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The Impact of Information Technology in Accounting Systems in Kosovo

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Abstract

Introduction of information technology in accounting is one of the most important innovations. Nowadays, all types of business are helped by advanced accounting systems to manage their operations. Accounting is a key factor in any business, and being in step with advanced systems of information technology enables increased speed and accuracy of calculations, increased flexibility and file information in the accounts, as well as helping better decision making by management. The role of this information is important, not only for foreign investors or large businesses, but even for those small and medium because it provides important information about the phases of decision-making, such as planning, control and evaluation. With the advancement of information technology, especially in recent times, the opportunities increased for the development of accounting and information systems. The use of computers and different software for recording and analyzing information has enabled firms to increase productivity and accelerate the exchange of information. Therefore, the purpose of this paper is to present the impact of information technology in accounting systems in Kosovo. The data was collected through the questionnaire, which contains both types of questions, open and closed questions. Data processing is done by SPSS software. According to the survey that was conducted with the employees from the accounting companies, currently in Kosovo are used different systems to process accounting information.

Keywords: information systems; information technology; accounting; financial reporting; decision-making, business.

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1. Introduction

Accounting is defined as information system which measures, processes and communicates the financial results of a business entity. Accounting is a systematic and comprehensive recording of financial transactions dealing with a business, and also refers to a process to summarize, analyze and report these transactions to the supervisory agencies and entities collecting taxes. Accounting performs a key function for almost any business, recording all the information as to internal business purposes as well as for parties, partners and oversight authorities.

Accounting systems and data entry evolve over time, while the biggest revolution is reached with the advancement of information technology. With the advancement of information technology, especially in recent times, the opportunities increased for the development of accounting and information systems. The use of computers and different software for recording and analyzing information, have enabled firms to increase productivity and accelerate the exchange of information.

This paper aims to show the impact that development of information technology had in accounting systems in Kosovo. The development of information technology (IT) has had a major impact in each area, including accounting. IT development has been especially useful for accounting, enabling many firms to develop and use computerized systems for recording their data. In addition, technology has contributed to shortening the time needed for the preparation and presentation of financial statements by accountants, which consequently enables faster and better decision making by management. How much the accounting systems in Kosovo have evolved, how much has the efficiency increased with the development of IT, and what kind of accounting systems respective firms in Kosovo are using are some of the questions that we will try to answer in this paper.

2. Literature review

According to Francis Pol. C. "Impact of Information Technology on Accounting Systems", the information technology advancements have greatly helped the accounting systems of business entities. Because of today's computerized accounting information systems, business performance seems to improve significantly. Many transaction processes were simplified thus creating efficient operations [1].

Based on the research paper "The Impact of Information Technology (IT) on modern accounting systems" by Maziar Ghasemi, Vahid Shafeiepour, Mohammad Aslani and Elham Barvayeh, the use of information technology to perform the accounting functions has brought more opportunities for companies to advance their accounting systems and increase efficiency using computerized systems for data processing [2].

The accounting industry is becoming a new brand in the language of business. It is considered as the language of the next generation of accountants. The evolution of IT has been very large and it also has the potential to continue increasing in the future. With the changes that have occurred by using IT in accounting, productivity of enterprises has created greater stability as well as many different possibilities of professional accountants in industry [3].

3. Accounting information system

The accounting information system is a structure that a business uses to collect, store, manage, process and report its financial transactions in order to be used by accountants, consultants, business analysts, managers, financial supervisors, auditors and regulatory and tax agencies. In particular, accounting information systems are used by accountants trained to provide the highest level of accuracy in financial transactions of the company and to make financial information readily available to those who legitimately need and have rights of access to those data.

In general terms, business entities use three types of information systems; namely, a manual system, computer-based transaction systems or database systems [1].

- manual system

This is the first type of accounting system. It utilizes paper-based journals and ledgers. Nowadays, computer-based transaction systems replaced some paper records into computer records. A manual system is labor intensive, for this system relies on human processing. Because a manual system relies on human processing, they may be prone to errors.

