



# The Role of Information Technology in Accounting: Literature Review

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**Abstract.** In last decades, the business is changing drastically because of advancement of technology. Information technology (IT) has changed every industry function, including accounting function. While businesses might not be able to afford an in-house accounting system, information technology makes it possible to get any kind of accounting and finance services from off-site location and these are equally effective and accurate services. At the same time, information technology is a key factor to avoid any barrier that prevents limitations and time to be applied by users and enable them to become available quickly and in a more satisfactory way. The task will be performed in better way and transformed paper methods into electronic methods.

The result of the analysis shows that the IT has a positive impact on the accounting practice, which means information technology affect the accounting professions in a positive way. With the technology the accounting data processing is seamless, timely, retrievable and accurate.

**Keywords:** Accounting information system · Accounting software · Accounting practice · Information technology · Artificial Intelligence

## 1 Introduction

Twenty first century is the new age of technological evolution, and IT has overrun other sectors with the advent of new software such as Enterprise Resources Planning. Blockchain and big data will have significant impact on accounting, finance and audit function in the future. The value addition integration of IT, computer, and communications has created new innovative models of business and created synergy which result in improved profit with high efficiency [1]. The advancements of technology have made the need to prepare and present financial and qualitative information by economic units and ease in adoption of Integrated Reporting. The accounting information is considered qualitative (most of them voluntarily) if it possesses specific features and can offer benefits to users of financial information and helps them in making informed decisions. Some of these features are relevance, reliability and comparability, thus, there is hope that the quality of the information can improve through the use of IT [2]. IT is one of the most

important variables which have become a reality of life in the organizations. IT plays a key role in reducing time and place limitations (through off site location work) and causes information to become available to users more accessible, reliable and in a more effective way. It also changes the way of performing accounting and finance tasks and transforms paper methods into electronic form. Now accounting data can be captured anytime from anywhere. This change provides conditions in which time needed for information exchange is getting shorter and on real time basis, information is exchanged and the way of exchange of information has changed i.e., financial information is exchanged instead of money [3].

Accounting systems are moving very fast toward being more integrated with and intelligent logic through applying Artificial Intelligence [4]. Since the purpose of accounting profession is to provide relevant and reliable financial information for various users to make useful decisions, using Artificial Intelligence to produce such a reliable and relevant information would be more supportive.

Accounting Information Systems (AIS) are a tool which are designed to help the management in informed decision making more prompt. But the stunning advancement in technology has opened the possibility of generating and using accounting information from a strategic and decision-making viewpoint [5]. AIS is vital to all kinds of organizations either profit or nonprofit-oriented need to maintain their accounting records [6]. AIS is the platform which integrate raw data and transform them into meaningful financial data for the purpose of financial reporting for decision makers [7]. To better understand the term, 'Accounting Information System', the three words constitute AIS would be elaborated separately. Firstly, past literature inferred that accounting consist of information system, language of business and source of financial information. Secondly, information is processed data that provides a basis for making informed decisions, taking actions and meeting legal obligation. Finally, a system is an integrated entity, where its framework is focused on a set of objectives [8].

## 2 The Impact of IT on Accounting

Internet, computer, and digital server have changed the methods of how companies do business. It also helped in the development of traditional processes and production procedures. Accounting experienced huge developments and improvements from using information technology. This new technology in the accounting displaced the traditional papers and books of accounting [9]. These programs come with a lot of privileges and also, we can modify them to assist in accounting or business administration. Companies often choose accounting software according to the magnitude of its processes and the amount of users on the system. Large corporations can select varied software packages. Information technology has helped create major benefits for accounting departments. This technology has helped accountants in the preparation of financial information and presented to the administration and stakeholders in a short time. Information systems have not only speed up the preparation of financial information and presented to the administration, but it also developed the overall effectiveness and accurateness of the information [10].

