



# ACCOUNTING INFORMATION SYSTEMS AS A SUPPORT TO FINANCIAL REPORTING OF COMPANIES

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## Abstract:

With the help of accounting information systems, we established the basis of the information system for financial reporting, *i.e.* informing of external and internal users. Having in mind the continuous development of information systems, leading to the improvement of accounting information systems' role, this paper aims at identifying and presenting the development of one of the frequently asked questions in research that refers to accounting information systems, *i.e.* financial reporting. A series of issues regarding the financial reporting, starting from the manner of reporting, volume of information provided, purpose of information usage *etc.*, can be observed in the context of accounting information systems, as pointed out herein.

## Key words:

accounting information systems, support, company, financial reporting.

## 1. INTRODUCTION

Information and communication technology (ICT) with its development year by year has transformed the way in which enterprises operate. "The information system is the set of formal procedures by which data are collected, stored, processed into information, and distributed to users" (Hall, 2013, p. 5). When speaking about accounting, it can be pointed out that accounting achieved tremendous progress thanks to the development of ICT. The accounting software today replace traditional ways of performing tasks, and depending on the needs of companies they can contribute to the realization of specific demands by the accountants of a company. Information technologies have led to numerous advantages in the processing and presentation of accounting information, and in this respect, in particular for reporting purposes, shortened the time required for accountants to prepare and disclose the report and improved the level of efficiency in presenting information, which is also certainly positive looking from the aspect of the quality of business decisions of various interest groups.

Two broad types of information systems of a company include: the accounting information system (AIS) and the management information system (MIS). The AIS is composed of three major subsystems: (1) the transaction processing system, which supports daily business operations

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with numerous reports, documents, and messages for users throughout the organization; (2) the general ledger/financial reporting system, which produces the traditional financial statements (income statement, balance sheet, statement of cash flows, and other reports required by law); and (3) the management reporting system (MRS), which provides the internal financial information needed to manage a business (Hall, 2013, p. 5.) However, we should bear in mind the fact that management often requires information that goes beyond the capability of AIS.

The flexibility of AIS is an important characteristic that has to be present in the modern company. The characteristic of AIS to adapt to the changes dictated by the modern environment and to continue to provide information needed for functioning of the organization, stands out as an imperative of modern business.

Having in mind the development of ICT that affect the development of AIS, the paper shows the development of the AIS role in supporting the financial reporting of enterprises. Accordingly, through the review of the literature presented in the first part of the paper, the question of the role of information technology is discussed, particularly the influence of information technology development on generation and publication of financial information within the AIS, exploring the relevant academic literature. In the second part, relying on the possibilities of the development of AIS, the trends, issues and challenges are pointed to, offered by the accounting profession in the segment of reporting and the possible responses of information technology in this regard. The same part is devoted to perception of a future trend concerning the development of AIS to support financial reporting of the company.

## 2. LITERATURE REVIEW

AIS is an important segment of business operations, and in this sense, numerous researchers are engaged in the research of different specific issues related to AIS (Vaassen, 2002; Romney & Steinbart, 2009; Sutton, 2010; Nicolaou, 2011).

Liu & Vasarhelyi (2014) state that there is a number of significant and major issues when investigating AIS, and in this regard they list several characteristics of accounting:

1. Accounting is based on data;
2. Accounting entails a substantive amount of information processing;
3. Accounting is the field of business measurement;

4. Accounting entails substantive data analysis;
5. Accounting is ultimately delivered through reporting;

It is important to emphasize that the AIS can be traditional, which uses a database that is distributed by departments and integrated, where there is no above-mentioned distribution, but you have access to the data in the department in which business is carried out and to all other data necessary for the execution of tasks (Knežević *et al.*, 2015).

According to Stanković, Knežević & Mitrić (2013) in performing the tasks, management is informationally dependent on AIS, and therewith information having a great significance for the management of the company, the existence of a modern comprehensive database is important for the control and reporting of the company. The information of AIS is presented in the form of paper reports or displayed on a computer screen. Financial statements represent "the crown" of accounting. They are the bearers of accounting information and the basic tool for financial communication of a company with interested users outside the company. Fundamentally, the financial statements are a key source of information on the financial position of the entity at the end of the period, on the total result of the entity for the period and the cash flows of the entity, and are used to make economic decisions by a wide range of users (Knežević *et al.*, 2012). Also, according to the same authors, AISs are a basis of information system of the company for financial reporting to internal and external users. The foregoing additionally gains in importance if one bears in mind that the AIS, in addition to input and processes, also deals with the output, *i.e.* with the publication of financial statements, by which accounting communicates with internal and external users, providing them thus information necessary for business - financial decision making.

Accounting reports *i.e.* information, in the content are prepared as a basis for decision-making, namely, their users are holders of management and decision-making authorities (Stanković *et al.*, 2012). It is important to emphasize that the content of the accounting information is in the functional dependence on the objects it relates to, on the temporal aspect and on the holders of the management bodies (Đurić *et al.*, 2011).

As regards the delimitation of internal and external reporting of a company, it must be mentioned that the AIS should adequately respond to information management requirements in the company. AIS deals with producing financial statements that are important for management and decision-making of management, and



acting of management to eliminate the disadvantages of producing repeated requests, represents the initial impulse to improve the information content of AIS.