- Computer-Based Transaction System

In this system, accounting data are kept separately from other operating data. Treatment of information is the same with that of the manual system. The only difference is that the user here is simply filling in a computer screen that looks and often times acts as the source document of the transaction.

- Database Systems

This system reduces inefficiencies and information redundancies. This system captures both financial and non-financial data, and then it stores that information in the data warehouse. The advantages of this system include recognition of business rather than just accounting events; the support in the reduction in operating inefficiencies and; the elimination of data redundancy [1].

4. The accounting process

In most accounting information systems there are four steps of the accounting process: analyze the transactions, record the effects of transactions, summarize the effects of transactions, and prepare reports. This procedure is neutral; this means that the steps involved can be applied both in manual and technology-based systems.

The first step is the analyzing of transactions, the transaction must be known to be financial in nature, where recordable and non-recordable transactions are separated. In this step, the transaction is being analyzed on how it affects the accounting equation. Source documents such as invoices, orders, checks are helpful in this stage.

The second step is to record the effect of the transactions. Transactions are recorded using journal entries. These journal entries are the accountant's way of recording the effect of both simple and complex business transactions. Journals provide a chronological record of all transactions of a business. They show the dates of the transactions, the amounts involved, and the particular accounts affected by the transactions. Sometimes a detailed description of the transaction is also included. It is also known as the books of original entries.

The third step is to summarize the effects of transaction, under this step, the journal entries will be posted to the ledger and a trial balance will then be prepared. Once transactions have been analyzed and recorded in a journal, it is necessary to classify and group all similar items. The next step is to determine the total balance of each account. After the account balances have been determined, a trial balance is usually prepared. A trial balance lists each account with its debit or credit balance.

The fourth step is the preparation of the reports; this includes adjusting entries, preparation of financial statements and closing of the books. There will be recording and posting of some adjusting entries that is applicable for the period. Then the trial balance will again be recomputed. From the data in the trial balance, the financial statements are then prepared. This includes the statement of financial position, income statement, cash-flow statement and the notes. The last procedure will be the closing of the books [1].

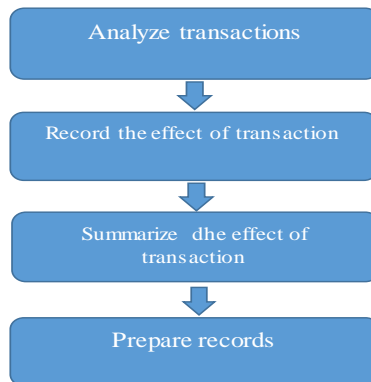


Figure 1: The accounting process [1]

5. The impact of information technology in accounting information systems

Of all the technology developments that have been made recently, the development of IT has had the greatest impact in the business arena. Utilization of modern technology, computer equipment, telecommunications, and internet is a challenge faced by many organizations. Nowadays without them, one cannot imagine the accounting information systems. Within a business, software is considered a non-tangible asset of a business and represents a set of programs and procedures related to the accounting system.

The biggest impact of accounting information systems from IT advancement is manifested by creating opportunities for companies to develop and use computerized systems to record financial transactions. Utilization of IT in accounting has reduced the time required to prepare and present accounting information to

management.

Utilization of computers, software, internet, and other digital devices have transformed the way of how companies carry out business activity. Consequently, the accounting systems are much improved, thanks to the tremendous growth and development of IT. Accounting software that is used as a package of programs and procedures has replaced traditional bookkeeping accounting in a greatly automated way. These software packages are usually taken with a number of specialized features and suit current business operations. IT has created numerous benefits to improve the accounting information systems. Greater benefits are manifested in shortening the time required to prepare and present financial information for management and stakeholders. In addition, advanced systems of IT have also led to increased functionality, improved accuracy, faster processing of data and better external reporting [2].

Computerizing the accounting systems has improved the functionality of the accounting process by increasing the frequency and periodicity for preparation of accounting information. The management has the ability to be quickly informed about the current business situation thanks to faster processing and preparation of financial statements. Besides speed of information, IT has resulted in the increase of the information and productivity presented by the accounting [4].

