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Accounting And Auditing In The Digital Economy

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ABSTRACT

In order for an enterprise to achieve its goals and objectives, an information system is required in which the collected, entered and processed data and stored, managed, audited and reported information are combined (Cushing & Romney, 1994, p.3-13). The rapid progress in information technologies and the difficulty of following them have revealed the necessity of establishing computer-based information systems in enterprises and making an investment in this direction. Computer-based information systems are a set of strategies, rules, methods and policies required to use this system with software, hardware, databases, communication networks, people. KKP systems, which have become widespread rapidly since the mid-1990s, are systems developed in order to increase efficiency by obtaining information both inside and outside the enterprise more accurately and quickly. Information systems in the enterprise should always follow the developments in technology closely and the necessary updates should be made on time. In the KKP systems, in line with the needs of the enterprises, the information networks should be continuously expanded. The storage of data and information, which is very important for the business, is done with relational databases in KKP systems. The system, which can be made more effective by integrating Internet technology into the system, also reduces the cost of data querying between remote systems. With Internet technology, businesses can use 'Intranet', which describes the internal connections of the enterprise in Local Information Networks (LAN), and 'Extranet' networks that describe the external connections of the enterprise in Wide Area NetworkWAN (İlter, 2007, p.8-9)

GENERAL İDEAS

Information is the transformation of data in a way that is useful in decision making and making it meaningful by analyzing it. "Information", which is seen as a rising value today, directly affects the competitiveness of businesses. The accuracy and verifiability of information, completeness, timeliness, relevance, economy and simplicity increase its value and utility (Gökçen, 2002, p.5-17).

A system is a structure consisting of two or more interrelated components or subsystems. The information system consists of input, processing of the input and the resulting output and feedback. Input is raw data collected, captured. Processing is the modification of data to produce a usable, useful output. Processing includes calculations, comparison of data, storage of data for future use. Output is mostly obtained as documents or reports. Output obtained from one system can be input for another system. Feedback is information used to make changes in input or data processing. In some cases, it may be necessary to take the correct input into the system or to change the transaction process in order to correct errors or problems in the system. Feedback is also important for managers and decision makers to take timely and correct steps for the future. It guides businesses to achieve their goals and objectives such as working with

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optimum stock, increasing profits, and improving customer service (Stair & Reynolds, 2010, p.10-11)

In order for an enterprise to achieve its goals and objectives, an information system is required in which the collected, entered and processed data and stored, managed, audited and reported information are combined (Cushing & Romney, 1994, p.3-13). The rapid progress in information technologies and the difficulty of following them have revealed the necessity of establishing computer-based information systems in enterprises and making an investment in this direction. Computer-based information systems are a set of strategies, rules, methods, and policies required to use this system with software, hardware, databases, communication networks, people. KKP systems, which have become widespread rapidly since the mid-1990s, are systems developed in order to increase efficiency by obtaining information both inside and outside the enterprise more accurately and quickly. Information systems in the enterprise should always follow the developments in technology closely and the necessary updates should be made on time. In the KKP systems, in line with the needs of the enterprises, the information networks should be continuously expanded. The storage of data and information, which is very important for the business, is done with relational databases in KKP systems. The system, which can be made more effective by integrating Internet technology into the system, also reduces the cost of data querying between remote systems. With Internet technology, businesses can use 'Intranet', which describes the internal connections of the enterprise in Local Information Networks (LAN), and 'Extranet' networks that describe the external connections of the enterprise in Wide Area NetworkWAN (İlter, 2007, p.8-9)

THE RELATIONSHIP BETWEEN ACCOUNTING INFORMATION SYSTEM AND MANAGEMENT INFORMATION SYSTEM

One of the most basic duties of managers in an enterprise is to determine the business objectives and to make strategic and operational planning with a flexible structure, taking into account the changing environmental conditions and information technologies. In addition, it is to organize business processes, to recruit appropriate personnel, to direct, to provide coordination and to make necessary controls. Management Information System is the collection and processing of data in order to produce the information that managers need to organize, plan and control the activities in the enterprise (Cushing & Romney, 1994, p.12). The outputs created with the Management Information System are sent to various management levels and communication is provided.

