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# Accounting Information System: The Need of Modernisation

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**Abstract:** The primary purpose of this paper is to present the need of accounting information system in the modernization. This paper provides an overview of the main objective of an accounting information system (AIS), a pre-eminently user-oriented system; it is the collection, recording of data and information regarding events that have an economic impact upon organizations, maintenance, processing and communication of information to internal and external stakeholders. Accounting information System has a great potential to influence business performance. After the description of the theoretical background I state the main objectives of Accounting Information system, its uses, importance, and role of accounting information system in modernization. The results of the paper indicates that Accounting information systems plays an important role in our economic and social systems especially in management decision making process by providing information to make proper and effective decision for the success and prosperity of the business in the modern world.

**Keywords:** Accounting; Information system; Accounting Information system; Subsystems of Accounting Information System; Research model of AIS.

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## I. INTRODUCTION OF ACCOUNTING

The purpose of accounting is to provide a means of recording, reporting, summarizing, and interpreting economic data. In order to do this, an accounting system must be designed a system which serves the needs of users of accounting information. Once a system has been designed, reports can be issued and decisions based upon these reports are made for various departments. Since accounting is used by everyone in one or another form, a good understanding of accounting principles is beneficial to all.

### INTRODUCTION OF INFORMATION SYSTEM:

A computer Information System (IS) is a system composed of people and computers that processes or interprets information. The term is also sometimes used in more restricted senses to refer to only the software used to run a computerized database or to refer to only a computer system. More specifically, it is the study of complementary networks of hardware and software that people and organizations use to collect, filters, and process, create and distribute data. Every information system is designed to accomplish one or more goals or objectives. For example, an information system may be designed to collect and process the data about employees which helps managers in preparing payroll reports etc.

### INTRODUCTION OF ACCOUNTING INFORMATION SYSTEM:

An accounting information system (AIS) is a system of collecting, storing and processing financial and accounting data that is used by decision makers. It is generally a computer-based method for tracking accounting activities in conjunction with information technology resources. It combines the study and practice of accounting with the design, implementation,

and monitoring of information systems. Such systems use modern information technology resources together with traditional accounting controls and methods to provide users the financial information necessary to manage their organizations. The advent of the computer and the Worldwide Web technological changes has reshaped financial management and accounting. Workstations running applications can now instantly provide standardized data entry, inventory accounting, and financial worksheet inputs. Accounting information systems provide a great deal of information and a real time control environment. They now change the way internal controls are implemented and the type of audit trails that exist within a modern organization. The lack of traditional forensic evidence, such as paper and journal entries is now replaced with a more accurate and updated form of accounting. For example, some systems allow direct journal posting to the various ledgers and others do not. The resulting financial reports can be used internally by management or externally by other interested parties including investors, creditors and tax authorities.

#### **OBJECTIVES OF ACCOUNTING INFORMATION SYSTEM:**

- It provides accurate and timely information to a business management, internal and external users.
- It makes information about the financial position and performance available while it also furnishes the information about the changes in financial position of the enterprise.
- It possesses the characteristics of reliability, relevance, understandability and comparability in order to facilitate management indecision making process.

Thus, a well-designed and well- managed accounting information system can improve the work performance and it leads to improve efficiency and effectiveness of a business enterprise.

#### **USES OF ACCOUNTING INFORMATION SYSTEM:**

AIS are useful for companies and businesses entities want to make the accounting process easier by utilizing a computer program or other system that will perform payroll and other functions. These systems, commonly including accounting software, make it easier to compile financial data for use in taxes, payroll, and other bookkeeping requirements.

- Producing external reports
- Supporting and fastening routine activities
- Decision support
- Budgeting
- Financial Control
- Implementing internal control