Most computerized accounting systems have automatic rules, which enable in advance that all the accounts are balanced before the financial statements are prepared. This ensures maximum accuracy, which is not easy to achieve with manual recording systems. Also, the accuracy is guaranteed with limiting the number of accountants who have access to financial information. Less access by accountants ensure that financial information is adjusted only by qualified supervisors. Computer accounting systems allow accountants to process large amounts of financial information in a shorter period of time. Financial statements and other published reports have improved significantly by the IT advancements, aiding investors to assess whether a company can be a good investment or not. Implementation of computer networks creates the possibility of concluding a separate store and transmit data and information from one point to another. This leads to better communication at a higher efficiency in data processing, with a better and much quicker distribution of data, yielding a higher effectiveness of the work of the accountant in general, and highest management performance [5]. In today's globalization of the economy and the transformation of organizations in the digital firms, the success of business organizations is associated with accounting information systems. The use of accounting information systems effectively requires an understanding of the organization and the management of IT. For the success of accounting information systems, the choice of appropriate hardware and software is very important, not only to respond to the needs of the moment but also for a long future, as it is known that these components "depreciate" very quickly. Implementation of large databases and database management systems are the most important part of the accounting information systems [6].

6. The impact of information technology in accounting systems in Kosovo

The working paper "The impact of IT in accounting systems in Kosovo" was conducted with employees working in the accounting companies in Kosovo. There were 12 questionnaires collected from different

companies. Surveys represent a representative sample considering the fact that most systems use the same accounting data processing. So, based on the research topic, the purpose of the survey was to get specialist advice on the impact that technology has had in the accounting information systems in Kosovo. From submitting the application to completing the questionnaire, respondents were assured that the questionnaire will be anonymous, and confidentiality of information is strictly assured. Furthermore, the data from this survey will be presented aggregated without any characteristic or individual information.

To realize the paper, we faced some limitations of which we can mention:

- Delays in completing the questionnaire: the biggest obstacle in this preparation, according to the planned timetable, has been delay in receiving completed respondent questionnaires. Although the respondents had been previously asked to respect the deadline of completing the survey in five working days, most of them completed the questionnaire only after the second and third recall.
- Limitation on literature: Obtaining adequate literature for this topic, and the lack of history of accounting systems that have been used in the past in Kosovo have been the main obstacles of presenting a chronology of accounting information systems that are used in Kosovo.

The questionnaire contains both types of questions, open and closed questions. We tried to increase the number of closed questions in order the respondents can answer more easily. However, due to the nature and purpose of the paper, some questions had to be open. Data processing is done by SPSS software. The survey results are presented in tables and figures.

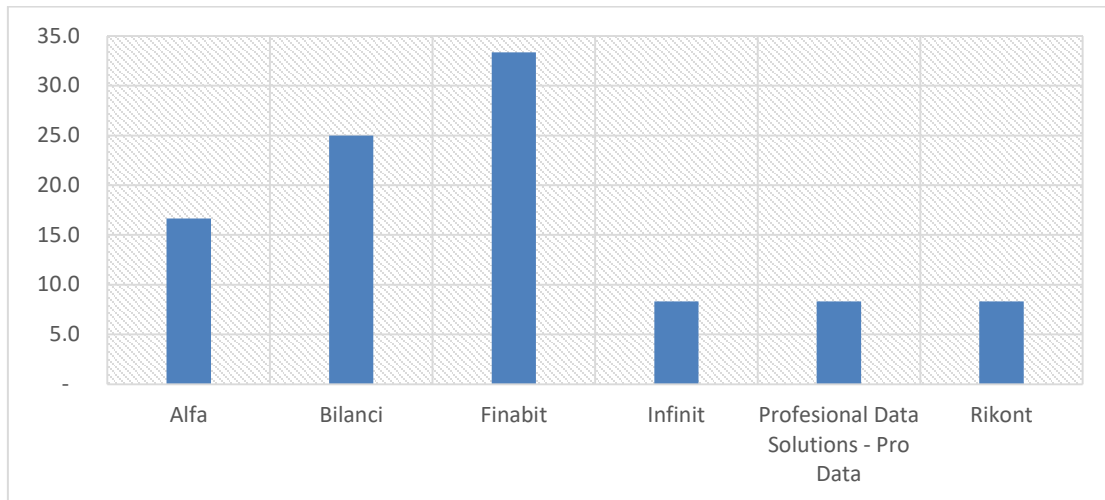


Figure 2: Systems for processing the accounting data used in Kosovo, in percentage

