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## The impact of Information Technology (IT) on modern accounting systems

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### Abstract

This paper attempts to clarify the impacts of information technology (IT) on accounting systems. The biggest impact IT has made on accounting is the ability of companies to develop and use computerized systems to track and record financial transactions. IT networks and computer systems have shortened the time needed by accountants to prepare and present financial information to management. This system allows companies to create individual reports quickly and easily for management decision making. Other capabilities of computerized accounting systems are: Increased Functionality, Improved Accuracy, Faster Processing, and Better External Reporting. Finally, this paper shed light on advantages and disadvantages of using information technology (IT) in accounting systems.

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### 1. Introduction

Accounting is the system a company uses to measure its financial performance by noting and classifying all the transactions like sales, purchases, assets, and liabilities in a manner that adheres to certain accepted standard formats. It helps to evaluate a Company's past performance, present condition, and future prospects. A more formal definition of accounting is the art of recording, classifying, and summarizing in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character and interpreting the results thereof. Advances in information technology (IT) have transformed many firms in professional services industries, but perhaps none as much as those in the public accounting industry. Once a slow-paced and conservative industry, public accounting underwent tremendous changes at the turn of the millennium, sparked largely by the rapid changes in its if environment (Elliott 1998). Audit software and knowledge-sharing applications are two crucial components of these changes. Automation of audit tasks and use of specialized audit software has substituted IT for labor and changed the structure of audit teams. Equally important is the use of advanced systems to share knowledge

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bases across different parts of the organization that has enabled professional services firms to leverage their human resources more effectively (Gogan et al. 1995).

### *1.1. Information Technology (IT)*

IT is the area of managing technology and spans wide variety of areas that include but are not limited to things such as processes, computer software, information systems, computer hardware, programming languages, and data constructs. In short, anything that renders data, information or perceived knowledge in any visual format whatsoever, via any multimedia distribution mechanism, is considered part of the domain space known as Information Technology (IT). IT professionals perform a variety of functions (IT Disciplines/Competencies) that range from installing applications to designing complex computer networks and information databases. A few of the duties that IT professionals perform may include data management, networking, engineering computer hardware, database and software design, as well as management and administration of entire systems. Information technology is starting to spread farther than the conventional personal computer and network technology, and more into integrations of other technologies such as the use of cell phones, televisions, automobiles, and more, which is increasing the demand for such jobs.

### *1.2 The influence of Information Technology on Accounting*

Computers, servers, the Internet, wireless and personal digital devices have forever transformed the way companies conduct business. Software packages have also improved traditional operations and production processes. Accounting has seen tremendous advancements thanks to the growth of information technology. Accounting software automates the traditional paper ledgers and accounting books. These software packages may come with a variety of specialized features or a generic program that can be customized to current business operations. Companies usually choose accounting programs based on the size of their operations and the number of users accessing the system. Large companies may choose system-wide software packages, such as an enterprise resource planning system. Information technology (IT) has created significant benefits for accounting departments. IT networks and computer systems have shortened the lead time needed by accountants to prepare and present financial information to management and stakeholders. Not only has IT shortened the lead time required to present financial information, but it also has improved the overall efficiency and accuracy of the information.

### *1.3 Computerized Accounting Systems*

The biggest impact IT has made on accounting is the ability of companies to develop and use computerized systems to track and record financial transactions. Paper ledgers, manual spreadsheets and hand-written financial statements have all been translated into computer systems that can quickly present individual transactions into financial reports. Most of the popular accounting systems can also be tailored to specific industries or companies. This allows companies to create individual reports quickly and easily for management decision making. Other advantages of computerized accounting systems can be summarized as follows:

#### *1.3.1 Increased Functionality*

Computerized accounting systems have also improved the functionality of accounting departments by increasing the timeliness of accounting information. By improving the timeliness of financial information, accountants can prepare reports and operations analyses that give management an accurate picture of current operations. The number of financial reports has also been improved by computerized systems; cash flow statements, departmental profit and loss, and market share reports are now more accessible with computerized systems.

### 1.3.2 Improved Accuracy

Most computerized accounting systems have internal check and balance measures to ensure that all transactions and accounts are properly balanced before financial statements are prepared. Computerized systems will also not allow journal entries to be out of balance when posting, ensuring that individual transactions are properly recorded. Accuracy is also improved by limiting the number of accountants that have access to financial information. Less access by accountants ensures that financial information is adjusted only by qualified supervisors.

### 1.3.3 Faster Processing

Computerized accounting systems allow accountants to process large amounts of financial information and process it quickly through the accounting system. Quicker processing times for individual transactions has also lessened the amount of time needed to close out each accounting period. Month- or year-end closing periods can be especially taxing on accounting departments, resulting in longer hours and higher labor expense. Shortening this time period aids companies in cost control, which increases overall company efficiency.

