

UNIT V

ACCOUNTING IN COMPUTERISED ENVIRONMENT

Significance of Computerised Accounting System- Codification and Grouping of Accounts-
Maintaining the hierarchy of ledgers- Pre-packaged Accounting software.

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UNIT 5: ACCOUNTING IN COMPUTERIZED ENVIRONMENT BENEFITS

5.1 The Accounting System

Accounting is the method in which financial information is gathered, processed, and summarized into financial statements and reports. An accounting system can be represented by the following graphic.

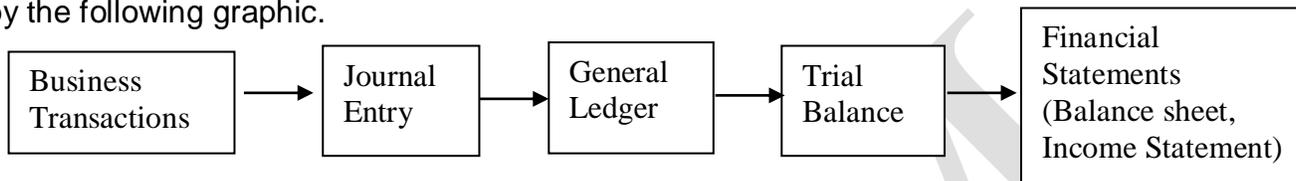


Fig5.1 The Accounting System

The purpose of accounting is to provide information used in decision making. Accounting may be viewed as a system (a process) that converts data into useful information.

Information processes include:

- Recording
- Maintaining
- Reporting

Every business has numerous processes. Some simple, others complex and cumbersome. But as the business grows, acquires new customers, enters new markets and keeps pace with constant changes in statutory regulations... the company will need to maintain highly accurate and up-to-date accounting, inventory and statutory records.

This is where a computerized accounting helps simplify, integrate, and streamline all the business processes, cost-effectively and easily. We now look into accounting in a computerised environment. The first and foremost thing to remember is that the fundamentals of accounting does not change whether books of account are maintained manually or are computerised. The same principles of debit and credit that we apply for recording income or expenditure, purchase or sale of assets or creation or discharge of liability in a manual accounting system is equally applicable in a computerised environment. However, since the recording medium is something else compared to hard copy documents and considerable reliance have to be placed on the software for the input, processing and output of the data certain precautions, methodologies and techniques are to be adopted while maintaining accounts in a computerized environment.

5.2 SALIENT FEATURES OF COMPUTERISED ACCOUNTING SYSTEM

Computer information system environment exists when one or more computer(s) of any type or size is (are) involved in the processing of financial information, including quantitative data, of significance to the audit, whether those computers are operated by the entity or by a third party.

Fast, Powerful, Simple and Integrated

Computerized accounting is designed to automate and integrate all the business operations, such as sales, finance, purchase, inventory and manufacturing. With Computerized

accounting, accurate, up-to-date business information is literally at the fingertips. The Computerized accounting combine with enhanced MIS, Multi-lingual and Data organization capabilities to help the company simplify all the business processes easily and cost-effectively.

Complete Visibility

Computerized accountings giving the company sufficient time to plan, increase the customer base, and enhance customer satisfaction. With Computerized accounting the company will have greater visibility into the day-to-day business operations and access to vital information.

Enhanced User Experience

Computerized accounting allows the company to enter data in a variety of ways which makes work a pleasure. Adapting to the specific business needs is possible.

Accuracy, Speed

Computerized accounting has User-definable templates which provides fast, accurate data entry of the transactions; thereafter all documents and reports can be generated automatically, at the press of a button.

Scalability

Computerized accounting adapts to the current and future needs of the business, irrespective of its size or style.

Power

Computerized accounting has the ability to handle huge volumes of transactions without compromising on speed or efficiency.

For Improved Business Performance

Computerized accounting is a highly integrated application that transforms the business processes with its performance enhancing features which encompass accounting, inventory reporting and statutory processes. This helps the company access information faster, and takes quicker decisions. Computerized accounting also guarantees real-time optimization of operations and enhanced communication.

Quick Decision Making

Generates real-time, comprehensive MIS reports and ensures access to complete and critical information, instantly.

Complete Reliability

Computerized accounting makes sure that the critical financial information is accurate, controlled and safe from data corruption.