From the answers of respondents to the question what is the accounting system that they use to process the data, we understand the most used system of accounting by companies in Kosovo is Finabit. A total of 12 respondents, 4 responded that they use this system which represents about 33 percent of our sample. The rest use Balance (25 percent), Alfa (16.7 percent), Infinite (8.3 percent), Processional Data Solutions (8.3 percent) and Rikont (8.3 percent).

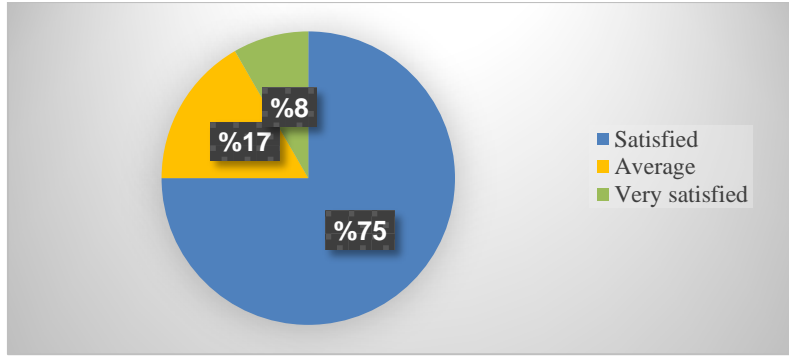


Figure 3: Satisfaction of users of the system for processing accounting data

What is the satisfaction of users for accounting systems that are used in Kosovo, 75 percent said they are satisfied, 16.7 percent said it was average and 8.3 percent said they were very satisfied. Furthermore, the results of responses of respondents are presented in the following tables.

Table 1: Results from the survey, the first part

Position at your institution					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Accounting assistant	1	8.3	8.3	8.3
	Accountant	11	91.7	91.7	100
	Total	12	100	100	
Your level of education					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor	6	50	50	50
	Master	6	50	50	100
	Total	12	100	100	
Your level of qualification					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Certified accountant	2	16.7	16.7	16.7
	Accounting technician	10	83.3	83.3	100
	Total	12	100	100	

The respondents were asked about their position in the company in which they work; the majority, or 91.7 per cent, said they were accountants and only one respondent has been declared that his position is accounting assistant, which represent 8.3 percent of our population. Regarding the level of education, 50 percent stated that their highest level of education is bachelor and 50 percent stated that they have master degree. While according to the survey, two of the respondents have the level of qualification of certified accountant and ten others have

the level of technical accounting qualification. The detailed information is given in the above table.

Unlike the first group of questions, the second group is trying to deal with answers to questions related to the system used by surveyed companies for processing accounting data; is current system efficient, what was the previous system, and how has the new system affected the performance at work. Respondents' answers are given in the table below.

Table 2: Results from the survey, the second part

What is the accounting system used to process the data?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Alfa	2	16.7	16.7	16.7
	Bilancin	3	25	25	41.7
	Finabit	4	33.3	33.3	75
	Infinet	1	8.3	8.3	83.3
	Professional Data Solutions - Pro Data	1	8.3	8.3	91.7
	Rikont	1	8.3	8.3	100
	Total	12	100	100	
Which was the previous system that you have used?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Access	1	8.3	8.3	8.3
	Alfa	2	16.7	16.7	25
	Excel	5	41.7	41.7	66.7
	Llogaritaria	1	8.3	8.3	75
	Doesn't know	1	8.3	8.3	83.3
	Rikon	2	16.7	16.7	100
	Total	12	100	100	

From the respondents' answers to the question of what the accounting system are they using to process the data, we understand that the most used system of accounting by companies in Kosovo is Finabit. Of the total 12 respondents, 4 responded that they use this system which represents about 33 percent of our sample. The rest use Balance (25 percent), Alfa (16.7 percent), Infinite (8.3 percent), Processional Data Solutions (8.3 percent) and Rikont (8.3 percent). Respondents were asked also from when they began using their current accounting system. Finabit system is a new system of accounting used by companies in Kosovo, with the majority of the respondents saying that they have used this system for two or three years. Balance system seems to be a new

system used by companies in Kosovo for two or three years. Alfa seems to be an older system as respondents said they were using this system for five and seven years. Infinite is used for seven years, Professional Data Solutions - Pro Data is used for three years and Rikont is used for two years.

