

MODERN INFORMATION TECHNOLOGIES IN THE MANAGEMENT ACCOUNTANT WORKING ACTIVITIES

Abstract: The contemporary information technologies are becoming increasingly important for the organization of economic units' accounting systems. Automation is one of the most promising areas in the development of accounting systems. Its innovative capabilities are used in the construction of the management accounting system. An important role in the formation and maintenance of an effective management accounting system and its adaptation to the conditions of a particular organization is played by accounting management personnel.


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Introduction

Many modern organizations develop and implement integrated business management systems / enterprise resource planning-ERP/of a new generation. A significant part of the theoretical statements and practice related to these systems is focused on the management. Management accounting is a connecting element between the "product" created through the business organization system and its "users" – managers of different hierarchical levels. In this regard, it is necessary that the ERP system were also described from the point of view of management accounting. They can be considered as a new generation of technologies in the process of automation of accounting, which are a natural result of the rapidly growing information systems and the growing needs of internal users of accounting information.

ERP as tool in the work of modern management accountant

ERP offers a complete integration of company data and binds individual business functions in the organization, ensuring reliable control over resource efficiency (material, labor, financial, investment and innovation), business processes (supply, production and sales) and performance for the activity (volume of produced output and services, cost, profit, etc.). The role of management accounting, as the main subsystem of the enterprise information system, is aimed at normalizing, reporting and analyzing material, labor and cash costs. Management Accounting also has the task of arranging input and output information in accordance with the management needs of both the economic unit itself and its subdivisions.

The principle of adaptive behavior of the management accounting system is to adapt it to changes in the management system and new information needs at the different levels of management.

An efficiently functioning management accounting system plays an essential role for effective management within a specific organization. An accounting officer plays an important role in forming and maintaining an effective system of management accounting, adapting it to the particular organization. A qualified preliminary assessing the cost of the product development stage avoids the loss of time and poor returns on the elements of the production process¹. Accounting management personnel should know the competition, know-how of production and technology and find reserves for savings. In connection with the assessment of business expansion opportunities, management accounting staff is required to seek and find opportunities to reduce fixed indirect costs. According to (Ch. Horngren², 1996) accounting Department does not exercise power over the units in the organization. Management of accounting staff rather provides managers with services such as budgeting tips, help with deviations, pricing, and decision-making on management issues. It is also considered that by building up a system of indicators for "assessing the status of activities and assessing expenditure by economic elements, management decisions can be improved in terms of timely planning and spending of financial resources"³.

Over the years, in theory and practice, much attention has been paid to how traditional accounting software work, what should be improved in it, how to make it more useful in organization of the accountant's work. In parallel, organizations are developing and implementing a new generation of ERP systems⁴. A significant part of the theoretical statements⁵ and practice in relation to these systems is focused on the management.

Management accounting is a connecting element between the "product" created through the business organization system and its "users" – managers of different hierarchical levels. Management accounting staff is involved in creating the information product and transmits it in various forms to individual users, depending on their needs. In this context, it is necessary to perform an up-to-date overview of ERP systems in terms of management accounting. These can be considered as new generation technologies in automation of accounting, which are a natural result of fast-growing information systems as well as the growing needs of internal users of accounting information.

By integrating business management systems within economic units, data is covered and information about all units in the organization, the functions they perform and the resources they consume is created. Thus, the entire organization-specific database is focused and intended to be used by different groups of internal users of information. ERP system is a tool that provides centralization of all information about a particular economic unit. The integrated system provides timely and accurate real time information and helps in making operational, tactical and strategic decisions.

Despite the widespread use of integrated business management systems and the existence of available information for their operation, the study of their impact on the work of modern management accountant is limited.

¹ Kukukina I. G., 2012: Management accounting, "Finance and statistics", Moscow, Russia, pp. 13 (in Russian)

² Horngren, C., Sundem, G., Stratton, W. et al., 2016: Introduction to Management Accounting, Pearson Education, USA, pp. 16.

³ Yordanova, D., 2016: Application of a parametric method for evaluating the effectiveness of financial resources in Veliko Turnovo municipality. Journal Industrial Management, Vol. 2, ed. Faculty of Economics, Technical University, Sofia, pp. 29. (in Bulgarian)

⁴ [www.entersoft.eu; https://erp.bg/products/EnterpriseOne/general-presentation](https://erp.bg/products/EnterpriseOne/general-presentation)

⁵ Akhater, J., 2016: Production Planning and Control (SAP PP) with SAP ERP, 2nd Edition, SAP PRESS; Dickersbach, J. T., G. Keller, 2011: Production Planning and Control with SAP ERP, 2nd Edition, SAP PRESS; Mohammad A. R., L. Hossain, J. D. Patrick, 2002: The Evolution of ERP Systems: A Historical Perspective, IRM Press.

The subject of this study is the relationship between ERP systems and management accountants in modern business. Attention is focused on how the system contributes to the efficient management of the accountant, what impact the system has on the work of the managerial accountant and hence of the management accounting system.

