

**Margaryta I. Skrypnyk, Mykola M. Matiukha**

**COMPLIANCE OF MANAGEMENT ACCOUNTING WHEN USING  
INFORMATION TECHNOLOGIES**

*The article studies the correspondence of management accounting structure when using of information technologies. The article proves interaction between management accounting systems and internal audit when using information technologies to ensure the effectiveness of decision-making information provision.*

*Keywords: accounting information systems, management accounting, management reports, internal audit.*

**Маргарита. І. Скрипник, Микола М. Матюха**

**ЕКВІЛІНЕАРНІСТЬ ВЕДЕННЯ УПРАВЛІНСЬКОГО ОБЛІКУ В  
УМОВАХ ВИКОРИСТАННЯ ІНФОРМАЦІЙНИХ ТЕХНОЛОГІЙ**

*У статті досліджується питання відповідності побудови управлінського обліку в умовах застосування інформаційних технологій. Обґрунтовано питання взаємодії систем управлінського обліку та внутрішнього аудиту при застосуванні інформаційних технологій для забезпечення ефективності інформаційного забезпечення прийняття рішень.*

*Ключові слова: інформаційні системи обліку, управлінський облік, управлінська звітність, внутрішній аудит.*

**Маргарита И. Скрипник, Николай Н. Матюха**

**ЭКВИЛИНЕАРНОСТЬ ВЕДЕНИЯ УПРАВЛЕНЧЕСКОГО УЧЕТА В  
УСЛОВИЯХ ИСПОЛЬЗОВАНИЯ ИНФОРМАЦИОННЫХ  
ТЕХНОЛОГИЙ**

*В статье исследуется вопрос соответствия построения управленческого учета в условиях применения информационных технологий. Обоснованно вопросы взаимодействия систем управленческого учета и внутреннего аудита при применении информационных технологий для обеспечения эффективности информационного обеспечения принятия решений.*

*Ключевые слова: информационные системы учета, управленческий учет, управленческая отчетность, внутренний аудит.*

**Problem statement and its relation to important scientific and practical tasks.** Transfer of Ukraine's economy to market principles, significant growth of data streams, increasing role of information technologies require study and solution to accounting issue, primarily management one. Production efficiency and provision of company management personnel with information to make effective decisions largely depend on its successful solution.

Nowadays modern companies use a variety of sources and types of information that complicates data selection and systematization and integrated management system faces obstacles. At the domestic level a significant part of decisions is made by managers baselessly, on an intuitive level, without taking into account the actual state of affairs. This creates a situation of crisis economic state, reduces company revenues and leads to collapse of business in Ukraine. Thus, provision of productive use of information resources is a necessary condition for the formation of management accounting system as company development potential.

This causes the necessity of management accounting study and reasoning of its development when using information technologies.

**Analysis of recent publications on the issue.** The formation and rational use of information supplies with the help of management accounting attract particular attention of scholars and practitioners. A significant contribution to their development was made by such scholars as: Vakhrushyna (2007), Drury (2002), Ivashkevych (2000), Needles (1994), Paliy (2003) and others. But the issue of formation and presentation of management accounting information when using information systems remains not fully studied.

In the current economic conditions, stiff competition on the market and new effective information products force to revise existing principles of operation of business information provision. A lot of concepts and principles that were lately quite acceptable begin to slow down business dynamics noticeably and require detailed analysis and revision to improve them. Companies need to make efforts to improve

technological level and effectiveness of information provision of business processes to maintain their market positions. Necessity to find additional opportunities to reduce costs and prime cost, improve customer service quality, reorganize and restructure companies to improve business efficiency arises - namely, necessity to restructure business on the basis of information provision of management accounting.

Issues regarding determination of the role of information technologies in management accounting, their formation and maintenance remain slightly studied. This fact makes the problem of company information management particularly actual and practically important in modern terms of rapid development of information technologies.

