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## COMPLIANCE OF MANAGERIAL ACCOUNTING IN THE CONTEXT OF INFORMATION TECHNOLOGY USE

*The article explores the issues of managerial accounting structure compliance in the context of information technology use. The need for interaction between the systems of managerial accounting and internal audit under information technology implementation to ensure the effectiveness of information support in decision making is grounded.*

*Keywords: accounting information systems; managerial accounting; internal audit.*

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## ЕКВІЛІНЕАРНІСТЬ ВЕДЕННЯ УПРАВЛІНСЬКОГО ОБЛІКУ В УМОВАХ ВИКОРИСТАННЯ ІНФОРМАЦІЙНИХ ТЕХНОЛОГІЙ

*У статті досліджено питання відповідності побудови управлінського обліку в умовах застосування інформаційних технологій. Обґрунтовано необхідність взаємодії систем управлінського обліку та внутрішнього аудиту при застосуванні інформаційних технологій з метою забезпечення ефективності інформаційної підтримки прийняття рішень.*

*Ключові слова: інформаційні системи обліку; управлінський облік; внутрішній аудит.*

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## ЭКВИЛИНЕАРНОСТЬ ВЕДЕНИЯ УПРАВЛЕНЧЕСКОГО УЧЕТА В УСЛОВИЯХ ИСПОЛЬЗОВАНИЯ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ

*В статье исследован вопрос соответствия построения управленческого учета в условиях применения информационных технологий. Обоснована необходимость взаимодействия систем управленческого учета и внутреннего аудита при применении информационных технологий для обеспечения эффективности информационной поддержки принятия решений.*

*Ключевые слова: информационные системы учета; управленческий учет; внутренний аудит.*

**Problem statement.** Transfer of Ukraine's economy to market principles, significant growth of data streams, increased role of information technologies require new approaches to accounting, primarily the managerial one. Production efficiency and provision of company management with information for effective decisions largely depend on the successful solution of this problem.

Nowadays companies use a variety of sources and types of information that complicates data selection and systematization of management data. At the domestic level a significant share of decisions is made by managers on the intuitive level, without taking into account the actual state of affairs. This often leads to crisis economic situations, reduces company revenues and eventually ends up in collapse of business. Thus, productive use of information resources is a necessary condition for the formation of management accounting system to develop a company's potential.

**Recent publications analysis.** Formation and rational use of information supplies within managerial accounting attract particular attention of both scholars and prac-

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titioners. A significant contribution to their development was made by such scholars as: M.A. Vakhrushyna (2007), K. Drury (2002), V.B. Ivashkevych (2000), B. Needles et al. (1994), V.F. Paliy (2003) and others. But the issue of formation and presentation of managerial accounting information when using information systems remains not fully studied.

Under the current economic conditions, stiff competition at the market and new effective information products force the revision of the existing principles of operation of business information provision. A lot of concepts and principles that were lately 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. The need to find additional opportunities to reduce costs and prime cost, improve customer service quality, reorganize and restructure companies to improve business efficiency arises, namely, the necessity to restructure business on the basis of information provision of managerial accounting.

Issues regarding the determination of the role of information technologies in management accounting, their formation and maintenance remain understudied. This makes the problem of company information management particularly apparent and practically important under contemporary rapid development of information technologies.

**Formulation of the research objectives.** Company accounting processes gradually improve in order to increase the 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 avoiding problems associated with fast provision of data and formation of an information base. Accordingly, there is a need to determine priority and secondary requirements and correspondence of purposes of managerial accounting when activating information technologies at each stage of company's development. Study of dynamic processes of managerial accounting development is the goal for many scientists and companies' managers trying to optimize information provision for decision-making.

**Key research findings.** It is important to determine correspondence and exactness of managerial accounting within the accounting system using advanced information technologies. In this context, managerial accounting is considered 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 and tax reports.

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

Managerial accounting appeared on the junction of two components – financial accounting and management. Management always needs information, but financial accounting, because of development and complexity of business environment, doesn't provide managers with sufficient information. Therefore, managerial accounting

is becoming not just a continuation of accounting but is developing into as a new independent discipline.

In the age of information technology use managerial accounting began to acquire characteristics of other related disciplines, combine elementary and complex analytical systems of information presentation. Managerial 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 separate task, but general company's management. System approach involves the consideration of each object or task not in isolation but within relationship with other tasks and objects. Effective management automation is possible only if carried out in a single system. This system has, above all, to form a general database, operated by a company. If all documents are created in a common electronic environment, then the first and the most important task – accounting – will be used automatically. Obtaining of various reports is purely a technical task when all output data are in a common database.