This defines the problems in the system and when the information flow in an enterprise is analyzed to understand the problems of managers and other information users, it is seen that organizational levels are divided into more than one field of activity. Business activities form the basis of the pyramid and include basic activities such as production, sales and distribution. In the section above here, management levels are examined in 3 35 stages. Operations management is directly in charge of controlling daily operations. Mid-level management carries out organizational activities in line with business goals and undertakes short-term planning. Senior management, on the other hand, determines the business goals and makes long-term plans (Hall, 2008, p.3). Managers at various levels of management take the necessary decisions by providing information flow from sources related to the management information system, keep the activities under control and help them find solutions.

Information flow is provided horizontally and vertically at management levels. Daily operation information includes many detailed information about the company's commercial operations,

from labor and material usage in the production process to sales and shipping. Vertical information flow, on the other hand, transmits summary information of operational and other activities to senior management levels. At the same time, various instructions and budget information are transmitted from senior management levels to lower management levels. In addition to these, the company is also in exchange of information with its external connections, which we can examine in two groups as commercial partners and stakeholders. While commercial partners include customers and suppliers, stakeholders include auditors, shareholders, financial institutions, or government entities that directly or indirectly affect the company, either internally or externally (Hall, 2008, p.4). Accounting Information System (MBS) is a subsystem of the Management Information System. MBS has all the features of the Management Information System in its structure. Basically the aspect that differs from each other is that their scope is different. While the Management Information System includes all the data that enters an enterprise, MBS includes financial information and information resulting from data processing. In order to understand and analyze MBS in an enterprise, Management Information System of that enterprise should be known (Cushing & Romney, 1994, p.12-17). Figure 11 shows the relationship of MBS with business and environment.

Although Hall (2008) states that modern information systems are in an integrated structure with each other, he examined the Accounting Information System and Management Information System as separate systems for better analysis. Another reason for conducting such an investigation is the Sarbanes-Oxley Act (SOX) signed in 2002, which states that external audits should be carried out in terms of operational efficiency as well as management designs and internal controls in the financial reporting process in public enterprises in the United States. It is thought that examining MBS and Management Information System separately will bring a conceptual perspective to managers and auditors in determining the key processes and risk areas within the company.

ACCOUNTING INFORMATION SYSTEM

Accounting is to provide a systematic information that combines the data of the events and transactions that have financial results in the form of monetary expressions and numerical data, processes them through recording, classification and analysis, and presents the information obtained as a periodic reports to the relevant persons and institutions. system (Karakaya, 1994, p.37). In order for an enterprise to achieve successful results, it must be able to make good use of the opportunities faced and make correct decisions when necessary 37. Information obtained from the accounting system comes to the fore in these decision-making processes. Today, we can define Accounting Information System (MBS) as the transformation of accounting data into information with computer systems. MBS refers to a process cycle in which information systems are developed and information technologies are used (Bodnar & Hopwood, 2004, p.1-2). In the past, manually (manually) accounting information can be reported with computer-aided systems. Although not exactly the same in all businesses, the information obtained as a result of economic activities in terms of accounting appears as financial reports. MSB also refers to an internal control process that regulates and manages the activities of the enterprise. Internal control is a process created to provide assurance in achieving goals such as obtaining reliable financial reports, ensuring efficiency and productivity in activities, and acting in accordance with laws and regulations (Bodnar & Hopwood, 2004, p.1-23). The Accounting Information System differs from other information systems in two ways. First of all, inputs in MBS are generally economic events. The second is that MBS's operating model is related to the party that will use the information. Because the output of the information system affects the user and is the basis for activating. While this is correct in tactical and strategic decision making,

it is less accurate in daily decision making. In these cases, it is seen that managers obtain accounting information by using direct personal communication without waiting for official reports. Therefore, personal communication is included in the system as an output (Hansen & Mowen, 2010, p.26-27)