ERP systems from an accounting point of view can be defined as a means by which the accountant manages to practice. Using the integrated system, the accountant manages to participate in any process involved in developing and making operational, tactical and strategic management decisions. In connection with the application of an ERP system, the functions performed by the organization's accountant are expanded. The necessity to develop the functionalities of management accounting staff is due to different reasons: complicating the organizational structure of modern economic units and increasing the information needs of the managers from the individual hierarchical levels. These needs, in turn, are driven by the dynamic business environment in which organizations operate. Every business seeks to establish a competitive advantage, and this is achieved through an improved information system. In response to changes in the external environment, it is necessary for a particular business to be flexible and adapt its organizational structure to the external environment.

Relationships and dependencies in the management information system

For the successful functioning of the business unit in the modern economic conditions of uncertainty, the reorganization of its organizational structure is not enough. Managers need a comprehensive information platform that provides accurate, timely, detailed information relevant to this new organizational structure. Such information refers to: the individual components of the economic unit's activity; the environment in which it operates; its suppliers and its target customers.

The resource planning system is the technical means of collecting the abovementioned database. A Managing Accountant is the entity that participates in the collection, creation and maintenance of this database and, on the other hand, processes and analyzes available information and provides it to managers from different hierarchical levels. *This gives reason to believe that there is a bilateral relationship between the ERP system and the accountant accountant - on the one hand, the accountant manages the system, and the system itself is a technical tool through which the accountant manages to perform his or her activity.*



Figure 1. Relationships and dependencies in the management information system

Fig. 1 presents the relationship between the management accounting staff, ERP system and management of the organization. On the one hand, the two-way relationship between the management accountant and the ERP system is schematically marked, and on the other-the relationship between the activities of the management accountant and information needs of managers could be seen.

In the considered aspect, it can be concluded that the resource planning system is fully compatible with the functioning of the automated management accounting and information system

in the economic unit. Therefore, the ERP system is considered not only as a technical means of management, but also as a management accounting tool. Management accounting is a bridge between modern ERP systems and organization management.

Regarding the effectiveness of the resource planning systems in the economic unit, it may be noted that the implementation of the system should be consistent with the following: the state and specificity of the industry in which the separate economic unit and conditions within the economic unit operate; market conjuncture; investment climate; organizational structure and internal allocation of responsibilities in the economic unit; pricing and taxation; the legal basis governing the various aspects of the activity; labor motivation and competencies of managerial accounting staff and others.

A resource planning system does not necessarily guarantee the success of a particular organization. The subject should play the role of the intersection of the interests of the ruling (their needs found expression for specific purposes) and the product that provides the resource planning system (information). This quality has a management accounting staff, which is the link between the management process in the organization and the resource planning system. In the general framework of planning and control of the organization of system of management accounting serves as a mechanism to control business process, and managerial accountants perform innovative role in the promotion of management strategies expenditure and income, which justify the “cost” for the solution of management problems.

A management accountant is critical to the success of the resource planning system in the organization and its subdivisions. From this point of view, its role can be seen in two directions:

- Competence in building and operating with the management information system in the organization;
- Competence in analyzing, evaluating, grouping and transforming information, product of the system, according to the specific needs of the management.

Exploiting the managerial accountant's potential for the successful operation of the ERP system in the economic unit increases its role in the decision-making process at various hierarchical levels.

The application of ERP systems through the management accounting prism can help to optimize the work of management accounting personnel in the following directions:

- 1) Linking business functions in an integrated system within an organization (finance supply, production, warehousing, sales, etc.). The system is a structured relational database in which duplication is removed during data entry and reporting.
- 2) Prerequisites for achieving greater accuracy in relation to the preparation of reports and reports of different nature, the product of the management information system.
- 3) Prerequisites for creating timely and flexible management reports, reports and reports.
- 4) Opportunity for greater effectiveness and efficiency in the implementation of the work activities within the scope of management accountants.
- 5) Flexibility by management accountants in analyzing financial and non-financial information and taking greater part in the process of developing various alternatives to management decisions - integrating the implementation traditional accounting activities with analytical and advisory positions.
- 6) Creating new opportunities for control activities by management accountants in a real-time environment.

The study of resource planning systems as an instrument of management accounting leads to the structuring of the directions in which the activities of management accounting personnel, in their entirety, contribute to the functioning of the systems themselves. It is considered that they can be searched for in the following **directions**:

▪ Development and presentation of various options for management decisions at the operational, tactical and strategic level by the management accountant, interpreting information from the resource planning system for the organization as a whole and its divisions. Thus, the improvement and optimization of the information system itself is stimulated.

▪ As a result of changes in the external and internal environment in which the organization operates, there is an increase in the information needs of managers. This, on the one hand, is the reason for the expansion of the functions of the management accountant to meet these information needs, and on the other, creates the need to optimize the relational database in order to support the activities of the management accountant in meeting the information needs of managers.

Feedback from managers to the resource planning system is carried out through management accounting information, which is sent through communication channels to managers from different hierarchical levels. The level of detail varies depending on the management hierarchy.

From the other side, it can be concluded that the resource planning system is fully compatible with the functioning of the automated management accounting and information system in the economic unit. Therefore, the ERP system is considered not only as a technical means of management, but also as a management accounting tool. Management accounting is a bridge between modern ERP systems and organization management.

Conclusion

Improvement of the management accounting system leads to expansion of the management accountant activity. The study and clarification of the relationships between ERP systems and the functionality of personnel management accounting will help to optimize the management of business processes in the organization.

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