Speed

Data entry onto the computer with its formatted screens and built-in databases of customers and supplier details and stock records can be carried out far more quickly than any manual processing.

Automatic document production

Fast and accurate invoices, credit notes, purchase orders, printing statements and payroll documents are all done automatically.

Accuracy

There is less room for errors as only one accounting entry is needed for each transaction rather than two (or three) for a manual system.

Up-to-date information

The accounting records are automatically updated and so account balances (e.g. customer accounts) will always be up-to-date.

Availability of information

The data is instantly available and can be made available to different users in different locations at the same time.

Management information

Reports can be produced which will help management monitor and control the business, for example the aged debtors analysis will show which customer accounts are overdue, trial balance, trading and profit and loss account and balance sheet.

- HIGH SPEED
- TIME SAVING
- ACCURACY
- DILIGENCE
- VERSALITY
- STORAGE
- MINIMISE ERRORS

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GST/VAT return – the automatic creation of figures for the regular GST/VAT returns.

Legibility – the onscreen and printed data should always be legible and so will avoid errors caused by poor figures.

Efficiency – better use is made of resources and time; cash flow should improve through better debt collection and inventory control.

Staff motivation – the system will require staff to be trained to use new skills, which can make them feel more motivated. Further to this with many 'off-the-shelf' packages like MYOB the training can be outsourced and thus making a particular staff member less critical of business operations.

Cost savings – computerized accounting programs reduce staff time doing accounts and reduce audit expenses as records are neat, up-to-date and accurate.

Reduce frustration – management can be on top of their accounts and thus reduce stress levels associated with what is not known.

The ability to deal in multiple currencies easily – many computerized accounting packages now allow a business to trade in multiple currencies with ease. Problems associated with exchange rate changes are minimized.

5.3 Advantages of Computerized accounting

- Automation of tedious clerical jobs
- Speed and accuracy
- Low cost of packages
- Automatic generation of standard reports
- Redundant data storage permits efficient generations of some reports
- Increase revenue while lowering operating costs and enhancing competitive advantage of the company.

Disadvantages of Computerized accounting

- Transactions orientation only
- Periodic not real time reporting
- Limited flexibility for ad hoc reports

SOFTWARE

- TALLY
- CASH MANAGER
- BEST BOOK

5.4 CODIFICATION AND GROUPING OF ACCOUNTS

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A proper codification requires a systematic grouping of accounts. The **major groups** or heads could be

- Assets
- Liabilities,
- Revenue Receipts,
- Capital Receipt,
- Revenue Expenditure,
- Capital Expenditure.

The **sub-groups or minor** heads could be "Cash" or "Receivables" or "Payables" and so on. The grouping and codification is dependent upon the type of organisation and the extent of sub-division required for reporting on the basis of profit centres or product lines.

There could a classification based on geographical location as well.

- a. The main unit of classification in accounts should be the major head which should be divided into minor heads, each of which should have a number of subordinate heads, generally shown as sub-heads. The **sub-heads** are further divided into **detailed heads**. Sometimes **major heads** may be divided into '**sub-major heads**' before their further division into minor heads. The Major heads, Minor heads, Sub-heads and Detailed heads together may constitute a four tier arrangement of the classification structure of Accounts.
- b. Major heads of account falling within the Receipt Heads (Revenue Account) may correspond to different activities or line of business of the company such as car manufacture, servicing of cars, repairs and maintenance of cars, while minor heads subordinate to them shall identify the specific manufacturing activity like manufacture of car body, components and spare parts, etc. A manufacture of car body may consist of a number of activities like the manufacture of the chassis, the door, the front panel, the rear panel, etc. These will then correspond to 'sub-heads' below the minor head represented by the main activity - car manufacture.
- c. A "detailed head" is often termed as an object classification. In the expenditure account being considered in the above example the main purpose of the detailed head is to control expenditure on an item to item basis and at the same time group the objects according to the nature. Example of such detailed head could be 'Salaries', 'Office Expenses', 'Salesman Expenses', 'Workshop Overhead', etc.
- d. The detailed classification of account heads and the order in which the Major and Minor heads shall appear in all account records should be approved by the top management of the organization and should be reviewed by the auditor before they are introduced in the computerized accounting environment.