According to Romney and Steinbart (2003), MBS consists of five elements.
1. Persons operating the system and performing various functions related to the system,
2. Both manual and automatic processes that collect, process and store data on business activities,
3.Data about the business processes of the business
4. Software that processes data,
5. Information technology infrastructure consisting of computer, peripheral and network communication devices.
According to Nash and Heagy (1993), due to the spreading effect of the accounting system, the quality of accounting information and the performance of the accounting system are the focus of managers. The accounting system is like the "nervous system" of a business, if it does not fulfill its function, it could be the end of the business. Although a good accounting system does not guarantee the success of a business, having a bad system can destroy the business. MBS, which is the most developed and applied information system by businesses, has a wide structure including financial and cost accounting. It puts data and financial transactions into the process in order to plan, control and manage business activities (Şahin, 2005, p.33-34)

THE EFFECTS OF DEVELOPMENTS IN THE BUSINESS ENVIRONMENT ON THE ACCOUNTING INFORMATION SYSTEM

The fact that businesses continue their activities in a dynamic structure and cannot control most of the changes that occur in the environment necessitates compliance with environmental conditions. In line with these changes and developments, there have been differences over time in the accounting information system, which is the most important source of information of the enterprise. It is possible to examine the developments occurring in the business environment and affecting the accounting information system as socio-political, economic and technological developments (Karakaya, 1994, p.48).

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Socio-Political Developments

Accounting serves the society as a social science and reflects the cultural, economic, legal, social and political characteristics of the society. In order for accounting to be technically and socially beneficial to society, it should be taken into consideration that practices may change in line with renewed needs (Ağca, 2003, p.83). Political, economic and technological developments in the world increase both the responsibilities of the units that make up the society and their dependence on each other. For this reason, the success of the enterprises should be evaluated by looking whether the social responsibilities are fulfilled as well as the commercial

criteria. The social responsibility of accounting enables the business to fulfill its economic responsibilities. Accounting information system, which takes into account the interests of the society under the principle of social responsibility, should include environmental issues that lead to negative externalities into the accounting system (Özkol and Others, 2005, pp.134-143).
Economic developments

Depending on the economic developments in the world, the economies of the countries have also become dependent on each other and the fluidity of information, resources and capital has accelerated. Previously, the accounting of each country used to measure the results of its economic activities; Although the financial reports produced by him are sufficient, over time, due to the necessity of evaluating and interpreting the financial reports produced in different countries in a similar way, it has become necessary to use an internationally valid language in accounting. This has brought the necessity of harmonizing the national accounting standards of the countries and the use of international accounting standards as a common accounting language by everyone (Çankaya & Erdoğan, 2008, p.299-300). When the historical development is examined, the factor affecting the development of accounting in the second half of the 20th century is determined by the capitalist understanding of the economy.

The double entry method was born and developed as the accounting method of the capitalist economic order. Western countries discussed the global harmonization of accounting at the World Accountants Congress, and at the end of the 20th century, the globalization of International Accounting Standards (UMS) was considered. After the dissolution of the Union of Soviet Socialist Republics, when globalization in accordance with the capitalist order accelerated, a rapid change process was observed in accounting practices based on double-entry recording method. At the beginning of the 21st century, again as a requirement of economic developments, it is seen that the globalization of uniform financial statements is discussed (Güvemli, 2006, p.46-49)

Technological developments

It is seen that technological developments from past to present have contributed to the Accounting Information System in many ways. With the advancement in information technology, efficiency has been increased by providing faster and more accurate transmission of financial information to managers as well as reducing the workload in accounting departments in businesses. In the past, paper books, manual reports and financial statements were obtained by computer-aided systems today, while the continuity of the information flow was ensured and the diversity of the reporting was increased. Computer technology has enabled a large amount of data to be obtained properly from the system, reducing the possibility of error. Accounting package programs, which have diversified and become widespread today, have made significant contributions to accountants and managers in data analysis as well as reporting (Özer et al., 2010, p. 3279). With the technology, the necessity of using new techniques and methods has emerged for businesses to continue their existence in the increasingly competitive environment. Production enterprises have increasingly switched to automation-based systems such as computer-aided design and computer-aided production. Along with technology support, the Just In Time model, which is applied in the automobile industry by Japanese manufacturing companies, has also led to improvements in cost control by providing production without stock (Karakaya, 1994, p.51-52).

