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Accounting Information System as a Platform for Business and Financial Decision-Making in the Company

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Information system in the company should provide all necessary information for decision-making. Accounting information systems are continuously upgraded, apart from other types of information systems. The aim of this paper is to identify the role of accounting information system in the process of business and financial decision-making in the company in line with everyday development of information and communication technologies. Accounting information system can be viewed as a special discipline and as part of a larger system and presents a discipline that is oriented towards practice. The aim of this paper is to signify different types of accounting information systems, detection of the objective side of these contents and their role and active use as a platform in decision-making. The research method used in the paper is the content analysis method.

Keywords: accounting, information system, decision-making, company

1. Introduction

In the process of making business and financial decisions the starting point are the previously determined company objectives. The basic assumption of a rational company management is information. Information can be non-quantitative and quantitative, and quantitative information is further differentiated into financial information (accounting) and non-financial information. The identification of adequate information system is of crucial importance for company management, which should provide a reliable information basis for business and financial decision-making. Accounting has an indispensable function in determining the information system.

Business information system includes the following sub-systems: (1.) Management Information System, (2.) Accounting Information System, (3.) Marketing Information System, (4.) HR Information System and others. Two main functions of an accounting system are: (1) rendering accounts function and (2) company management function. The first function is under the competence of financial accounting that is primarily oriented towards meeting needs of external users, that is, it is focused on financial communication of the company with its environment. From the methodological point of view, it is known as a fact that financial accounting is based on technique of double-entry book-keeping. Dual observation of economic categories is the basic characteristic of double-entry book-keeping. The second function is under the competence of management accounting that is oriented towards meeting the needs of internal users, first of all towards managers in the company. Managers need financial (accounting) information for making various business and financial decisions. Management accounting is focused on planning, running and control of business processes in the company.

The final phases of data processing in accounting are financial statements. They are carriers of accounting information and a basic tool for financial communication of the company and its external interested users. Basically, financial statements are the key source of information on financial position of a legal entity at the end of a period, on total performance of the legal entity for the given period and on cash flows of a legal entity, and they are used for making economic decisions for a broader range of users.

It is necessary to organize an accounting system in a way that accounting information system, which collects and processes data regarding accounting planning, record-keeping, control and analysis, generates

valid, timely and quality information [3]. Qualitative characteristics of financial information are: comprehensibility, comparability, relevance and reliability. The essential quality of information published as financial statements is that they should be understandable to users – various interested groups. Measurement and presentation of financial effects of similar transactions and other events must be performed consistently for the entire company, its parts, within the same accounting period and consistently to other companies. Information is relevant when it affects economic decisions of users in terms of helping them evaluate business events and correct previous evaluations.

The relevance of information is under significant influence of materiality as an intersection point of relevance or irrelevance of information. Information is reliable when it does not contain material errors, when it is precisely shown and when users can rely on it during the process of evaluation of financial performance and making business and financial decisions.

Accounting Information System (AIS) is the basis of information system of a company for reporting to internal and external users. In those terms, it presents a platform for company managers in the decision-making process.

2. Organisation of an Accounting Information System in the company

Today we see significant evolutionary changes that head for creation of a more modern company in line with changes caused by market globalisation, business internationalisation, dynamic development of information technologies and strong competition. Constant interactions with both external and internal events are the reason for an analysis of the role and quality of an information system for efficient business operations. The need for creation of information systems, which provide not only the database but to a great extent simplification and relief in functioning of business systems, is of crucial importance for successful business operations of a company. Information and communication technology includes all electronic media whose function is to transfer information between the sender and the receiver, and to enable or support communication. Changes in information and communication technologies are dynamic. Development of modern technology and information systems caused significant change in the business of a company as well as changes in accounting information systems.

The development of the accounting system dates back to the times of Babylon, 3.600 BCE, when the oldest record of a business event occurred. There is much evidence that accounting systems were used in the ancient Greece, China and Rome. Trade activities became more complex which led to the development of greater organisational forms. Changes in accounting were in line with changes in data processing methods, along with the development of technique, starting with manual and including mechanographic and computer data processing as the most modern method for data processing. Current changes in accounting information systems refer to the improvement of the existing or purchase of new accounting information systems. In modern business conditions, accounting information system is part of a Computer-Based Information System (CBIS) that uses computer technology and consists of the following applications: data collection, data processing, database management and generating information.

Accounting information is understood as transformed data and indicators, directed towards users who would use them to realize a certain task within business activity of the company. Since information has a great significance for management of the company, existence of modern and comprehensive database is important for control and financial reporting of the company [6]. Regardless of the design and implementation of the information system, human factor, that is, management has a crucial role in using and managing changes [2].

The accounting information system is by its nature and design a more or less strictly formalized sub-system of a company's business system. This sub-system is characterised by complexity, significant presence of modern information technologies and coherence with other segments of a business system [7]. The most important part of a complete information system of a company, comprised of people, equipment, software, data, manners and methods of their organisation, communication and network solutions that connect all elements and organisational procedures, is an accounting information system [9].