5.5 MAINTAINING THE HIERARCHY OF LEDGERS

Once the classification of accounts into various groups is complete and codification is done after formation of major, minor, sub and detailed heads the same is required to be inserted into the computer system. Account master files are created with codes and description of the accounts. Some accounting software allows ledgers and subsidiary ledgers to be created from the main ledgers. The subsidiary ledgers can further be subdivided to sub subsidiary ledgers thereby allowing grouping under various profit centres. These are particularly useful where accounts are maintained without codes. In a coded system this is easily achieved by allotting codes to major, minor, sub and detailed heads and thereafter obtaining reports based on these codes.

Apart from the general ledger and the subsidiary ledger (or the sub-subsidiary ledger as is available in some software) there are other ledger accounts that are automatically created by any standard accounting software. These are the debtors ledger and the creditors ledger. At the time of creation of the account heads some of account heads are indicated to the system as cash account, bank account, debtors account and creditors account. Thereafter whenever an entry is made say with a cash account and a bank account the computer automatically indicates it as a contra in the reports. Similarly when a sale transaction is made, the reflection is given in the debtors account and when a purchase transaction is made the reflection goes to the creditors account.

Another important ledger which forms part of most standard accounting package is the inventory ledger. In simple accounting softwares this may give only the movement of inventory items without valuation of inventories. However, many of the packages give the option of valuation of inventories based on the method of costing set like the FIFO, LIFO , weighted average, etc.

GROUPING OF ACCOUNTS

1. SUPER GROUP
2. SUB GROUP

METHODS OF CODING

- SEQUENTIAL CODING
- BLOCK CODING
- MNEMONIC CODING
- GROUP CODING

5.6 PREPACKAGED ACCOUNTING SOFTWARE

There are several prepackaged accounting software which are available in the market and are used extensively for small and medium sized organisations.

This software's are **easy to use, relatively inexpensive and readily available.**

The installation of this software's is very simple. An installation diskette or CD is provided with the software which can be used to install the software on a personal computer. A network version of this software is also generally available which needs to be installed on the server and work can be performed from the various workstations or nodes connected to the server.

Along with the software an user manual is provided which guides the user on how to use the software. After installation of the software, the user should check the version of the software to ensure that they have been provided with the latest. The vendor normally provides regular updates to take care of the changes of law as well as add features to the existing software.

These softwares normally have a section which provides for the creation of a company. The name, address, phone numbers and other details of the company like VAT registration number, PAN and TAN numbers are feeded into the system. The accounting period has to be set by inserting the first and the last day of the financial year.

The next step in the use of this software could be the creation of accounts. This is done by adding the accounts along with their codes into the master file files. Each account has to be classified into whether it is an asset or liability or an income or expenditure account. Whether the account has other subsidiary ledgers under it needs to be indicated to the system. The opening balances are to be entered into the master file files. The company parameters need to be set at this point of time so that the accounts which are the cash, bank, sundry debtors, sundry creditors, etc are known to the system. The customer's name, address and other basic details are also entered in the customer master file.

Similarly, the creditors details are entered into the creditor master file files. Product details are entered through the product master file files. Here the unit of measurement and the opening stock quantities including the values are provided. The system of valuation of stock like the FIFO, LIFO, Weighted average, etc are defined in the product master file files. Once the basic parameters are set and the master files are updated, the system is ready for use.

To summarise, any standard prepackaged software will have the following master file screens:

- Company master file
- Accounts master file
- Sub ledger master file
- Customer master file
- Vendor master file

- Product master file
- Division master file

The entry screens differ in look and feel from software to software and from vendor to vendor. However, the basic entry screens are the following:

- Cash Receipts and Payment Entry
- Bank Receipts and Payment Entry
- Petty Cash Voucher Entry
- Journal Entry
- Purchase Order, GRN Bill, Purchase return Entry
- Sales Order, Challan, Invoice, Sales Return Entry
- Debit Notes and Credit Notes Entry
- Cash Sales and Purchase Memos
- Production
- Consumption
- Stock Transfer

Each of the screens are provided with the add, modify or delete options. Special options like the **date modification** and **voucher number modifications** are provided in some of the software's.

The next section that the software provides is the reports section where the following reports are common to most of the software's:

- Cash Book
- Bank Book
- Petty Cash Book
- Purchase Book
- Sales Book
- Cash Sales Book,
- Cash Purchase Book,
- Sales Return register
- Purchase Return register
- Journal Book
- General Ledger
- Subsidiary Ledger
- Debtors Ledger
- Creditors Ledger
- Debit Note Register
- Credit Note Register
- Stock Ledger

- Stock movement register
- Production register
- Consumption register

Document printing options like printing of purchase orders, challans and bills, sales order, challans and invoices, declaration forms and return forms.

