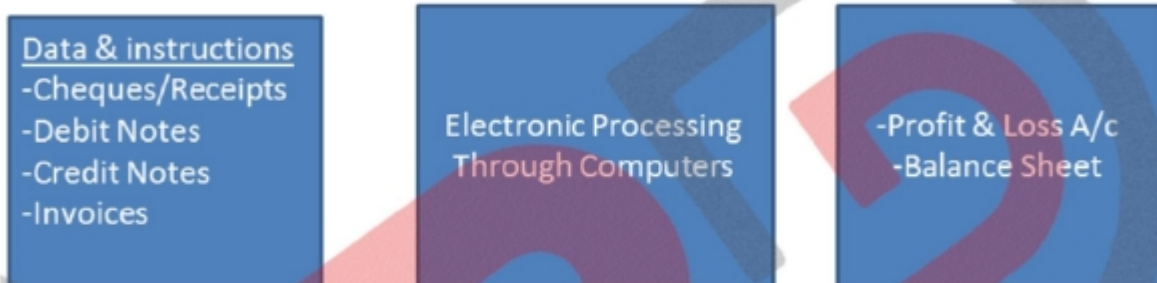


10 - Computerized Accounting System

PROCESS OF COMPUTERISED ACCOUNTING

• Input → Processing → Output



FEATUERES OF COMPUTERISED ACCOUNTING

1. Fast, Powerful, Simple and Integrated
2. Complete Visibility Enhanced User Experience
3. Accuracy
4. Speed
5. Scalability
6. Power
7. Improved Business Performance
8. Quick Decision Making
9. Complete Reliability

PROCESS / STEPS IN COMPUTERISED FINANCIAL ACCOUNTING

- Planning and opening of an Accounting System
- Entering of data
- Coding
- Bank reconciliation
- Posting
- Printing of trail balance
- Finalization of Accounts

Comparison between Manual and Computerized Accounting

Accounting, by definition, is the process of identifying, recording, classifying and summarizing financial transactions to produce the financial reports for their ultimate analysis. Let us understand these activities in the context of manual and computerized accounting system.

- **Identifying** : The identification of transactions, based on application of accounting principles is, common to both manual and computerized accounting system.
- **Recording** : The recording of financial transactions, in manual accounting system is through books of original entries while the data content of such transactions is stored in a well-designed accounting database in computerised accounting system.
- **Classification** : In a manual accounting system, transactions recorded in the books of original entry are further classified by posting into ledger accounts. This results in transaction data duplicity. In computerized accounting, no such data duplication is made to cause classification of transactions. In order to produce ledger accounts, the stored transaction data is processed to appear as classified so that the same is presented in the form of a report. Different forms of the same transaction data are made available for being presented in various reports.
- **Summarising** : The transactions are summarised to produce trial balance in manual accounting system by ascertaining the balances of various accounts. As a result, preparation of ledger accounts becomes a prerequisite for preparing the trial balance. However, in computerized accounting, the originally stored transactions data are processed to churn out the list of balances of various accounts to be finally shown in the trial balance report. The generation of ledger accounts is not a necessary condition for producing trial balance in a computerised accounting system.
- **Adjusting Entries** : In a manual accounting system, these entries are made to adhere to the principle of cost matching revenue. These entries are recorded to match the expenses of the accounting period with the revenues generated by them. Some other adjusting entries may be made as part of errors and rectification. However, in computerised accounting, Journal vouchers are prepared and stored to follow the principle of cost matching revenue, but there is nothing like passing adjusting entries for errors and rectification, except for rectifying an error of principle by having recorded a wrong voucher such as using payment voucher for a receipt transaction.
- **Financial Statements** : In a manual system of accounting, the preparation of financial statements pre-supposes the availability of trial balance. However, in computerised accounting, there is no such requirement. The generation of financial statements is independent of producing the trial balance because such statements can be prepared by direct processing of originally stored transaction data.
- **Closing the Books** : After the preparation of financial reports, the accountants make preparations for the next accounting period. This is achieved by posting of closing and reversing journal entries. In computerised accounting, there is year-end processing to create and store opening balances of accounts in database. It may be observed that conceptually, the accounting process is identical regardless of the technology used.