The success of businesses in a competitive environment depends on the improvement of "quality, cost and time" factors. Businesses also tried to create new management and business techniques and made progress in the computer software sector, and the last point of these developments was KKP (Yereli, 2007, p.65). KKP emerges as an important information

technology that has been widely used in the world in recent years. KKP is a system that includes the accounting system, is possible with information technology and integrates all the functions of a company (Düzakın & Sevinç, 2002, p.190). With the information flow provided between many modules such as production, sales, project management and the accounting module, accounting personnel have the opportunity to examine this information and submit the necessary reports to the management.

COMPONENTS OF ACCOUNTING INFORMATION SYSTEM

The Accounting Information System consists of various components including technology, databases, reporting, control, business activities, business processes, management decisions, system development and activities, communication, accounting and auditing principles (Gelinas & Dull, 2008, p. 9-12). Since technology has a strong influence on information systems, it should be followed closely to understand all aspects of MBS. Planning and managing business processes in a business largely depends on having available technology knowledge (Gelinas & Dull, 2008, p.10). Canadian Certified Public Accountants in 2010)

The Canadian Institute of Chartered Accountants (CICA) has published the top ten technology research reports that include comparisons of old and new technologies and their impact on business. Among these, remarkable topics include the ability to cope with compliance with international financial reporting standards, information management, data theft, security problems arising from the increase of privacy violations, as well as the benefits of technology. In order to create an economical and effective MBS in an enterprise, there are system development principles that develop within the framework of new approaches in information communication technologies and guide the design of the system. These principles; Cost Effective Principle, Reporting Principle, Human Factor Principle, Organization Structure Principle, Flexibility Principle, Openness and Understandability Principle and Data Collection and Processing Principle (Sürmeli et al., 2005, p.250-254) Within the framework of these principles;

- The benefit to be obtained from MBS developed in an enterprise should be equal to or higher than system costs.
- The system should allow effective reporting both internally and externally.
- Since the employees will use the system, the employees should adopt the system closely and the system should be developed by considering humanitarian factors.
- The system should be developed to operate within a clearly defined organizational structure.
- Since the business is in a dynamic environment, the necessity of the business to adapt to changing internal and external conditions requires the system to be flexible, which will allow for changes.
- The system should be developed in a clear and understandable way so that people who operate the system can easily monitor transactions and activities.
- The system should be developed in a way to present meaningful, timely and necessary information to the management.

Database refers to a collection of data integrated with each other. In addition to collecting and accumulating data in the database, the relations between the elements that make up the data collection are also regulated (Sürmeli et al., 2005, p. 89). The corporate database is at the center of MBS. Knowing the database structure in the system will facilitate the presentation of the necessary information to the users and increase efficiency. Reporting is the driving force behind MBS's development. The reports can be in the form of tables or in the form of pictures showing complex multi-dimensional relationships. Reports should be accessible from the system interface. Reports are of three types. The first is the filter report used to extract a certain data from the database, the second is the responsibility report used to meet the needs of a featured user, and the third is the comparative report to show the differences between certain periods

(Henson, 2006). In order to produce the requested and expected report from the Accounting Information System, accountants must have this information beforehand. Reports are often produced in a way that businesses can fulfill their specific reporting obligations and support management decisions (Gelinas & Dull, 2008, p.11). Although the control is done in order to see exactly what has been done in the system and to ensure the accuracy of the data by closely monitoring the system, it is also important in terms of establishing the security of the system. Obtaining reports obtained from MBS from computer systems,reporting and presenting it to the relevant parties has brought some security risks in recent years. Since the system has wide communication networks, the access of many users to the system creates a security problem. For this reason, employees are trained by establishing an internal control system in many enterprises. With the internal control system, problems can be prevented in the system before they arise, or in case of problems, the problem can be identified and a solution can be produced quickly. Control applications constitute a part of system development activities. The system can be developed in order not to encounter the problems that occurred before in the system again in the future. Accountants and control professionals are often part of the team that develops and modifies the information system. It acts as a link between processes and departments in the communication information system. Thanks to communication, the results obtained from the system are ensured to make the necessary decisions in management and to improve business processes.

Conclusion

Information is the transformation of data in a way that is useful in decision making and making it meaningful by analyzing it. "Information", which is seen as a rising value today, directly affects the competitiveness of businesses. The accuracy and verifiability of information, completeness, timeliness, relevance, economy and simplicity increase its value and utility (Gökçen, 2002, p.5-17).

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