It should be noted that there is no company without managerial 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 a managerial accounting system is only about its quality, and, therefore, its ability to provide timely and accurate information for decisions. This, in turn, depends on competent management policy, specialists' skills and cost of system's maintenance. Information data processing technologies enable an effective and efficient system of accounting management similar to its paper variant but taking into account the implementation of information provision system. This is the process of managerial accounting implementation 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 managerial 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 its managerial accounting system not just to follow traditions or trends, but as a real need for information of specific nature with particular results. Task of a specialist on managerial accounting at this stage is to interpret the needs of senior management and put them in specific tasks correctly.

**Block 2. Technical.** This stage determines the technical features of information technologies use in a particular managerial accounting system. One can not create information for regular solutions of tasks put at the first stage without knowing the rules of managerial 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 here. The main element of its stage is the coordination of performers' conflicts interests – between those collecting, processing and transmitting information and those interpreting and using it in decision-making. When implementing information systems at

this stage it is necessary to use traditional approaches to managerial accounting, considering company departments and staff who work with information.

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

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

1. Requirements to managerial accounting system – more levels of the system requires higher cost of its processing and special knowledge to set up its operations and use of the information system.

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

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

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

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

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

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

3. Accounting principles – managerial 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 information presentation to users more difficult due to the lack of unified, common rules.

4. Its use is not regulated not mandatory, depending on internal needs, the degree of integration and specific combination of accounting processes.

5. Retrospectiveness of information display regarding past activities enables planning future events within the budgeting.

6. Indicators – in addition to standard financial, physical and labor indicators, we use qualitative ones (e.g., customer satisfaction degree) in managerial accounting, which helps setting up certain logic functions within the information system.

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

8. Degree of openness and information users – managerial accounting information is often confidential, with limited access rights, encoding, encryption etc.

The basis for improvement of information provision quality for company management is the organizational structure of interaction between managerial accounting and internal audit, on the completeness and reliability of data of which information management provision will depend. Information system must stipulate the 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 internal audit elements in the information system of company's management, must be stipulated for these purposes:

1) to control the environment and monitor internal management to obtain the integral understanding of the information provision system and the mechanisms for its implementation;

2) subjects of control are determined by managerial accounting reporting and corresponding powers to authorize this control;

3) definition of the purpose of internal audit and its tasks in the context of previous, current and future audit;

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

5) organizational and methodological provision of internal audit with information (collection and storage of data, analysis of calculated indicators, development of the form for internal audit results presentation for further decision-making based on these results).

Establishment of relationship between managerial accounting information system and internal audit, that enables company management get timely, reliable and detailed information for further decision-making regarding activities' optimization.

**Conclusions and prospects for further research.** The conducted analysis of implementation and use of managerial accounting information system indicates the need for compliance of organizational methods and technical parameters. Priority principles regarding managerial accounting information system are determined.

The role of interaction between managerial accounting and internal audit in providing reliable information has been identified.

Poor organization of managerial accounting information systems raises risks for internal information provision, leads to provision of company management with false information on the actual situation.

#### References:

*Атамас П. Й.* Управлінський облік: Навч. посібник. – 2-ге вид. – К.: Центр учбової літератури, 2009. – 440 с.

*Брег С.* Настольная книга финансового директора / Пер. с англ. – 7-е изд. – М.: Альпина Паблишерз, 2011. – 536 с.

*Вахрушина М. А.* Бухгалтерский управленческий учет: Учебник для студентов вузов, обучающихся по экон. специальностям. – 6-е изд., испр. – М.: Омега-Л, 2007. – 570 с.

Внутрифирменное управление и информационные технологии: Монография / Д. В. Чистов и др. – М.: ПМСОФТ, 2009. – 324 с.

*Друри К.* Управленческий и производственный учет: Учебник. – М.: ЮНИТИ-ДАНА, 2002. – 1071 с.

*Ивашкевич В.Б.* Организация управленческого учета по центрам ответственности и местам формирования затрат // Бухгалтерский учет.– 2000.– №5. – С. 15–18.

*Мюллер Г., Гернон Х., Минк Х.* Учет: международная перспектива. – М.: Финансы и статистика, 1993. – 135 с.

*Нидлз Б., Андерсон Х., Колдуэлл Д.* Принципы бухгалтерского учета. – М.: Финансы и статистика, 1994. – 495 с.

*Палий В.Ф.* Управленческий учет: система внутренней информации // Бухгалтерский учет.– 2003.– №2. – С. 57–59.

*Пушкар М.С., Пушкар Р.М.* Контролінг – інформаційна підсистема стратегічного менеджменту: Монографія. – Тернопіль: Карт-бланш, 2004. – 370 с.

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