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APPROACHES TO AUTOMATION OF MANAGERIAL ACCOUNTING

The article studies the key approaches to implementation of managerial accounting at an enterprise using software. The mechanism to develop and implement methodologies and regulations of managerial accounting is offered. The key results to be achieved after the implementation of managerial accounting are identified.

Keywords: managerial accounting; software; automation.

Юлія П. Зима

ПІДХОДИ ДО АВТОМАТИЗАЦІЇ УПРАВЛІНСЬКОГО ОБЛІКУ

У статті досліджено основні підходи до впровадження управлінського обліку на підприємстві з використанням програмного забезпечення. Запропоновано кроки з розробки та впровадження методології та регламентів управлінського обліку. Визначено головні результати, які мають бути досягнуті після впровадження системи управлінського обліку.

Ключові слова: управлінський облік; програмне забезпечення; автоматизація.

Рис. 2. Літ. 16.

Юлия П. Зима

ПОХОДЫ К АВТОМАТИЗАЦИИ УПРАВЛЕНЧЕСКОГО УЧЕТА

В статье исследованы основные подходы к внедрению управленческого учета на предприятии с использованием программного обеспечения. Предложены шаги по разработке и внедрению методологии и регламентов управленческого учета. Определены главные результаты, которые должны быть достигнуты после внедрения системы управленческого учета.

Ключевые слова: управленческий учет; программное обеспечение; автоматизация.

Introduction. A very important problem for Ukrainian business is searching for the most effective instruments of preparation and presentation of quality reporting. "Quality reporting" means not only reporting for tax authorities or other state organizations, but reporting which helps in enterprises' management. It is not a secret that many enterprises in Ukraine prepare mandatory reporting which does not represent the real situation in a company. That's why the formation of managerial information system becomes a sensitive task for managers.

Recent research and publications analysis. The researches on the methods and approaches to of formation information system which open opportunities for managers to understand how to use company's resources more effectively have are represented by (Ferreira and Otley, 2009; Nixon and Burns, 2012; Soin, 2004; Napadovska, 2000a, 2000b; Caplan, 2010; Vasarhelyi and Alles, 2008; Silveira et al., 2007; Sabina-Cristiana, 2007). These works study different sides and important features of managerial accounting.

Unresolved issues. The important problem is to find approaches to create effective managerial accounting system using software. New tasks in research on managerial accounting for Ukrainian business should be the design of the concepts of managerial accounting which takes into account the newest technologies of analyses and

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reporting. Implementation of the concept of managerial accounting and budgeting is only possible with the use of digital technologies.

The aim of the research is to consider the methodological approaches to implementation of managerial accounting system using software.

Material and methods. The basic methods used in the research are general scientific methods, analysis and graphical methods.

Key research findings. There are two approaches to automate budgeting and managerial accounting: 1) automation of the existing managerial accounting system; 2) development of a model of managerial accounting and automation of this new model.

The second approach (automation of a financial model) requires developing methodology and regulations for budgeting and managerial accounting. The development of a model of managerial accounting, methodology and rules needs to be within a certain time and only after a model has been tested in practice, the company moves to tasks automation. Schematically, the two main classical strategies of automating budgeting and managerial accounting are presented in Figure 1.

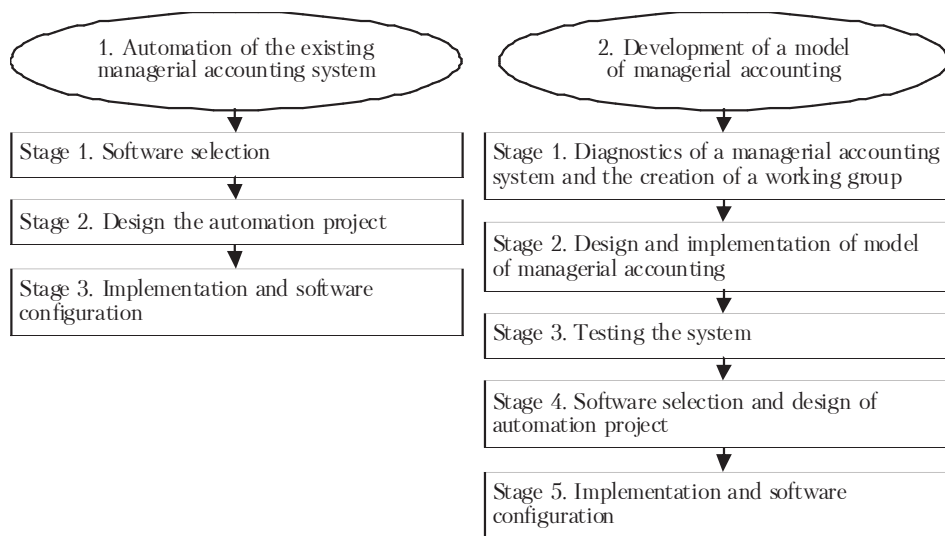


Figure 1. The comparison of the two basic approaches to automating the financial model of budgeting and managerial accounting, constructed by the author