### 1.3.4 Better External Reporting

Reports issued to outside investors and stakeholders have been improved by computerized accounting systems. Improved reporting allows investors to determine if a company is a good investment for growth opportunities and has the potential to be a high-value company. Companies can utilize these investors for equity financing, which they use for expanding

## 1. 4 Software Tools in the Accounting Process

Up-to date accountants must be familiar with the software tools to help them perform the accounting functions more effectively and efficiently.

*Accounting software* contains the basic accounting functions such as input, processing and output. There are two classifications of accounting software as low-end and high-end. Low-end is all-in-one software, which means all of the functions of accounting system are performed within one software. Therefore, low-end software is used for small companies.

*Income tax.* Because tax laws are frequently changing, it is becoming exceedingly difficult to deal with them. Therefore, manual tax preparation is becoming more and more difficult and time consuming. Fortunately, tax preparation software is currently available for companies. Therefore, instead of processing tax manually, companies can use computer software to perform the same functions. As a result, even complex calculations can be performed via computers in a short period of time.

*Audit.* Information technology has also computerized the auditing profession. If auditors perform auditing functions manually, it takes time. However, audit software packages are currently available for auditors. For example, trial balance software enables auditors to input the working trial balance, handle all types of adjusting entries, and automatically compute the adjusted trial balance.

*Word processing.* Word processing is computer-assisted creation, editing, correcting, manipulation, storage, and printing of textual data (Romney et al., 1997: 246). Accountants use word processing software to prepare reports, billings, memos, and financial statements.

*Graphics software.* Graphics can be prepared using graphics software. Graphics can be printed on paper or displayed on slides, transparencies, and photos. Many auditors and managerial accountants use the graphics software to graph the data in financial statements and reports.

*Image processing.* Creating, storing, and updating paper forms of documents take time. In addition, it is very costly to process and store documents. Fortunately, these costs can be eliminated with the help of document imaging systems. Image processing captures electronic image of data so that it can be stored and shared. With the help of document imaging, accountants can scan paper documents into the computer and process all of the files electronically. Companies that use document imaging are moving toward paperless offices.

*Electronic data interchange (EDI).* Electronic data interchange enables companies to communicate with each other electronically. Therefore, EDI enables companies to exchange documents electronically with each other. For example, computerized network enables purchaser and the supplier to exchange purchase orders and invoices electronically in the form of images.

*Electronic funds transfer (EFT).* Companies can now connect to banks through EFT. This system enables companies to make payment and collection electronically. In this case, when company wants to pay for accounts payable to a supplier, it can do it via EFT. Furthermore, whenever company makes sales, transactions are immediately charged to consumer's bank account and simultaneously credited to company's account. In addition, all relevant accounts such as accounts receivable and cash are updated immediately by the computerized system. The use of the computerized systems mentioned above has led to the automation of accounting information system. Accounting information systems equipped with these kinds of technologically advanced tools can now perform accounting functions more effectively and reduce costs.

Accounting programs or software can help accountants or business owners create sales forecasts, economic business models and other business decision tools. They will also automatically input the business' financial information, limiting the number of human data entry errors. Standard defaults and mathematical verification processes are additionally important features of accounting software. These processes ensure that the company's accounting books are always in balance and do not violate any preset requirements. Small business accounting software packages are usually basic programs created with the non-accountant in mind. This allows owners and managers to complete traditional accounting functions without much formal training or technical knowledge. Small business owners may also be able to transfer this information electronically to their public accountant for tax purposes. Electronically transferring information is usually more accurate and timely than handing over a stack of manual accounting ledgers.

## 2. Conclusion

Advancements in information the technology have enabled companies to computerize their information systems. Accounting information systems have also been computerized as a result of significant Improvements in the technology. As accounting information systems are being computerized, accountants must gain the skills to use computerized systems. The use of computerized Accounting information systems has brought opportunities for companies to perform the accounting functions more effectively and efficiently because the use of computerized AIS has brought significant time and cost savings. Use of information technology to perform accounting functions has brought a chance for companies to progress toward paperless offices. Companies applying a production system may as well apply it more effectively if they use computerized systems. Such tools as electronic data interchange and electronic funds transfer can provide companies with opportunities to apply production system more effectively and save money. Some of the advantages of using a computerized accounting system are:

- The arithmetic of adding up debits and credits columns is done automatically and with total accuracy by the computer.
- Audit trails or details are automatically maintained for you.
- Produce financial statements simply by selecting the appropriate menu item.
- A computerized system lets you retrieve the latest accounting data quickly, such as today's inventory, the status of a client's payment, or sales figures to date.

- Data can be kept confidential by taking advantage of the security password systems that most accounting programs provide.

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