## **II. RESEARCH METHODOLOGY**

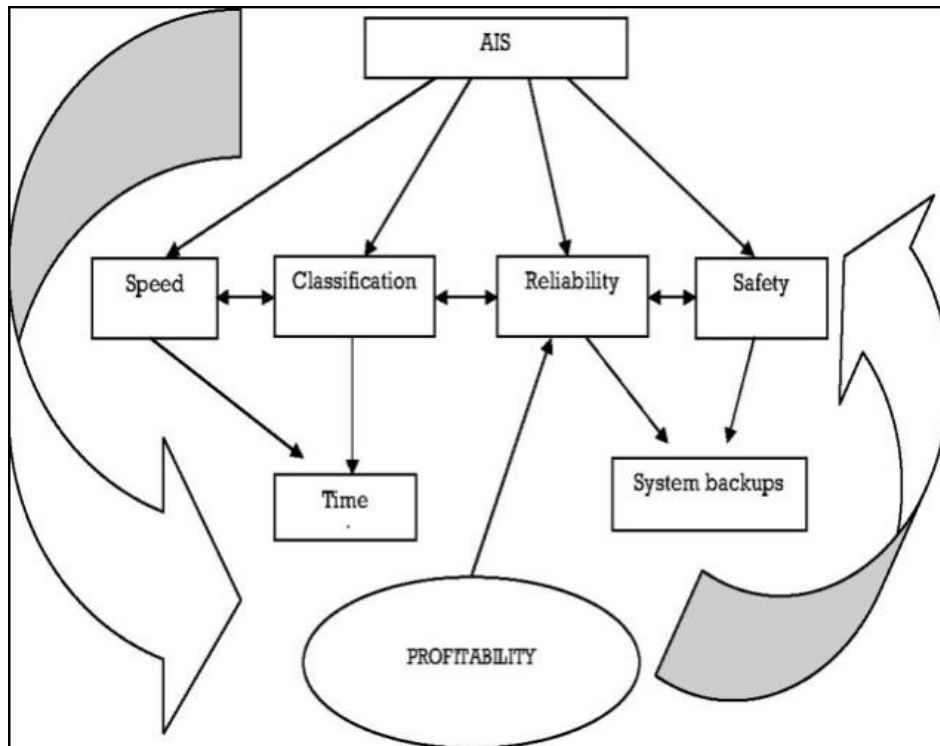
The present study has been completed with the help of secondary data only. The data is collected from various sources related to the subject of study which are: books, research articles, scientific journals, websites, and some accounting and e-accounting books. The secondary data were sourced from the review of related literature basically to create a theoretical background for the study.

#### **OBJECTIVES OF THE STUDY:**

The main purpose of this paper is to provide a conceptual view about Accounting Information System.

1. To provide a structural framework of Accounting Information System.
2. To study the role of Accounting Information System in modernisation.
3. To study and examine the major subsystems, importance and role of accounting information systems in modernisation.

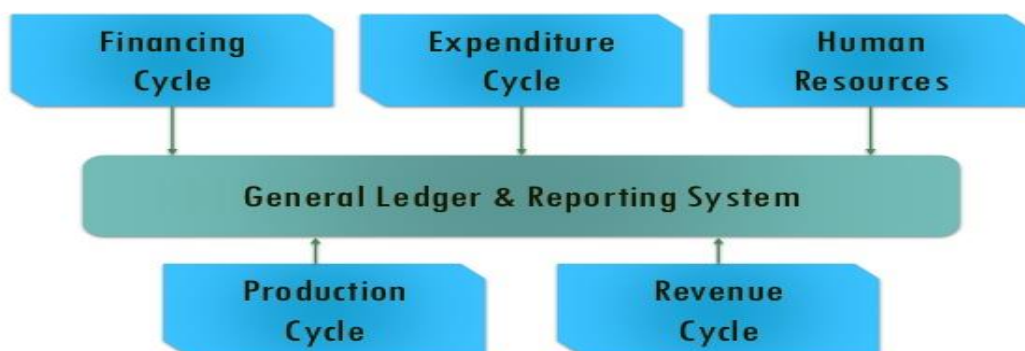
#### RESEARCH MODEL OF ACCOUNTING INFORMATION SYSTEM:



#### MAJOR SUBSYSTEMS OF ACCOUNTING INFORMATION SYSTEMS:

- Transaction Processing System (TPS) that supports daily Business operations.
- General Ledger System and Financial Reporting System (GLS/FRS).
- The Management Reporting System (MRS).

