

# IMPACT OF INFORMATION TECHNOLOGY IN EVOLUTION OF TRADITIONAL ACCOUNTING TO MODERN ACCOUNTING

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**Abstract-** Information technology development has many irrefutable effects in all the areas of human life, and leads to advance in all of these areas. The aim of information technology is facilitating life. In the age of trade and competition between the companies, lack of up-to-date technologies leads to end of competition for the mentioned companies; accounting and accounting systems are not the exception from this rule. The transition from manual applications states to electrical and intelligent technologies is the turning point of information technology usage. Accounting career is one of the most important and sensitive jobs in each organization, company or institution, without a doubt. Rapid mutation of information technology, persuade managers of small and large companies to apply modern technologies and applications for their accountants and auditors to continue their progress. According to massive and growing volume of accounting calculations, traditional systems are incapable in accurate and timely perform calculations; so, use of modern systems of accounting is the only way. Information technology impacts on accounting systems can be investigated in terms of quantitative and qualitative. Advantages of these modern systems are save time and money, improved performance and accuracy and help the environment due to no need to paper. Furthermore, quicker and better decisions of managers are the result of performing quicker accounting calculations. The goal of this paper is surveying on information technologies in the evolution of accounting.

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**Keywords-** Modern Accounting Systems, Information Technology

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## I. INTRODUCTION

Information technology (IT) impacts cannot be ignored, in recent decades. This subject is very important in human life, and living without new technology achievements is difficult and impossible. Influence of technology is very string, so there is no area without technology progress. According to IT power this phenomena influence on the position, performance and fate of the people and organizations. The aim of information technology is facilitating human life. There is no need to fight against wild animals with a spear, and you can request your food with press a button simply. Modern technologies make our life more comfortable, and it is obvious with a detailed look to the world around. From the perspective of trade and competition, managers of companies and organizations should use from up-to-date technologies to gain more profit and don't stay ahead of other competitors. Consider two companies, the first company has been equipped to modern technologies and the second one used from traditional methods; the first company will win competition, without a doubt. Information technology mechanism is converting traditional methods to the electrical and intelligent technologies, to increase accuracy and speed and enhance the quality.

Accounting and auditing are very important in each organization, institution and company. Accounting and auditing role is important more than ever, because of internal and external complex communications. Manager's decisions depend on accurate information of accounting, completely. Therefore, accounting status one of the most important and sensitive sectors in each company. Accountants performed their calculations with very

simple features such as abacus, in the past. According to the amount of calculations in that periods, there was no problem in traditional method's usage; however nowadays which second are determinative and with consideration the amount of calculations, use of traditional methods is logical?! According to rapid mutation of information technology, use of modern technologies and applications is the only way for accountants to have a chance against other competitors. As mentioned, traditional methods are incapable in perform accurate and timely calculations, time consuming calculations with abacus, will be calculated in a second with a computer; therefore, use of up-to-date technologies is the best way. Saving time and money, improve performance and accuracy and helping to the environment due to the lack of use from paper are some advantages of modern technology's usage in accounting.

According to the mentioned notes on the importance of information technology in human life and accounting, this paper attempts to survey the impacts of information technology in evolution of traditional accounting to modern accounting.

## II. INFORMATION TECHNOLOGY

In broad strokes, information technology is management technology, with very wide range, and it doesn't limit in the process, maintain, collect, save, distribution, transfer and security only. Based on definitions, information technology has close relation with computers; this relationship includes both software and hardware parts. Nowadays, electronic devices play a crucial role in human life, devices like television, computer, refrigerator, mobile and

automobiles which our life will face a serious challenge without them. Therefore, vital role of information technology cannot be ignored. Human, mechanism, tools and structure are the growth path of information technology. At the first step, according to the available sources and existing concepts, human attempts for innovation based on his / her thoughts, then according to the laws governing and available methods, investigated improvement and financial mechanisms, in the next step, they used from existing software, hardware, networks and communications as desired tools, finally, they present technology with organization, extra organization or global structure based on demands.

### III. INFORMATION TECHNOLOGY ROLE IN ACCOUNTING DEVELOPMENT

Trade in companies and institution is very different with recent years. Strong effects of information technology such as computers, the Internet, wireless, software and hardware have been changed business and management style generally. New practical software, improved obtained results in different sections of a company or factory such as production line, packaging, accounting and management. Improvement in performance and obtained results leads to promotion in quality level of products or services, more attractions of customers' satisfaction, and obtain more profit finally.

Accounting systems are one of the systems with the most changes due to the IT progress. These changes and developments help accountants to overcome the defects of traditional methods. In traditional methods of accounting, accountants were notes their calculations, statistics and data in papers, which problems of these method need to be investigated in other researches, but low accuracy and speed, information losses due to the different reasons and environmental problems are disadvantages of these methods, briefly. Mentioned problems in traditional methods of accounting, have been resolved in new methods; by automated software and computer, manual calculations and paper usage is not required anymore for accounting calculations. The strength of these applications is their flexibility in programming; so, accounting software can be used in different companies with different goals, or an application can be written for a company, exclusively. Therefore, there is no limit in coding software for different companies. The raised question is how to choose the type of software by company. Two factors are effective in this choice; the first factor is the amount of operations, which should be done by accountants, the second one is the number of users who access to this system. According to the mentioned notes, stronger application is needed in the larger company. On the other hand, if a normal company use from very powerful and professional accounting application, it spent additional cost.

