through technology preparation, implementation, monitoring, review and adjustment of the budgets of the centers of financial responsibility in terms of budget planning; defines budgeting as a continuous sequence of steps is achieved through the use of IP-technology sliding planning. Considering budgeting as a management technique we should be aware management functions, among which according to the classification of the O.N. Volkova, the functions ensuring the organization of in-formational flow (providing information, analysis, planning) and functions that determining the content of information-flows (coordination, motivation and control).

RESULTS AND DISCUSSION

Taking into account the factors that distinguish the system of budgeting at the enterprises for the production of electrical products (a kind of ongoing activities, restrictions affecting the activity, the information needs of managers, long-term objectives of the company, the size of the organization and the system of management) the authors propose the following stages of construction of system budging enterprises EEI (Fig. 1). The analysis of the existing planning system is necessary to define the goals and objectives of budgeting on the basis of long-term plans of the company, as well as to evaluate the existing system of planning, to identify its shortcomings. Besides we should define the factors affecting the formation of the system of budgeting at the enterprises of the industry.

One of the most important stages in the formulation of budgeting is the formation of the financial structure of the organization. The formation of the centers of responsibility and determination of their status (the list of the transferred rights, the composition of the

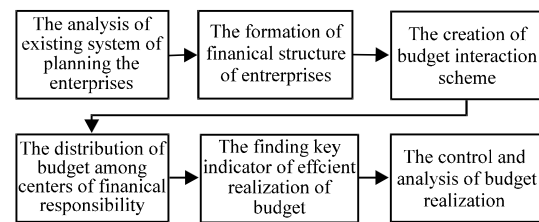


Fig. 1: The stages in building of budgeting system at the EEI enterprises

responsibility, etc.) determine the next steps. The scientific novelty consists in the development of methodological issues, development of methods of budgeting, including the totality of inter-levels of budget management with using of specific coding information to quickly analyze any deviations. A distinctive feature of the proposed sequence is the development of the financial structure, containing a list of budgets with a set of parameters and the coding system of information, taking into account the segmentation of the figure-of electro technical enterprises.

The formation of the financial structure of the company involves the allocation of financial responsibility centers the structural divisions of the organization, impersonate, whose leaders will be held responsible, of their activities (Kuratko and Hodgetts, 1998). As a rule, talking about achieving the goals of the organization meant that these objectives are transformed into individual targets structural units. The theory of management by the centers of financial responsibility is based on the following idea: every structural division must contribute into aggregate financial result of the enterprise (Klychova *et al.*, 2014a). For identification of responsibility centers on the base of organizational structure of the enterprise the following variantsare exist:

- Formation of responsibility center on the base of one structural division (for example, impregnation section, legal department, etc.)
- Formation of responsibility center by means of joining together of a number of structural divisions. This variant must be used if structural divisions have uniform items of costs or if the proportion of incomes or costs of the structural division is not big
- Formation of several responsibility centers from 1 structural division this variant is necessary if structural divisions under control of 1 manager make different contribution into aggregate financial result of organization's activity

This approach determined the scope of the powers and responsibilities of department heads to establish

Table 1: The formation of the Centers of Financial Responsibility (CFR) at factories producing electro technical products

The type of CFR	Organizational form of CFR	Performance measures of CFR	Motivation of CFR
Cost centers	The centers of production costs (units of the enterprise: the site twist, teaching run off infiltration, the site cutting, etc.); centers of functional costs (accounting legal department, personnel department labor protection, etc.)	Compliance with the plans cost control over the level of the standard deviations of actual costs; implementation of the budget; perform assigned functions Implementation of the budget	Cost savings; implementation of works on the approved plan; contribution to the final results of the company
Revenue centers	Sales department	Implementation of the plan sales activities of organization; control the level of the standard deviations of actual costs	Achievement planned revenue within fixed costs
Profit centers	Branches of the company	Achievement the planned return on sales; control the level of the standard deviations of actual costs	Achievement planned profit within fixed costs
Investment centres	Technical department: department of innovation and development quality department, research department	Implementation of investment projects; control the level of the standard deviations of actual costs	Implementation of investment areas; the economic efficiency of investment projects