A new method of budgeting and managerial accounting can be used in preparation of technical specification of software implementation. After preparing the specification a company makes the choice of either seeking a ready-made, the most appropriate, information system, or developing a system for themselves on their own or with the assistance of a third party.

We need to pay attention to the fact that in each phase a company may be engaged completely independently or may involve external consultants.

Comparison of the two approaches indicates the probable difficulty of the second one (Figure 1). The first strategy automation is comprised of 3 stages, which

at a first glance may seem obvious and simple enough. Initially it is enough to define the procedures and accounting areas for automation, select "box" with the possibility of integrating financial and managerial accounting, write technical requirements, conduct system setup for a specific company, hire staff or attract third-party developers, and train staff in 2–3 months to receive reports.

However, the disadvantage of this approach is that any accounting system supports only formalized processes which in practice are carried out in accordance with certain approved procedures. Such an approach can not detect errors in organization of managerial accounting that automation does not solve and which later will affect the quality of accounting information. To implement a methodology to automate the accounting system in one day or month is impossible.

In the second approach an important stage is the diagnostics of the existing managerial accounting system and definition of the directions how to improve it. In addition to formalizing the project objectives and criteria of its success in the diagnostics process we study different sides of the existing accounting method: in the financial structure – we analyze its compliance with business structure, processes and responsibilities for a financial result; in the budgetary structure – we analyze budgets and the relationship between them; in the movement of financial documents – we study the existing distribution system of responsibilities for various areas of accounting, the information collection algorithm; in the reporting – we evaluate the quality and usefulness of reports, the adequacy of analytical data through interviews with users; in the budget process – we check the algorithm of forming the final budget, the degree of coherence with planning.

The result is the diagnostics report, which sets out the proposals for a working group on the revision of the existing financial model at an enterprise and a detailed work plan for further stages of the project.

The development of managerial accounting and budgeting begins with the design of the financial structure of the enterprise, which is the "skeleton" of the budgeting system (Figure 2).

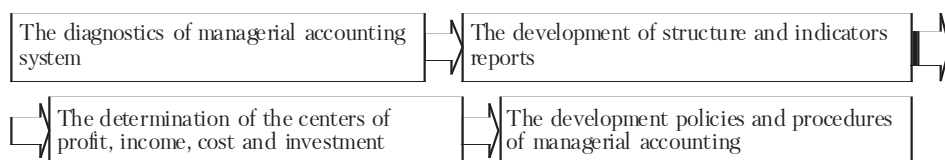


Figure 2. The stages in developing the methodology for managerial accounting, constructed by the author

The development of managerial accounting methodology starts with designing the financial structure of the company. In the framework of financial structure of the company we need to distinguish:

- profit center – a department or a group of departments responsible for maximizing profits by increasing income and minimizing costs;
- center of income – a department or a group of departments, responsible for maximizing sales revenues;
- cost center – a department or a group of departments, responsible for carrying out tasks within the approved budget expenditures;

- investment center – the center of responsibility for investments efficiency.

Since the methods and rules of managerial accounting are not regulated by state standards or legislation, they are set by enterprises (Figure 2). Usually they prepare the following basic internal regulations and instructions specifying rules and regulations of managerial accounting: standard on the financial structure of the enterprise; standard of managerial accounting policy; uniform classifications of managerial accounting and the instructions on their use; a chart of accounts in managerial accounting; forms of primary documents and reports of managerial accounting; regulations of business processes that reflect the terms, procedures and responsibilities of individual employees for creating registers and reporting forms.

The next step after the construction, implementation and testing of the model of managerial accounting will be the software selection. The most popular and modern solutions are ERP-systems like SAPR/3 (global.sap.com), Oracle Applications (www.oracle.com), Galaktika (www.galaktika.com) etc. An effective tool for generating and analyzing management accounting is a business intelligent system, which is not a software, but a technology.