Advantages of Computerised Accounting System

Computerised accounting offers several advantages vis-a-vis manual accounting, these are summarised as follows ;

- **Speed** : Accounting data is processed faster by using a computerised accounting system than it is achieved through manual efforts. This is because computers require far less time than human beings in performing a task.
- **Accuracy** : The possibility of error is eliminated in a computerised accounting system because the primary accounting data is entered once for all the subsequent usage and processes in preparing the accounting reports. Normally, accounting errors in a manual accounting system occur because of repeated posting of same set of original data by several times while preparing different types of accounting reports.
- **Reliability** : The computer system is well-adapted to performing repetitive operations. They are immune to tiredness, boredom or fatigue. As a result, computers are highly reliable compared to human beings. Since computerised accounting system relies heavily on computers, they are relatively more reliable than manual accounting systems.
- **Up-to-Date Information** : The accounting records, in a computerised accounting system are updated automatically as and when accounting data is entered and stored. Therefore, latest information pertaining to accounts get reflected when accounting reports are produced and printed. For example, when accounting data pertaining to a transaction regarding cash purchase of goods is entered and stored, the cash account, purchase account and also the financial statements (trading and profit and loss account) reflect the impact immediately.
- **Real Time User Interface** : Most of the automated accounting systems are inter-linked through a network of computers. This facilitates the availability of information to various users at the same time on a real time basis (that is spontaneously).
- **Automated Document Production** : Most of the computerised accounting systems have standardised, user defined format of accounting reports that are generated automatically. The accounting reports such as Cash book, Trial balance, Statement of accounts are obtained just by click of a mouse in a computerised accounting environment.
- **Scalability** : In a computerised accounting system, the requirement of additional manpower is confined to data entry operators for storing additional vouchers. The additional cost of processing additional transactions is almost negligible. As a result the computerised accounting systems are highly scalable.
- **Legibility** : The data displayed on computer monitor is legible. This is because the characters (alphabets, numerals, etc.) are type written using standard fonts. This helps in avoiding errors caused by untidy written figures in a manual accounting system.
- **Efficiency** : The computer based accounting systems ensure better use of resources and time. This brings about efficiency in generating decisions, useful informations and reports.
- **Quality Reports** : The inbuilt checks and untouchable features of data handling facilitate hygienic and true accounting reports that are highly objective and can be relied upon.

• **MIS Reports** : The computerised accounting system facilitates the real time production of management information reports, which will help management to monitor and control the business effectively. Debtors' analysis would indicate the possibilities of defaults (or bad debts) and also concentration of debt and its impact on the balance sheet. For example, if the company has a policy of restricting the credit sales by a fixed amount to a given party, the information is available on the computer system immediately when every voucher is entered through the data entry form. However, it takes time when it comes to a manual accounting system. Besides, the results may not be accurate.

• **Storage and Retrieval** : The computerised accounting system allows the users to store data in a manner that does not require a large amount of physical space. This is because the accounting data is stored in hard-disks, CD-ROMs, floppies that occupy a fraction of physical space compared to books of accounts in the form of ledger, journal and other accounting registers. Besides, the system permits fast and accurate retrieval of data and information.

• **Motivation and Employees Interest** : The computer system requires a specialised training of staff, which makes them feel more valued. This motivates them to develop interest in the job. However, it may also cause resistance when we switch over from a manual system to a computer system.

Limitations of Computerised Accounting System

The main limitations emerge out of the environment in which the computerised accounting system is made to operate. These limitations are as given below ;

• **Cost of Training** : The sophisticated computerised accounting packages generally require specialized staff personnel. As a result, a huge training costs are incurred to understand the use of hardware and software on a continuous basis because newer types of hardware and software are acquired to ensure efficient and effective use of computerised accounting systems.

• **Staff Opposition** : Whenever the accounting system is computerised, there is a significant degree of resistance from the existing accounting staff, partly because of the fear that they shall be made redundant and largely because of the perception that they shall be less important to the organisation.

• **Disruption** : The accounting processes suffer a significant loss of work time when an organisation switches over to the computerized accounting system. This is due to changes in the working environment that requires accounting staff to adapt to new systems and procedures.

• **System Failure** : The danger of the system crashing due to hardware failures and the subsequent loss of work is a serious limitation of computerised accounting system. However, providing for back-up arrangements can obviate this limitation. Software damage and failure may occur due to attacks by viruses. This is of particular relevance to accounting systems that extensively use Internet facility for their online operations. No full proof solutions are available as of now to tackle the menace of attacks on software by viruses.