#### BASIC SUBSYSTEMS IN THE AIS

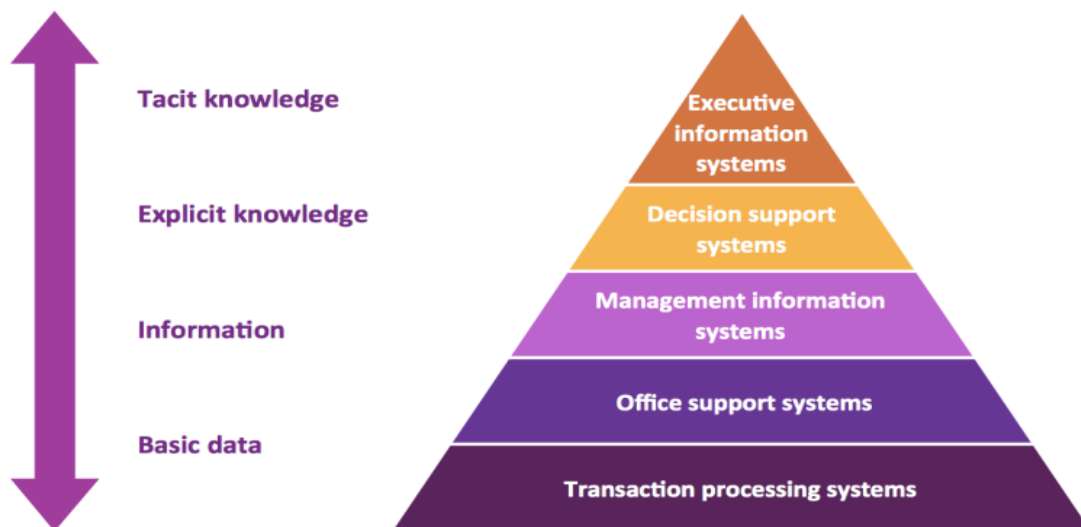


TPS is responsible for supporting daily business operations or transactions. These transactions can be grouped together in three transaction cycles: the revenue cycle, the expenditure cycle and the conversion cycle. The purpose of the first information systems was to automate business processes, which shows that the accounting domain was one of the very first to use information systems to support its activities. Indeed the Era of computer accounting launched with the appearance of the first computers, in particular, with the IBM 702 which became available for accounting use in 1953. The GLS/FRS are two closely related systems, with the first one dedicated to summarization of transaction cycle activity and the second one to the measurement and reporting of the status of financial resources, generally outputted in the form

of financial statements or tax returns to external entities. MRS, usually in the scope of Management Information Systems (MIS), offers internal management with special purpose financial reports and information needed for decision-making such as budgets, variance reports, and responsibility reports.

For almost all professionals from the accounting domain, the main idea about the information system of an organization and particularly AIS is embraced by the Enterprise Resource Planning (ERP), which encompasses all the essential functions to support an organization and is implemented in almost all large organizations.

#### **FIVE LEVEL PYRAMID MODELS OF INFORMATION SYSTEM TYPES:**



### **III. DEVELOPMENT OF ACCOUNTING INFORMATION SYSTEM**

The development of Accounting Information Systems (AIS) includes five basic steps which are discussed below:

- 1. Planning – project management objectives and techniques:** The very first phase of an Accounting Information System Development is planning the project. This involves determination of the scope and objectives of the project, the definition of project responsibilities, control requirements, project phases, budgets, and final products.
- 2. Analysis:** The analysis phase is used to determine and document the accounting and business processes used by the company. These accounting processes are usually redesigned to take advantage of the operating characteristics of modern system solutions.
- 3. Data Analysis:** It is a review of the accounting information that is currently being collected by a company. Current data are then compared to the data that the organization should be using for managerial purposes. This method is used primarily when designing accounting transaction processing systems.
- 4. Decision Analysis:** It is a review of the decisions that a manager is responsible for making. The primary decisions that managers are responsible for are identified on an individual basis. Then models are created to support the manager in gathering financial and related information to develop and design alternatives, and to make actionable choices. This method is valuable when the primary objective of the system is decision support.
- 5. Process Analysis:** It is a review of the company business processes. The organizational processes are identified and segmented into a series of events that are able to either add or change data. These processes can then be modified or reengineered to improve the organization's operations in terms of lowering cost, improving service, quality, or management information. This accounting method is used when automation or reengineering is the system's primary objective.

#### **IMPORTANCE OF ACCOUNTING INFORMATION SYSTEM IN AN ORGANIZATION:**

Generally, information system is the whole of the related components that are working together to collect, store and disseminate data for the purpose of planning, control, coordination, analysis and decision making. On the other hand, an

AIS is the whole of the related components that are put together to collect information, Raw data or ordinary data and transform them into financial data for the purpose of reporting them to decision makers. The most important and oldest of the present systems in business is certainly the Management Information System. "Management" and "information" are two inseparable concepts and show the impossibility of the rational execution of management activities without information. The accounting information system that is created in a business is directly related to the organizational culture, level of strategic planning and the information technologies that this specific business has. It is possible to obtain healthier information about the financial structures of the business that have set up a good accounting information system. Accounting information plays an important role in the process of managing an enterprise's activity. In the last ten years, there has been an intensive process of implementing AIS in the world. These systems were implemented in large industrial and small trade enterprises. Later, implementation of AIS started in other enterprises and state institutions.