Accounting information system deals with:

1. measurement or quantification of business events in monetary forms (by recording in accounts) – INPUT;
2. data processing in business books and drawing accounting reports – PROCESS; and
3. publication of financial statements, with which the accounting communicates with internal and external users thus giving them information necessary for business and financial decision-making - OUTPUT.

The main characteristic of an accounting information system made of individual sub-systems is the creation of special sub-systems for complete units within the company, that is, modules supported by various software solutions, without possibility for integrated functioning [9].

The accounting information system is connected to several other areas, the most important of which are:

- *Accounting and administrative organisation* is a system of organisational measures with a focus on collection and processing of data, which are directed towards provision of information to the management, certain functions in the company and for accounting purposes;
- *Internal control* as a control of activities and decisions made by other employees, conducted for the purposes of management by or on behalf of the said management;
- *Provision of information required for decision-making* through systematic collection, recording, keeping and processing of data with the aim to provide information that is relevant for decision-making (selection among many options) for various functions in the company including the accounting function; and
- *Information systems* are a set of interconnected components which serve for collecting, procurement, processing, warehousing and analysis of information with the purpose to plan, control, coordinate and make decisions in business and other organisations [15].

In modern organisation, apart from the role of the general manager who is responsible for decision-making based on relevant information, the roles of a financial auditor, control and IT manager involved in processes of control and counselling are very important regarding procurement and provision of information while the general manager has the role of a moderator and coordinator between the stated functions.

3. Accounting information system as basic for business and financial decision-making

The business system as a complex system can be divided into three sub-systems: executive sub-system, information sub-system and management sub-system. The executive sub-system means basic business functions such as: procurement, production, sales, financial and other. The information sub-system as a link between the executive and management sub-systems has a task to provide timely information to the executive and management sub-system for decision-making. The information sub-systems, according to the criterion for roles and tasks of accounting, are divided to accounting and non-accounting information sub-systems (accounting information system, management information system) [13] [10]. It is important to stress that those systems are not organized in physically separated modules, but are frequently integrated in overlapping areas of responsibility.

Scapens (1996) confirmed the opinion that, due to advancement of information and communication technology, the management is in a better position during decision-making process because now it is possible to improve and constantly upgrade the accounting information system as a support to decision-making of management [12].

Sutton (2006) stressed that relation between information technologies and management is extremely complex in the field of accounting information systems [4]. By an adequate connection between accounting information systems and management, as well as executive functions and external users, compatibility of all functions in the company is established. The bottom line is that coherence between management and accounting information systems leads to the simplification of making business and financial decisions by the management.

Research conducted by Nilsson and Rapp [11] showed a theoretical framework of successful implementation and application of particular managerial strategies in Swedish companies, only if they owned the right information. Strategic management requires mostly concise and various information in order to make decisions. These management decisions are mostly directed towards future and therefore are significantly riskier

for the final outcome. Management at the tactical level needs detailed information in relation to the strategic management and, by a rule, for a shorter time period. Operational management mostly needs analytical data and information. At this level decisions are made almost every day.

In execution of their activities, the management depends on information from the accounting information system (Figure 1). Numerous accounting reports containing different information are necessary for different levels of management structures. These reports can be presented in different time intervals, in different methods and for different phases in management and decision-making in the company.

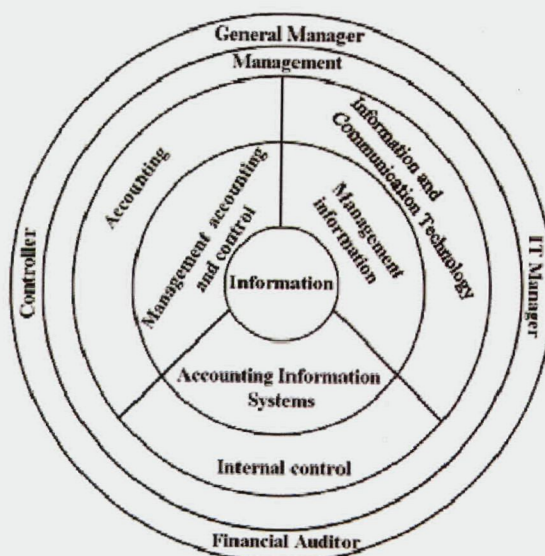


Figure 1. Positioning of an accounting information system [15]

Management accounting and control deal with information in order to make decisions and control in the organisation. Information management is a field traditionally connected to information systems and deals with "production" of information by using information and communication technologies [15].

The connection between the accounting information system and information management is in the field of development of information systems – making data models, simulation and development of internal control. The connection between the accounting management and control and information management is reflected in several common elements. They are contained in the definition of management as a discipline. They greatly depend on the human factor in the organisation. Unlike these two fields, the accounting information system traditionally has a stricter and more formal approach that does not greatly depend on the human factor. It can be said that the approach distinguishes the human factor in comparison to technocratic approach - accounting information system is between accounting management and control and information management [15].