- Trial Balance
- Profit and Loss Account
- Balance Sheet

Some of the softwares provide bank reconciliation options. In the entry screen date of clearances can be inserted. Reports can thereafter be generated of all uncleared items to make the BRS report. There are special reports also provided by some softwares like the cash, bank maintenance reports which shows any date on which the cash or bank by mistake had credit balance. There are also MIS reports like aging of debtors, slow moving and non-moving stock, etc.

Advantages of Pre-Packaged Accounting Software:

1. **Easy to install:** The CD or floppy disk is to be inserted and the setup file should be run to complete the installation. Certain old DOS based accounting software's required some settings to be added in the system configuration file and the system batch file. These instructions are generally provided in the user manuals.
2. **Relatively inexpensive:** These packages are sold at very cheap prices nowadays.
3. **Easy to use:** Mostly menu driven with help options. Further the user manual provides most of the solutions to problems that the user may face while using the software.
4. **Backup procedure is simple:** Housekeeping section provides a menu for backup. The backup can be taken on floppy disk or CD or harddisk.
5. **Flexibility:** Certain flexibility of report formats provided by some of the softwares: This allows the user to make the invoice, challan, GRNs look the way they want.
6. **Very effective for small and medium size businesses:** Most of their functional areas are covered by these standardised packages.

Disadvantage of Pre-Packaged Accounting Software:

1. **Does not cover peculiarities of specific business:** Business today are becoming more and more complex. A standard package may not be able to take care of these complexities.
2. **Does not cover all functional area:** For example production process may not be covered by most pre-packaged accounting software.
3. **Customisation may not be possible in most such softwares:** The vendors for these software's believe in mass sale of an existing source. The expertise for customisation may not have been retained by the vendor.
4. **Reports generated is not sufficient or serve the purpose:** The demands for modern day business may make the management desire for several other reports for exercising management control. These reports may not be available in a standard package.
5. **Lack of security:** Any person can view data of all companies with common access password. Levels of access control as we find in many customised accounting software packages are generally missing in a pre-packaged accounting package.
6. **Bugs in the software:** Certain bugs may remain in the software which takes long to be rectified by the vendor and is common in the initial years of the software.

5.7 ACCOUNTING SOFTWARE AS PART OF ENTERPRISE RESOURCE PLANNING (ERP)

Larger organisations often go for an ERP package where finance comes as a module. An ERP is an integrated software package that manages the business process across the entire enterprise.

Advantages of Using an ERP

The advantages of using an ERP for maintaining accounts are as follows:

1. **Standardised processes and procedures:** An ERP is a generalised package which covers most of the common functionalities of any specific module.
2. **Standardised reporting:** Majority of the desired reports are available in an ERP package. These reports are standardised across industry and are generally acceptable to the users.

3. **No Redundancy:** Duplication of data entry is avoided as it is an integrated package.
4. **Better Information:** Greater information is available through the package.

Disadvantages of an ERP

The disadvantages of an ERP are the following:

1. **Lesser flexibility:** The user may have to modify their business procedure at times to be able to effectively use the ERP.
2. **Implementation hurdles:** Many of the consultants doing the implementation of the ERP may not be able to fully appreciate the business procedure to be able to do a good implementation of an ERP
3. **Very expensive:** ERP are normally priced at an amount which is often beyond the reach of small and medium sized organisation. However, there are some ERP coming into the market which are moderately priced and may be useful to the small businesses.
4. **Complexity of the software:** Generally an ERP package has large number of options to choose from. Further the parameter settings and configuration makes it a little complex for the common users.

Choice of an ERP

Choice of an ERP depends upon the following factors:

1. **Functional requirement of the organisation:** The ERP that matches most of the requirements of an organisation is preferred over the others.
2. **Reports available in the ERP:** The organisation visualises the reporting requirements and chooses a vendor which fulfils its reporting requirements.
3. **Background of the vendors:** The service and deliverable record of a vendor is extremely important in choosing the vendor.
4. **Cost comparisons:** The budget constraints and fund position of an enterprise often becomes the deciding factor for choosing a particular package.