The great influence of information systems on accounting functions increased the capability of the organizations to grow and use computerized system to track and file

financial transactions to the regulators such Securities & Exchange Commission. All of the accounting records have been converted to the computer that can rapidly display separate transactions into financial reports. This has helped companies to do individual reports faster and easier to take administrative decisions. There are benefits of using the accounting information systems and it can be depicted as follows:

### **2.1 Improved Employment**

Accounting computer system also helped in the development and function of the accounting departments to increase timeline of accounting information. With this advantage, accountants can organize reports and analyze the processes that provides the management a precise image of the ongoing operations. Computers in general have greatly improved reporting like cash flow, loss and profit, and market shares for businesses [10].

### **2.2 Increased Accuracy**

Some computerized accounting systems have an internal examination and measurements balanced so that all transactions are stable before the preparation of the financial statements. Computerized system also will not allow this data to be presented if it is not balanced, and make sure that all individual transactions registered carefully. Accuracy also evolved due to give a certain number of accountant's authorization of this financial information. This small number of accountants can make sure that the financial information will not be seen by anyone except the competent observer [10].

### **2.3 Faster Processing of Data**

Accounting computer systems permits accountants to address a great number of financial information and progresses information quickly using accounting systems. In this fast processing of transactions reduced the time he needs to shut down every accounting period. End of each month or a year, when closing period, there would be taxing especially on the accounting department, and this led to longer hours and labor costs will increase. Reducing this time helps companies in cost control and also rises the productivity of the company in general [10].

### **2.4 External Reporting Better**

With the advent of technology, the financial reports can be available to investors and shareholders faster and more accessible anytime and anywhere. Better and quality reporting lets investors to decide whether the company is suitable for investment and facilitate in judging the opportunities for development and the possibility that the future value of the company will be higher. Companies can use those investors for equity finance and expansion [11].

## **3 Information Technology Applications in the Accounting**

The accountant has to be known with these software materials or gears to assist them carry out the accounting tasks successfully and professionally [10].

### 3.1 Accounting Software

Accounting software has mainly three accounting functions such as input, processing, and output (collectively IPO). There are two types of categories in accounting software such as low-end and high end. All accounting functions in the system are kept and generated in software. The low-end software such as Tally, Peachtree, and QuickBooks is used in small and medium companies. ERP and SAP are popular in big companies.

### 3.2 Taxes

Since tax laws such as income tax and corporate tax are changing regularly every year, it has become very complex to deal with. Tax preparation manual has become very difficult and takes a long time. Luckily, tax preparation software now exists for the firms. Rather than manually managing tax, corporations can use the computer software to do the similar job. As an outcome, even the difficult calculations can be achieved by the computer in a very short time and accurately.

### 3.3 Audit

IT also has computerized the auditing work. It will take the auditors a long time if they carry out the function of auditing manually. Luckily, audit software such as ACL, and CAAT now exists for auditors. For example: audit software allows auditors to enter the balances of the accounts and related adjustments and it automatically generate the adjusted trial balance and financial statements in no time.

### 3.4 Word Processing

Word processing is to create a computer-aided, designing, managing, storage, and printing of text data. Accountants apply the word processing software for preparing, invoices reports, notes, and financial data.

### 3.5 Electronic Funds Transfer

Nowadays, businesses can be linked to banks through this technology. This technology permits businesses to pay their bills electronically, for example, if the company wanted to pay the dealer for its accounts payable it will become easier for them using this technology. At any time, the company sells a product, transactions are sent at the same time for the customer's account at the bank [10].

## 4 How do Accountants use IT to Achieve Results in Business?

It is clear that the quality of the decision comes from the quality of the given information; accounting information has become the main principle in policy formulation and a standard choice between alternatives.

#### **4.1 Speed**

Speed is featured in the information technology, the use of several technology lead to quickest and most reliable results. However, every part of the technology that has been purchased has a software or hardware appropriate to give the best performance. If one part of this technology is not appropriate, the system will perform poorly, for example, if the network that carries accounting information dysfunction, the accounting process will be stopped and not fully complete [12].

#### **4.2 Accuracy**

Accounting work requires very accurate recording and reporting. The information technology has a high-quality impact on accounting functions because the calculations are done by a computer application drive which has a very small number of errors or no error. For example, a bill may additionally have quite a few line objects and sales taxes related with it. If the invoice has to be established manually, the probability of mistakes will be high [12].