When studying accounting information system it is necessary to mention the human factor (human resources management). The approach that neglects the human factor in studying accounting information system is not modern and presents a narrow view of human issues.

The accounting information system should adequately meet information requests from the management of the company. The connectivity of the accounting information system with the company's management is specific because of coordination of management with complete information capabilities of the accounting information system. It generates financial statements that are significant for management and decision-making; and it presents initial pulse for improvement of information content when management endeavours to remove weaknesses in production by repeating requests.

Connectivity between the company's management and the accounting information systems is reflected in the management's requests that refer to the INPUT of the accounting information systems. Upon requests of the management, the accounting information system must be adequately adjusted, starting with record-

ing of business events, drawing and publishing of reports and information. The complexity of connectivity between the management and accounting information systems originates from the necessity to adjust information received from different segments of accounting information systems to the different levels of management and managerial structures in the company.

In order to adequately meet the management's requests, the accounting information system must be organised as an active and creative system. How does the accounting information system meet the management's requests? The organizer of the accounting function should review, direct and improve information requests made by the management by using pro-active solutions. In that manner, the information strength of the accounting information system is increased, and making business and financial decisions by the management is facilitated.

The specificity of connectivity between the procurement function, as one of business functions of the executive sub-system, and the accounting information system of the company is reflected in a vital communication between executive functions and the accounting information system in order to timely take actions in case of changes in the environment and to make right decisions at the right moment. This two-way relation is shown as follows: procurement receives information from financial accounting, analytical book-keeping and management accounting, and provides information to the accounting information system, which is further processed and placed at disposal of all interested parties in the company. If there is a high level of communication and connectivity, the company will be able to adequately solve problems and successfully achieve desired economic objectives [8].

4. Support of various types of the accounting information system to the company's management

The first published paper on accounting was written by a Venetian monk Luca Pacioli who summed up the principles that have remained the same in their essence until today [14]. The basics of accounting are derived from these principles that are used in implementation and use of the accounting information systems.

In terms of organisation, the accounting information system can be:

1. made of individual sub-systems,
2. integrated or
3. combination.

Further below are analysed the accounting information systems comprised of individual sub-systems, that is, modules and integrated, from the point of view of support to the company's management. Combined accounting information systems as a combination of different types of the previous two are not subject of consideration. Depending on the needs of users, Hall (1995) pointed out that the following sub-systems can be created: sub-systems for processing of transactions, sub-systems of book-keeping journal, sub-systems of fixed assets and sub-systems of reporting to management [5]. Apart from that, G.H. Bodnar and W.S. Hopwood (1993) stated the following sub-systems: revenues, expenditures, production, finance and financial reporting [1]. Sub-systems that are characteristic of most contemporary accounting information systems comprised of individual sub-systems are: sub-systems of general ledger, sub-systems of analytical book-keeping and auxiliary sub-systems. Considering the fact that needs for information are different in different organisations, a single view on the module structure, which would be applicable in all companies, cannot be created. Regardless of the different module structure in companies, the accounting information system created upon individual sub-systems, presents support to management in the decision-making process and the realization of various types of business decisions.

The advantage of the accounting information system, created upon individual sub-systems, is the automatic transfer of data from the sub-systems of analytical book-keeping into the sub-system of the general ledger, which makes booking easier, while the main shortcoming is the entry of data in accounting, and not the place of occurrence of business change.

On the other hand, integral accounting information systems in companies are a set of modules which are integrated in one and a single information system of the company. Integral accounting information systems

operate in a way that data are only once entered into the system and are further used for processing. It is mostly based on an *on-line* computer system that enables the entry of transactions at the place of occurrence, using and updating information in all places where applicable.

The advantages of integral accounting information systems reflect first of all in recording data only once and online entry. The establishment of interactions between accounting modules enables that one business activity from one cycle causes certain changes in other cycles and in this manner the integrated accounting system shows advantages in relation to other forms of organisations.

Conclusion

Changes in features of corporations lead to changes in the management. Faced with risks, the company's management significantly improved its theoretical and methodological solutions as well as practice regarding management. Business management of the company today means existence of new, improved knowledge, changes in planning methods and implementation of new techniques. An important role in the previously stated has the accounting information system, its implementation, use and upgrading. The management that succeeded in accepting changes and adequately combined potential within the company and available resources and factors from the environment would lead the company towards generation of values for different interested groups.

The organiser of the accounting function should review, guide and improve the management's requests for information and thus increase information strength of the accounting information system and facilitate making business and financial decisions to various profiles of managers. The necessity to adjust information from different segments of accounting information systems, at different management levels and managerial structures in the company, shows the complexity of connectivity between accounting information systems and the management.

The accounting information system meets the management's requests as an active and creative system. To discuss management and at the same time neglect accounting as a basic source of information is really not possible.

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