Most respondents stated that the system they used previously for data processing has been Excel (41.7 percent), Alfa (16.7 percent), Rikont (16.7 percent) and Access (8.3 percent). Most of those who used Excel now they use Finabit and Balance, while those who used Alfa now they use Balance. From the responses it is understood that none of the companies surveyed use Ms. Excel anymore for data processing.

Table 3: Results from the survey, the third part

How much was increased the effectiveness with the use of new system?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Jashtëzakonisht shumë	2	16.7	16.7	16.7
	Relativisht	1	8.3	8.3	25
	Shumë	9	75	75	
	Total	12	100	100	
In general, what is your satisfaction with the use of this system?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	E madhe	9	75	75	75
	Mesatarisht	2	16.7	16.7	91.7
	Shumë e madhe	1	8.3	8.3	100
	Total	12	100	100	

Regarding the efficiency of the use of current systems for data processing, the majority, or 75 percent, responded that work efficiency has increased significantly, and 16.8 per cent answered extremely, and only one respondent or 8.3 percent of the sample answered relatively. What is the satisfaction of users for accounting systems that are used in Kosovo, 75 percent said they are satisfied, 16.7 percent said it was average and 8.3 percent said they were very satisfied.

7. Conclusions

The advancement of IT has affected many areas of life in the present day. Its largest impact on accounting systems has been in creating opportunities for companies to develop and use computerized systems to record financial transactions. IT in accounting has reduced the time required to prepare and present accounting information to management. In addition, advanced systems of IT have increased the functionality, improved the accuracy, have enabled faster data processing and better external reporting.

The use of computers, internet, software, and digital devices has changed the way business entities operate in

the everyday life. The evolution of accounting information system has been accompanied with evolution of IT making it more effective and accessible to users. Today, most businesses use computers and IT as integral part of their accounting system.

In every accounting process there are four basic steps: analyze the transactions, record the effects of the transactions, summarize the effects of the transactions and prepare reports. All accounting systems, advanced and manual systems, go through these steps in the accounting process. The difference is that in manual systems, the accountant gathers, analyzes, and records the information, and with them prepares financial statements, while in computerized systems the accountant records and analyzes the information, and the system automatically calculates the balances of accounts and prepares the final reports.

Advances in IT have greatly assisted in the accounting systems of business entities. Because of today's computerized of accounting information systems, business performance has improved significantly. Many processes and transactions are simplified by creating efficient operations. IT advancements have influenced the evolution of the accounting systems used in Kosovo. According to the survey that was conducted with the employees from the accounting companies, currently in Kosovo are used different systems to process accounting information. From the survey results it is understood that the most used system for processing the accounting data is Finabit by 33 percent, then the Balance system with 25 percent from the respondents, Alfa 16.7 percent and other systems less. While before them, MS. Excel has been mostly used in accounting, today it is not used at all. Most respondents stated that new systems have contributed greatly to the growth and performance of the work effectiveness. Consequently, this has led to increased satisfaction using these systems.

8. Recommendations

According to the above mentioned results of our research, the respondents declared that effectiveness for using the new software for their accounting systems were increased extremely compared with the previous ones, hence our recommendation is to use the new technology for accounting.

By creating efficient operations, many processes and transactions will be simplified and also the performance of each business will improve significantly. In addition to the improvement of productivity, effectiveness and efficiency in the organization, the need to facilitate management is another motivating factor for adopting accounting software. As it was mentioned in our research, the satisfaction of the users of accounting software was increased with the new technology in their accounting every day work. Consequently, the recommendation is to use the newest systems of information technology because of many positive effects in the organization.

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