#### **4.3 Flexibility**

An accounting function additionally needs flexibility which can fit as change in initiative practices. To be more productive, technology associated with accounting have to be flexible to adapt the changes. For example, software must to be in a position to be up to date to provide new processes, such as deposit card processing, and the potential to distribute invoices online. Then, the software will emerge as useful. Accountants additionally use software program for taxes and for different accounting requests that change often. Technology should quickly adapt to setup with the changes [12].

#### **4.4 To Prepare Financial Statements**

In these modern days, no accountant uses the manual ledger to prepare financial statement in the accounting practice. It's very rare to find basic simple spreadsheet is used to keep and maintain books of accounts these days and then to extract the financial statement from it. Information technology has made the process of preparing financial statement very easy and simple, first accountants must enter the data and then click a single button. For example, ERP and SAP system are automatically generating accounting report by the click of some few buttons.

#### **4.5 For Forensic Analysis**

Investigate arm accounting experts utilize technology to plan forensic accounting information. This is considered as a very important responsibility for accounts in the general judicial system since accountants already utilize technology to plan and prepare financial information that will be acceptable in the court of law.

## 5 Advantages and Disadvantages of Computerized Accounting

### 5.1 Advantages

#### 5.1.1 Saving Money

Using information technology in accounting systems provides numerous benefits for all kind of businesses. The accounting systems for the small and medium companies can be bought at a reasonable cost. These packages enable managers to see the company's economic function in "real-time" and make changes to the commercial enterprise approach as needed. Using information technology structures can additionally supply immediate reports on inventory valuation, earnings and loss, purchaser bills and payroll and income analysis, permitting quicker changes in the enterprise strategy. Furthermore, the transactions should be entered only once and by training, everybody can do the inputting process in the organization [13].

#### 5.1.2 Saving Time

Using information technology in the accounting practice can save the organization and employees' time. Accounting systems and software programs approves information entry quicker than manual accounting and permits files such as invoices, and sales orders to be collated and printed fast and accurately [13].

Since it's effectiveness and ease of use, computerized accounting structures additionally enable the organization to enhance stock management and expediate collection, saving time and enhancing cash flow (Amiri & Amiri, 2014). Computerized structures replace some information automatically; therefore, the account documents will continually be up to date, and saving time in updating [13].

### 5.2 Disadvantages

Using information technology in accounting comes with its personal set of problems, such as the need to shield towards records loss via energy failure or viruses, and the chance of hackers stealing data. Computer fraud is additionally a concern and you want to instigate a machine of controls for who has get entry to the information, mainly client information. If there is a safety breach and information is stolen, administration can be held individually responsible for the loss of data. You additionally want to make sure that the information has been successfully entered into the system, as a mistake in information entry can throw off an entire set of data. Furthermore, IT is great investment. It involves investing money, time, intellect, and others. There is a cost on acquiring the components such as the hardware and setting up the software. Cost is incurred on maintenance of such components and elements. Additional cost is incurred on hiring of IT specialists and training of staff [14].

## 6 Conclusion

Information technology has significant influenced over accounting practice, or also on accounting profession. Information technology is no longer only evolving technology

progress itself, however also determining a modern business, public or society environment. With the fast improvement of the Internet, there is a huge demand for modern accountants, include the familiarity of accounting, gaining knowledge of the trainer ship of present-day information technology, and having a superb self-learning skill.

By adopting an appropriate system or technology of administration accounting, the organizations and the accounts are in a position to create perfect reports for decision making and investments. The use of IT in managing accounting is turning into fundamental component about accounting in accordance with the modern desires of instantaneous enterprise evaluation or overall performance measures.

## 7 Recommendations

As the utilization of accounting information technology turns out to be more applicable, the authorization of reinforcements and improvement methods are extremely basic in order to give contingency wanting to organize downtime.

Besides, it is prescribed to begin the accounting managements business authorizing, to arrange their control framework. It is additionally proposed to bring into accounting the product item confirmation with the goal that purchasers can follow their qualified differing qualities.

In addition to the management of companies can add computer professionals who have an extremely skilled, it should also be trained with the competitive impact of the latest information technology to verify the organization.

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