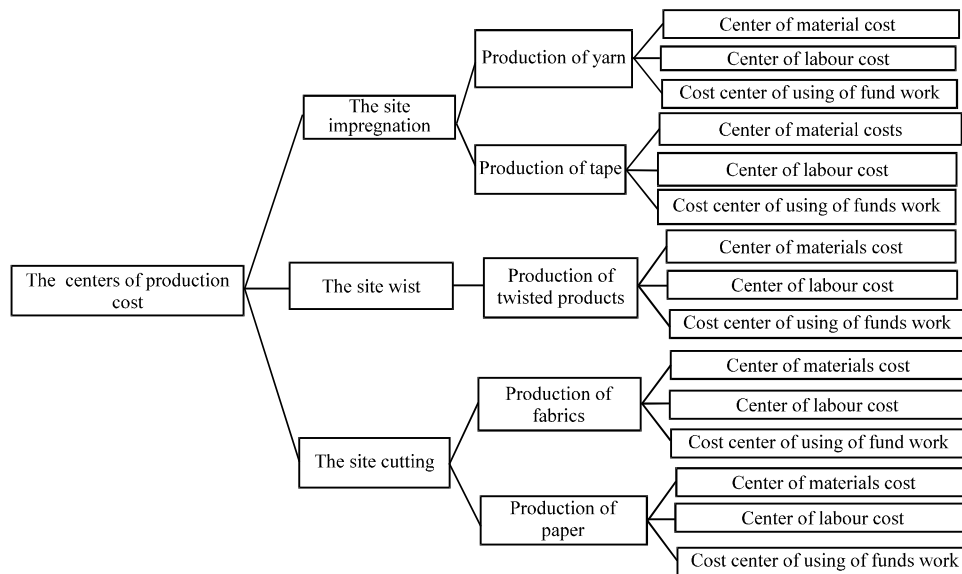


Fig. 2: The proposed centers of production costs for electro technical enterprises

long-exponent for which they are controlled. A.D. Sheremet considers that implementation tools of management accounting must begin with the formation of the center-responsibility and determining the list of the transferred rights, the composition of liability, the list of indicators.

By using these points, based on the organizational structure of enterprises for the production of insulating materials, we offer the following form centers of financial responsibility (Table 1). Based on the specifics of the operation of organizations for the production of electrical products, we offer a comprehensive approach to the organization of the centers of production costs. It combines features of structural and functional factor (Fig. 2). At first stage, we suggest allocate responsibility centers on the structural principle (by the sites). The second stage is defined by the functional separation of

the centers of responsibility (by types of products: the production of yarn, tape production, manufacture of twisted products, paper production, tissue). The third stage involves the allocation of responsibility centers on the factors of production in each sub-section of each sites

This approach will allow to analyze the cost structure complexly: by the sites, by the types of products, by the main factors of production. That will provide an opportunity to generate adequate data on the value of the share of material costs, labor costs, costs for the use of non-current assets. Thus, the proposed approach to the formation of cost centers provide full detailed information needed for further analysis.

We use structurally-factor approach to the functional cost center. Initially we allocate structural divisions and thus accumulate information on them and then group the costs in the context of the factors of production. Great

importance in the formulation of the budgeting system has the problem of the grouping of the costs of the centers of responsibility. We suggest using an integrated approach to the formation of responsibility centers in the formation of sub-accounts and analytical accounts. So, for example, for 20 account "The main production" we should open the following sub-account: 20.1 "The main production centers of responsibility (cost of production)"; 20.2 "Primary production of price-tram responsibility (functional costs)".

A similar group could be developed for the other accounts of the costs. We also should focus on the relationship of the analytical accounts of the codes in the administrative account. Thus, taking into account the specifics of the electrical companies we developed a system of encoding information in the construction budget (Klychova *et al.*, 2014b).

For example, codes of budget revenues we can start with besides we should introduce analytical sections, such as: area of shipment, the type of revenue, the specifics of shipped products, goods, works, services. The codes of budget expenditures we can start with the codes budget cash inflows and etc. The bookkeeper will record the fact of business transaction in the financial account balance and the operation code in the management accounting. This code is needed for budget construction. For example, an employee by making documents for the shipment will give additional code to put down the budget revenues (in the financial account balance by 90.1, in management accounting 1111 Revenues from sales of finished products in the state). EEI enterprises produce diversified production, so, we should remember about budgeting at different levels of the hierarchical structure of the enterprise.