It must be acknowledged, information technology has been significant contribution in improvement of accounting groups. In this regard, some advantages can be noted such as short time needed to present financial information to managers and stakeholders. Huge amount of today's calculations are very time consuming, if accountants perform them based on traditional methods, and the obtained results are not reliable completely. In addition to the shorter time of calculations, increased accuracy, improved performance and environment-friendly method, are other advantages of information technology in accounting. In the next section, these advantages investigated, separately.

### IV. ADVANTAGES OF NEW ACCOUNTING SYSTEMS

#### 4.1. Accounting systems appropriated with information technology progress

The greatest achievement of information technology on accounting is organized and disciplined financial information investigation and submits by using special applications and smart computers. In this method, accountants don't spend their time and energy, completely; furthermore, there is no need to paper for information submits. All the manual operations, such as calculations, submit information and provide financial report, defined as an accounting application by defaults and installed application in a computer performs all of these proceedings with higher speed automatically. In this method, instead of complex and time consuming calculations, according to the conditions, accountants choose suitable inputs and receive desired output in the shortest possible time. If existing applications are unsuitable for a company demands, then managers can request to experienced programmers for applications appropriated with their demands. Therefore, there is no limit in applications for companies or institutions. New accounting systems, reach necessary information to managers quick and timely; so, they take the best decisions in suitable time. In the age of competition between firms, based on mentioned notes, new accounting systems are important more than ever.

### V. PERFORMANCE IMPROVEMENT

There is a direct relationship between perform accounting calculations timely and performance of the system. Therefore, timely completion of accounting operations leads to performance improvement, and this is another advantage of new system usage in comparison with traditional systems. In a company, manager's decisions depend on financial reports of accounting, completely. Managers can take the best decision in current conditions by performance improvement of accounting, because in this condition, they have the best imagines from their

company and market based on accounting reports. Performance improvement of new accounting systems is effective, quantitatively. In this regard, number of financial reports increased in new systems greatly; so, it can be noted to some accounting reports such as cash flow, profit and loss and the company's share in the market, and these reports are available at any time because of new accounting applications.

#### 4.2. Increased accuracy

In coding advanced accounting applications, some lines belong to loops to balance the output according to defined errors; so, the accuracy of obtained results in accounting applications is acceptable, completely. While, traditional methods with manual calculations don't guarantee the accuracy of obtained results. Furthermore, these applications are capable of identify inappropriate inputs and remove them, because these data have negative effects on output value. Therefore, by exact analysis on input and output values, accuracy of obtained results can be guaranteed. Finally, escrow tasks with a computer which is free from human error instead of several accountants, solved the problem of result accuracy as an important factor for managers.

#### 4.3. Increased speed

In the age of speed and communications, work speed has a top priority. Speed of advanced applications and new accounting system is very more than traditional methods. If accounting calculations considered as a collection of single calculation, each member of this collection needs shorter time to be calculated in new systems; so, all the collection will be calculated in shorter time. Therefore, increased speed as an important factor is one of the advantages of information technology in new accounting systems.

#### 4.4. Provide better financial reports

Financial reports prepared after accounting calculations. Managers and stakeholders need these reports, and they would attract the attention of investors, to investment in the desired company. If the reports associated with desired standards and collected as well. Computer systems compliance these items as the best possible and they provide flawless financial reports with compliance all details.

### CONCLUSIONS

There is no need to perform complex and time consuming manual calculations, in the recent century. Companies can do their accounting calculations with desirable organization by use of new technologies. Information technology progress doesn't limit to a specific part of human life, and it includes all the areas. Accounting synchronized with developments in the world too, and it has evolved from traditional and old form to advanced and modern form. In the past, accountants had special skills in mathematical

calculations to perform their accounting tasks, but nowadays, mathematical calculations are defined in accounting applications by default, and accountants don't need to engage themselves in these kinds of operations. Of course, this does not mean an accountant sits behind a computer and obtained desired results with use some buttons only; so, they should have trained about accounting applications as well, and have sufficient expertise in use of these programs. Advances system of accounting usage, have many advantages for companies. As mentioned, there is no need to spend many times and cost for accounting calculations, so one of the most important advantages of information technology usage is saving time and money. Information technology progress, have been left many positive and negative impacts on environment. Growing pollutants is one of the negative effects. On the other hand, information technology progress and its effect on accounting, helped to the environment. In traditional methods, a great amount of papers were used for calculations, so a large number of trees were cut, but in current methods, there is no need to papers and cutting trees, and all the information saves in a computer memory. Modern system usage has many advantages such as simple workspace with defined rows and columns for data, and calculations done with computer automatically; accountant can save operation details, and this is accessible for everyone at any time simply; accountant can choose suitable inputs and receive financial reports according to the simple menu of these applications; managers can receive various reports such as investment situation, customer contract situation or sale conditions and all the information can be safe with set password and use of security software. According to the mentioned notes, managers of company and institution don't have any acceptable reason to use traditional accounting methods. Modern and advanced accounting systems are a convenient alternative to traditional methods.

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