Conclusions. To achieve positive outcomes of managerial accounting it is recommended to use several stages:

1. Defining the financial structure of the enterprise by means of identification and classification of financial responsibility centers.
2. Development of structure, contents and managerial reporting formats.
3. Development of managerial accounting classification.
4. Development of methods for managerial cost accounting and calculation of production costs.
5. Development of the underlying model for business operations.
6. Development of internal regulations and guidelines on the conduct of management accounting.
7. Organizational change through company training.
8. Automation of managerial accounting.

The results of automation of managerial accounting will be:

- 1) receiving information on cash balances on accounts;
- 2) receiving information on the current accounts receivables and payables, loans and credits, the remains of products in stock;
- 3) control over the cash flow from current accounts and exchange offices in individual branches or entities, departments and the whole company;
- 4) receive timely and correct reporting on the effectiveness of managers, sales effectiveness of individual product groups;
- 5) the correct data on the financial performance of individual divisions, departments, branches or the entire enterprise.

References:

Нападовська Л.В. Внутрішньогосподарський контроль в ринковій економіці: Монографія. – Донецьк: Наука і освіта, 2000. – 224 с.

Нападовська Л.В. Управлінський облік: Монографія. – Донецьк: Наука і освіта, 2000. – 450 с.

Caplan, D. (2006). Management accounting concepts and techniques. In: Concepts and Techniques; copyright 2006; most recent update: November 2010 // denniscaplan.fatcow.com.

Chornous, G., Vetchynov, O. (2012). Business intelligence technology: capabilities, application, and features in Ukraine. Bulletin of Taras Shevchenko National University of Kyiv, 140: 26–30.

- Chornous, G.O.* (2010). Intellectual approach for business management: actual state and perspectives. Bulletin of Taras Shevchenko National University of Kyiv, Economics series, 117: 58–61.
- Ferreira, A., Otley, D.* (2009). The design and use of performance management systems. An extended framework for analysis Management Accounting Research, December, 20(4): 263–282. Galaktika – official site // www.galaktika.com.
- Moreira, J.R.P., Caetano da Silva, P.* (2013). A Management Model for Integrating SOA and XBRL. The International Journal of Digital Accounting Research, 13: 123–150.
- Nixon, B., Burns, J.* (2012). The paradox of strategic management accounting. The Management Accounting Research, 23: 229–244. Oracle – Superior Solutions and Customer Choice (official site) // www.oracle.com.
- Sabina-Cristiana, M.* (2007). The Accounting Decisions and Their Modelling by Using Specialized Computer-Based Tools. The International Journal of Digital Accounting Research, 7(13): 27–51. SAP – official site // global.sap.com.
- Silveira, C., Abreu, R., David, F.* (2007). From an Object-Oriented Approach to the Financial Reporting: An Open Architecture. The International Journal of Digital Accounting Research, 7(13): 1–25.
- Soin, K.* (2004). Management Accounting, Risk and Regulation: A Pilot Study of Compliance Practices in UK Financial Services. Final report to the Chartered Institute of Management Accountants (CIMA).
- Vasarhelyi, M.A., Alles, M.G.* (2008). Reengineering Business Reporting Creating a Test Bed for Technology Driven Reporting. The International Journal of Digital Accounting Research, 8(14): 97–135. Who is who on BI market. PC WEEK/UE, #9(09), 19 May 8 June 2011 // www.pcweek.ua.

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КНИЖКОВИЙ СВІТ



СУЧАСНА ЕКОНОМІЧНА ТА ЮРИДИЧНА ОСВІТА
ПРЕСТИЖНИЙ ВИЩИЙ НАВЧАЛЬНИЙ ЗАКЛАД

НАЦІОНАЛЬНА АКАДЕМІЯ УПРАВЛІННЯ

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Фінансово-економічний розвиток України в умовах глобалізації: Колективна наукова монографія / За ред. Я.В. Белінської. – К.: Національна академія управління, 2008. – 212 с. Ціна без доставки – 25 грн.

Монографія присвячена фінансово-економічним проблемам розвитку економіки України в умовах глобалізації. Викладені теоретико-методологічні питання розробки стратегії входження України у світове господарство та формування фінансово-економічного механізму цього процесу. В основу викладу матеріалу монографії покладені багаторічні дослідження науковців в галузі економічної теорії, фінансів та банківської справи, які були апробовані на сторінках авторитетного журналу "Актуальні проблеми економіки" в 2004–2007 роках. В монографії обґрунтовано шляхи забезпечення структурно збалансованого економічного зростання економічної системи України та її ефективного міжнародного співробітництва, визначені напрями вдосконалення всіх ланок господарської системи.