CONCLUSION

Evaluation of the effectiveness of the centers of responsibility involves the development of targets: the definition of models of targets, selection of indicators and responsibilities, formation of reporting on key indicators (profitability, liquidity, turnover, financial stability, customer satisfaction, employee performance and others). Thus, the main indicators for assessing the activities of the company can be classified as follows:

- Economic indicators (profitability, liquidity, turnover, business activity, financial stability, etc.)
- Customer satisfaction rate (the number of claims, the market share)

- Performance of staff performance (productivity, turnover, level of education of employees and so on)
- Indicators of the efficiency of business processes (duration of the operating cycle, etc.)

Then, we should allocate these indicators for distinguished CFR: indicators of customer satisfaction for revenue centers, a number of economic indicators for the functional cost center, performance efficiency of the business processes for production and functional cost centers. The responsibility for each of the groups should be distributed across all levels of hierarchy. In order to determine the effectiveness of the proposed researchers and introduced in OOO "NPK" Energy", LLC "Energosnab", LLC "ETC "ENERGOKOMPLEKS", LLC "Experimental Design company" Elka-cable", LLC "Polus-C" method of budgeting we used a number of additional indicators (Alekseeva and Lapaeva, 2012).

We can conclude about the effectiveness of the proposed method. Deviations most of the coefficients characterizing the development of budgetary rules, discipline, financial planning, implementation of the principles of budgeting are within normal limits.

RECOMMENDATIONS

Budgeting methodology proposed by the researchers allows the following:

- Ensure the observance of the principle of integrated system
- Ensure compliance with the principle of completeness budgets
- Ensure compliance with the requirements of transparency due to the detail of expenditures and revenues
- Ensure compliance with the principle of flexibility in the budget at the expense of operational budgeting and the need to adjust these values
- Ensure the possibility of an operational plan-fact analysis of budget implementation in order to identify evaluation budget discipline by comparing actual data generated using the codes in management accounting and planning data in the same analytical sections

REFERENCES

- Ackoff, R., 1985. Planning for the Future of the Corporation. Progress Publishers, Delhi, India, Pages: 328.
- Alekseeva, E.J. and M.G. Lapaeva, 2012. Diagnosis budgeting system in the enterprise management system. Herald Orenburg State Univ., 13: 10-13.

- Brealey, R.M. and S.C. Myers, 2003. Principles of Corporate Finance. 7th Edn., McGraw-Hill/Irwin, New York, USA., Pages: 1071.
- Bulgakova, S.V., 2006. Structuring procedures and tools of management accounting. Herald Voronezh. state. Univ. Ser. Econ. Manage., 1: 169-173.
- Gorelov, D.V., E.I. Danilina and Y.I. Malikova, 2015. Business-planning quality support factors. Mediterr. J. Soc. Sci., 6: 71-71.
- Kaplan, R., D. Norton, 2006. Balanced Scorecard. Publisher: Olimp-Business, Moscow, Russia, Pages: 304.
- King, A., 2007. The Total Money Management. The Total Money Management. Polygon: Birlinn Ltd., Pages: 176.
- Klychova, G.S., M.S. Faskhutdinova and E.R. Sadrieva, 2014a. Budget efficiency for cost control purposes in management accounting system. Mediterr. J. Soc. Sci., 5: 79-83.
- Klychova, G.S., A.R. Zakirova, K.Z. Mukhamedzyanov and M.S. Fa-shutdinova, 2014b. Management reporting and its use for information ensuring of agriculture organization management. Mediterr. J. Soc. Sci., 5: 104-110.
- Kuratko, D.F. and R.M. Hodgetts, 1998. Entrepreneurship: A Contemporary Approach. 4th Edn., The Dryden Press, Fort Worth, TX., USA.
- Mukhina, E.R., 2014. The oretical aspects of budgeting as the element of resource ensuring of management accounting. Herald Univ. Perm. Economy, 1: 70-76.
- Neluheni, G.N., W. Pretorius and W.I. Ukpere, 2014. The role of quality strategic planning on organisational success. Mediterr. J. Soc. Sci., 5: 697-697.
- Reddy, J., 2004. Advanced Accounting: Theory and Practice. APH Publishers, New Delhi, India, ISBN: 81-7648-6444-2, Pages: 175.