According to the survey conducted by the Institute of Management Accountant (IMA) indicates that work relating to accounting system was the single most important activity performed by corporate accountant. The use of information systems is very important in recording vital financial data that will be used in the future. Major corporations, especially in the retail industry, will keep such data as sales, profits, expenses, and many other items for future use in financial reports. Recording will be done often on a daily basis, if not on a minute-by-minute basis with more complex and detailed accounting software. This is very important also because it will not only be used for daily practices, but will be necessary for tax purposes for the remainder of the year. Also, much of this data has to be kept on file for a number of years, in the event of an audit or other financial issues that may arise. Legal issues can cause severe problems and even end in the destruction of a company. By using computerized accounting information systems to organize and retain this data, companies have a much better chance to survive and succeed.

After the process of recording information with software, the next step that is taken is processing. With most accounting software or programs, there are different files and categories where records can be stored. This filing or storage can be done manually by the individual or group of people who works with the accounting information systems. Programs can also be set to do this automatically as information is entered into the system. Certain criteria can be set up in the program to allow the program to place files and data in the places or areas where it is supposed to go. There will usually be different categories for different data and some of the categories may include accounts payable, accounts receivable, payroll, purchasing, and other information that needs to be recorded and retained.

In short we can understand that

- It speeds the bookkeeping process and increases accuracy thereby reducing labor costs.
- A computerized accounting system is a powerful tool, allowing you easily extract data in order to prepare reports and analyze the information.
- Reviewing and acting upon a well designed, comprehensive set of reports (in addition to the Financial Statements) will help keep the company on the right financial path.
- A business entity will require accounting information so as to enable it manage and control its finances and resources.

#### **ROLE OF ACCOUNTING INFORMATION SYSTEM IN MODERNIZATION:**

Accounting information systems works towards success of the organization when there is incorporation of information and communication technologies, which is important role. Therefore, it will be driving towards innovation of accounting practices. Some of the responsibilities relatively are process management and operational activities, internal reporting and external reporting. In most of the modern organizations, it has become essential that accounting information systems produce information that is aligned with strategic perspective. This is one the major roles that accounting information systems are into. Therefore, accounts department will not just review internal operations but they will be working towards producing information that will benefit making external decisions. This will be related to the external environment of the organization and competition.

##### **1. Role by Accountants in General:**

An important role that accountants are playing is data processing in accounting information systems. It will be answering the below questions.

- What are the data to be stored and entered?
- Who are the employees to access these data?
- How are the data supposed to be retrieved, accessed, stored, updated and organized?
- What are means for meeting information needs that are unanticipated or scheduled?

## **2. Role by Specific Accounting Professions:**

General accounting in accounting information systems varies from specific accounting professions. Therefore, the discussion related to role by specific accounting professions is mentioned and all the following should be prepared by using accounting information systems showing roles of each accountant.

- Financial accountants are preparing financial information that is for external decision-making.
- Managerial accountants are preparing financial information that is for internal decision-making.
- Auditors are evaluating controls and attesting financial statements to the fairness.
- Accounting managers are controlling all accounting related activities.
- Consultants are devising accounting information systems specifications.

## **IV. CONCLUSION**

1. From the review of the implication of this study it's concluded that accounting information systems is focused on the recording, summarizing and validating of data about business financial transactions. These functions were performed for the various groups within the organization that were concerned about the respective decisions associated with financial accounting, managerial accounting, and tax compliance issues.

2. The result of this study also showed the use of AIS which improves financial statements and reporting correctness in the business.

3. Managerial decision making normally relies upon an effective information system which was being done by the managers through Accounting Reports facilitated by financial, Cost and Management Accounting Departments, which is considered in terms of Accounting Information System.

4. In the present era AIS is metamorphic ally changed as MIS with greater improvement of different elements. Hence, AIS is a perfect tool of information provisioning the environment for decision making and also eliminates the paper work as well as reduces the cost very significantly. However it can be asserted that AIS can help the business enterprises in the global context to make rational decisions in a swift manner for the betterment of the businesses.

5. The purpose of an accounting information system is closely linked to the purpose of accounting itself. At the most fundamental level, the purpose of accounting is to provide information for economic decision making. As business events transpire, the accounting information system to collect and store data about all aspects of those events, particularly the financial aspects.

6. Data should be stored at the most elemental level, with all aggregation and summarization being left to individual users. Given the virtually unlimited storage capabilities of modern day computer systems, the data stored in the "accounting" information system should not be limited to financial data. Non-financial data such as customer feedback, product quality ratings, and even images, audio, and video clips could potentially be stored. Most importantly, however, all data should be stored in a single integrated enterprise-wide repository.

The study also reveals that accounting information systems can play a vital role in the modern organizations until and unless there are proper resources and good effectively working system. The only reason for an accounting department to be modern in the organisation is the adaption of information systems in the business. The role of the accounting information systems is to meet the needs of the accounts department as aligned with modern organizational needs. Modern organization will fail to make decisions when there is an absence of effective accounting information systems.



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