Speaking about the advantages of computerized information systems used for accounting, Ghasemi, Shafeipour, Aslani & Barvayeh (2011) cite several advantages thereof, namely: the increased functionality (through increasing the timeliness of accounting information), improved accuracy (through increase of internal control mechanisms), faster processing (through faster processing of large amounts of information) and improvement of external reporting (through improved ways of reporting). And through the guidance of the aforementioned authors, and based on numerous benefits of AIS, we can certainly speak in more detail about the benefits produced by the modern AIS in relation to the traditional way of organization of data processing in accounting, and therefore on the impact on the financial reporting of the company as well. When it comes to improving external reporting, it can be said that it leads to investors, and other stakeholders, based on the report, being able to consider whether the enterprise is a good investment through the possibility of investment.

### 3. ACCOUNTING INFORMATION SYSTEMS AS A SUPPORT TO FINANCIAL REPORTING OF COMPANIES – A LOOK INTO THE FUTURE

Speaking about the AIS in terms of support to company financial reporting, several questions are raised. One of them may relate to the manner of delivery of information, then, who are the recipients of information, how will the information be used and for what purpose, and other significant issues. Nowadays, owing to development and support of ICT, reports that are immediately available are generated, both summary and reports by the different segments (*i.e.*, segment reporting), which actually provides the possibility of diversification of information to the level of transaction needed.

Statutory accounting regulations in different countries have, when it is about the financial statements drawn up by the companies, defined the layout and content of forms. In this sense, we may speak of the need to update a set of accounting reports when there is a need to change the regulation in one country.

In more advanced environment, companies may be required to open their own databases, so that interested users could get the information they need from the set of customized reports, with the help of variable time frame

and with different structures of accounts. It is important that by the establishment of such a system, the protection is ensured of confidential information and the system that protects from their disclosure (*e.g.*, on the suppliers, customers, wages, *etc.*) (Liu & Vasarhelyi, 2014, p. 13). In the case of providing larger satisfaction to the needs for accounting information of enterprises by the investors, the managers should be prepared to deal with the disclosure of different types of information, and therefore, it is necessary that they determine which information should remain confidential, on the one hand, and providing accounting information to users should take into account the requirements of the users, on the other hand, which is often very complex to be realized in a practical setting (Gal, 2008, p. 95).

Financial reporting in the future should focus on automatic reporting, and data access will be implemented through the provision of electronic data access (Mitrović & Vučić, 2015).

Wishing to show future developments and trends that will affect the future of accounting services in the second half of the 21st century, Geoffrey Moore (AICPA 2012) cites three crucial trends, which will be of great importance:

1. digitization (from paper to digital),
2. virtualization (from physical to digital presence) and
3. transformation (from generalization to specialization).

Speaking about the trends shown above, Liu & Vasarhelyi (2014) launch issues relating to the same trends that will affect the future of accounting, of which part of the questions relate to the reporting as one of the specific field of accounting and therefore open-ended questions that will be developed in the future on the basis of the development of AIS. The questions in the context of digitization trend relate to receipts and usage of reporting and new data analysis approaches in accounting/auditing, as part of the trend of virtualization, referring to the information processing issues and change of accounting measurement, while in the context of transformation, the questions relate to information processing issues (Table 1).

Belfo & Trigo (2013) among others, as part of the accounting challenges nowadays and responses of information technology to them, state also several accounting challenges relating to reporting. Thus, in the context of the challenges relating to external reporting and response to them in the form of information technologies, they state Web Services & Internet of Services, then Mobile



Trends <sup>a</sup>	Digitalization	Virtualization	Transformation
Questions	Receipts and usage of reporting New data analysis approaches in accounting/auditing	Information processing issues The change of accounting measurement	Information processing issues

Table 1. Summary of Trends and Questions

<sup>a</sup> Source: Adapted by: Liu & Vasarhelyi (2014)

Devices and Cloud Computing. If we consider further the challenge related to real-time reporting, as the answer to this type of challenges in the form of information technologies, the following are mentioned: Mobile Devices, Cloud Computing, Business Intelligence and Business Process Management. The challenge relating to tailor-made and interactive reporting with the response of information technologies is solved through: Business Intelligence, Computer Assisted Auditing Tools and Techniques and Big Data.

#### 4. CONCLUSION

Having in mind that AIS are the systems used to record the financial transactions of a business or organization, through the unifying role they affect the fulfillment of organizational goals of modern enterprises. We present more details about the benefits produced by the modern AIS in relation to the traditional way of organization of data processing in accounting, and therefore on the impact on the financial reporting of the company as well.

In order to show the frequently investigated issue during the development of AIS, relating to financial reporting of companies, in a number of specific points, the aim of this paper was to display in more detail the AIS as the support to financial reporting of companies. The development of AIS directly affects the development of financial reporting.

The overall conclusion is that the transition from traditional ways of processing data in the accounting to the modern ones, leads to various advantages, among which the most crucial are reducing the time and improving the efficiency and accuracy of information. The foregoing in terms of continuous development of AIS leads to the reports being available immediately at the request of the appropriate user groups with the specified requirements, concerning the detailed information. Further development implies that it is possible to get the information needed from a set of customized reports, with the help of variable time-frame and different structures of accounts.

Also, the future of financial reporting with the help of AIS as the support is providing electronic access data. Further, the trends of digitalization, virtualization and transformation through the open questions and possibilities of development are of great importance, as well as many other challenges of reporting to which the development of information technology may provide the answer.

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