**Formulation of research objectives.** Company accounting processes gradually improve in order to increase overall efficiency of accounting and presentation of information to managers. These improvements are called advanced techniques (best practices) (Breg, 2011: 390). They can start with simple techniques of improvement of record keeping of documents filling, and end with installation of advanced integrated document management systems that allow to avoid problems associated with fast and effective provision of data and formation of an effective information base of the company. Accordingly, there is a necessity to determine priority and secondary requirements and correspondence of purposes of management accounting when activating information technologies that arise at each stage of the company genesis. Study of dynamic processes of management accounting development is the goal of modern scientists and companies' managers who are trying to optimize information provision of decision-making.

**Statement of main results and their reasoning.** It is important to determine correspondence and lane exactness of management accounting in accounting system and when using advanced information technologies. In this context, management accounting is considered as a part of accounting. The most common understanding of the nature of accounting is distorted, since it is reduced to understanding the necessity of completion of standard forms of financial (balance sheet, profit and loss report) and tax reports.

It would be more correctly to say that accounting is composed of two subsystems: financial and management accounting. Sometimes accounting subsystems include tax accounting too, although it has earned the place only due to strict government regulation and possible fines for companies.

Management accounting appeared on the junction of two components - financial accounting and management. Management always needed information, but financial accounting, because of development and complexity of business environment, gave managers less information. Therefore, management accounting became not just a continuation of accounting but emerged as a new independent discipline.

In the age of information technology use management accounting began to acquire characteristics of other related disciplines, combine elementary and complex analytical systems of information presentation. Management accounting uses not only actual data of transactions, but also analytical, evaluative data and information on possible events in future (plans and budgets), presents a business manager with quantitative as well as qualitative (informal) information.

Complex automation stipulates that the object is not a single task, but general company management. Systems approach involves consideration of each object or task not in isolation but considering relationships with other tasks and objects. Effective management automation is possible only if it is carried out in a single system. This system has, above all, to form a general database, operated by the company. If all documents are created in a single electronic environment, then the first and most important task - accounting - will be used automatically. Obtaining of various reports is purely a technical task when all output data are in a single database.

It should be noted that there is no company without management accounting system at all. Even a private entrepreneur who has a small business runs his own calculations and planning. Thus, the issue of presence of management accounting system is only about its quality, and, therefore, ability to provide timely and accurate information regarding made decisions. This, in turn, depends on competent management policy, specialists' skills and cost of system maintenance. Information

data processing technologies enable to get an effective and efficient system of accounting management as an analog of its conduction in paper form taking into account implementation staging of information provision system. This is the process of implementation and conduction of management accounting within which one should follow standard approaches to building systems and prevent deviations that can be grouped in blocks.

Block 1. Methodological. Most of the projects on implementation of management accounting systems do not reach goals at this stage, as this is the stage where the basis of the entire system is laid. First of all, company management should realize the necessity for improvement of management accounting system not just to follow traditions or other trends features, but as real need for information of specific nature with particular results. Task of the specialist on management accounting at this stage is to interpret needs of senior management and put them in specific tasks correctly.

Block 2. Technical. This stage determines technical features of information technologies use in a particular direction, which corresponds to management accounting system. One can not create information for regular solutions of the tasks put at the first stage without knowing rules of management accounting. Composition of registers of analytical accounting and internal management reporting forms are selected, directions of information flows within the company are determined and control sample as a model is formed at this stage.

Block 3. Organizational. Responsibilities are allocated, fulfillment of functional tasks is established and immediate implementation and operation of the system are begun at this stage. One is requested to follow the principle of consistency and communication. The main element of the stage is coordination of performers' conflicts interests – between those collecting, processing and transmitting information and those interpreting and using it in management decision-making. When implementing information systems at this stage it is necessary to use traditional approaches to management accounting, considering company departments and staff who work with information base.

Block 4. Technical. One cannot do without implementation of technical parameters of information system of management accounting and reporting when implementing and exploiting it. Sense of purpose of works can be defined by formation and approval of documents flow system and development of the system of management reports regarding company activity, choice of combination form of information systematization and grouping based on software.