• **Inability to Check Unanticipated Errors** : Since the computers lack capability to judge, they cannot detect unanticipated errors as human beings commit. This is because the software to detect and check errors is a set of programmes for known and anticipated errors.

• **Breaches of Security:** Computer related crimes are difficult to detect as any alteration of data may go unnoticed. The alteration of records in a manual accounting system is easily detected by first sight. Fraud and embezzlement are usually committed on a computerised accounting system by alteration of data or programmes. Hacking of passwords or user rights may change the accounting records. This is achieved by tapping telecommunications lines, wire-tapping or decoding of programmes. Also, the people responsible for tampering of data cannot be located which in a manual system is relatively easier to detect.

• **Ill-effects on Health :** The extensive use of computers systems may lead to development of various health problems: bad backs, eyestrain, muscular pains, etc. This affects adversely the working efficiency of accounting staff on one hand and increased medical expenditure on such staff on the other.

Accounting Packages

Every Computerised Accounting System is implemented to perform the accounting activity (recording and storing of accounting data) and generate reports as per the requirements of the user. From this perspective The accounting packages are classified into the following categories :

- (a) Ready to use
- (b) Customised
- (c) Tailored

Each of these categories offers distinctive features. However, the choice of the accounting software would depend upon the suitability to the organization especially in terms of accounting needs.

Ready-to-Use

Ready-to-Use accounting software is suited to organisations running small / conventional business where the frequency or volume of accounting transactions is very low. This is because the cost of installation is generally low and number of users is limited. Ready-to-use software is relatively easier to learn and people (accountant) adaptability is very high. This also implies that level of secrecy is relatively low and the software is prone to data frauds. The training needs are simple and sometimes the vendor (supplier of software) offers the training on the software free. However, these software offer little scope of linking to other information systems.

Customized

Accounting software may be customised to meet the special requirement of the user. Standardised accounting software available in the market may not suit or fulfil the user requirements. For example, standardised accounting software may contain the sales voucher and inventory status as separate options. However, when the user requires that inventory status to be updated immediately upon entry of sales voucher and report be printed, the software needs to be customised.

Customised software is suited for large and medium businesses and can be linked to the other information systems. The cost of installation and maintenance is relatively high because the high cost is to be paid to the vendor for customization. The customisation includes modification and addition to the software contents, provision for the specified number of users and their authentication, etc. Secrecy of data and software can be better maintained in customised software. Since the need to train the software users is important, the training costs are therefore high.

Tailored

The accounting software is generally tailored in large business organisations with multi users and geographically scattered locations. These software **requires** specialised training to the users. The tailored software is designed to meet the **specific requirements** of the users and form an important part of the organizational MIS. The **secrecy and authenticity** checks are robust in such softwares **and they** offer high flexibility in terms of number of users.

Generic Considerations before Sourcing an Accounting Software

The following factors are usually taken in considerations before sourcing an accounting software:

- *Flexibility*
- *Cost of Installation and Maintenance*
- *Size of Organization*
- *Ease of Adaptation and Training needs*
- *Utilities/MIS Reports*
- *Expected Level of Secrecy (Software and Data)*
- *Exporting/Importing Data Facility*
- *Vendors Reputation and Capability*

Ways to Ensure data Integrity while transfer to computerized accounting

- *Data encryption, which locks data by cipher*
- *Data backup, which stores a copy of data in an alternate location*
- *Access controls, including assignment of read/write privileges*
- *Input validation, to prevent incorrect data entry*
- *Data validation, to certify uncorrupted transmission*

Computerized Accounting System

Q1

The treasurer currently maintains the records using a manual book-keeping system and is now considering transferring the records to a computerised accounting system.

REQUIRED

- (e) Recommend to the treasurer whether or not he should introduce a computerised accounting system. Justify your answer analysing **both** benefits and limitations to the club. [9]

Q2

The directors are considering investing \$60 000 in a new computer system to improve inventory control. According to the payment terms, 50% is payable in March 2018 and the remaining 50% in the following month.

REQUIRED

- (d) Advise the directors whether or not they should purchase the new computer. Justify your answer. [5]

Q3

K Limited needs additional computer software. The directors are considering whether to buy the computer software or acquire the right to use the new software for three years.

- (e) Evaluate whether the directors should buy the computer software or acquire the right to use it for three years. Justify your answer. [5]