It should be noted that management accounting system is based on internal needs and capabilities of making the system of information flows manipulation within the company but their reasoning is determined by a number of traditional terms and postulates. Their record must provide effective system functioning, analysis and evaluation of existing methods of information storage, processing and presentation. Main provisions of these approaches should consider composition of a modern information accounting system, which are as follows:

1. Requirements to management accounting system - more rate setting of the system requires higher cost of its processing and special knowledge to set up operation and use of the information system.

2. Scope of the company - ability to keep individual staff members specialized in management accounting, or combine functional responsibilities of accounting.

3. Company strategy – determination of priority areas of the company and staff that define and form it.

4. Company creative experience - desire of employees to change and study new information, doing original work.

We should note major differences of management accounting from financial and tax ones that have to be taken into account when considering compliance with requirements of implementation and use of the whole information provision system of the company. These include basic imperatives that determine the basis of management accounting and reporting when using information systems:

1. Purpose of accounting - full and effective (optimal) information provision of management decision-making.

2. Object of accounting and reporting - multi-vector economic entities (type of production, product group, division, department, individual employee).

3. Accounting principles - management accounting has no principles and standards that, on one hand, makes it easier to use, but, on the other hand, makes the process of setting objectives regarding its conduction and development of forms of presentation information to users more difficult due to the lack of unified common rules.

4. Mandatory use is non-regulatory, depending on internal needs of the company for management decisions, determines the degree of integration and combination of accounting processes for complex information provision.

5. Retrospectiveness of information displays information about past activities as well as enables to plan future events due to budgeting.

6. Indicators - in addition to standard financial, physical and labor indicators, we use qualitative ones (e.g., customer satisfaction degree) in management accounting, which leads to use of setup and use of logic functions in information system.

7. Frequency of reporting is determined by needs and capabilities of the company, depending on feasibility and effectiveness of data use, functions fulfillment and evaluation of management automation process.

8. Degree of openness and information users - management accounting information is often confidential and a trade secret of the company which requires provision of access rights delimitation and encoding, encryption.

The basis for improvement of information provision quality of company management is building of an organizational structure of interaction between management accounting and internal audit, as completeness and reliability of data which is information management provision will depend on it. Information system must stipulate interaction of accounting types, as well as setting up effective internal audit of the company to achieve information reliability, its real accounting representation and interpretation. Possibility of use of elements of internal audit in the

information system of company management, which are based on stated objects of management accounting, must be stipulated for this purpose:

1) control environment, which determines control subjects, assesses risks of internal audit, stipulates the use of methods and procedures for internal control, monitors internal management to represent an integral understanding of the formation of information provision system and the mechanism of its implementation;

2) subjects of control that are directly determined by the interaction of objects of accounting and management accounting reporting and corresponding powers of subjects authorized to control;

3) definition of the purpose of internal audit of activities information provision and its formed tasks in the context of previous, current and next audit;

4) definition of principles of organization of activities internal audit and necessity to apply the principle of competence and economic feasibility, compliance with which will enable to build an effective system of information provision that can affect optimality of tasks fulfillment and improve company management;

5) inverse element of information provision system of control actions process related to management accounting check;

6) organizational and methodological provision of internal audit with information (collection and storage of data, analysis of calculated indicators, development of forms of results of internal audit presentation for management decision-making based on its results).

Establishment of relationship between management accounting information system and internal audit, that enables company management to get timely, reliable and detailed control and analytics information, effectively influences decision-making regarding activities optimization.

**Conclusions and prospects for further research.** Conducted analysis of implementation and use of management accounting information system indicates the necessity to follow compliance, which is a subject of compliance of methods, organization and technical parameters. Priority principles regarding management accounting in information system were determined based on this.



We defined the role of interaction of management accounting and internal audit to provide reliable information.

Poor study of the issue of organization and methods of management accounting in information systems raises risks of internal information provision, leads to provision of company management with false information on the actual situation.

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