CHAPTER I

INTRODUCTION, OBJECTIVES,

METHODOLOGY & LIMITATIONS

OF THE STUDY
INTRODUCTION, OBJECTIVES, METHODOLOGY AND LIMITATIONS OF THE STUDY

In this chapter the introduction about study, importance of cost and management accounting, definition of Management Information System, importance of Information System, literature review on it, significance, objectives, methodology and limitations of the study are given.

1.1 INTRODUCTION:

"Management by Exception" (M.B.E.) is a well adopted principle of management now-a-days. Management people do not find sufficient time to look into each and every aspect of a matter. Rather they prefer more to sort out a problem within shortest possible time and by easy means. The complex nature of the business and cut throat competition of the present days emphasise more need of an expertise management than experienced management.

The management has to adopt various advanced techniques and make use of sophisticated equipments to handle decision making process. As such a well defined and properly implemented Management Information System becomes an essential part of the organisation structure. An
M.I.S. can solve half of the problems by itself, leaving only half for the management people.

The 'Management' of any organisation is a continuous process of problem solving and decision making. 'To Manage' means to have a control, to deal effectively and tactfully with a person. The word 'management' has got two meanings — first 'an act or system of managing' and second, 'a group of people engaged in managing the business'. The 'management' includes every person who gets things done from others and supervises the actual happenings. Starting from the top management as Managing Director, Chairman or Board of Directors, or owner of an organisation, a process of managing goes even up to a shop level foreman in the industrial organisation. During the process, different persons at different levels are involved as managers or supervisors who require different types of information from different sections for decision making purposes.

1.2 IMPORTANCE OF COST AND MANAGEMENT ACCOUNTING:

Management accounting involves application of appropriate techniques and concepts, which help management in decision making process. It helps in making rational decisions for accomplishment of the organisational objectives. Any workable concept or technique, whether it is drawn from financial accounting, cost accounting,
economics, mathematics or statistics, can be used in management accountancy. The data used in the cost based information system should satisfy only one broad test, i.e. it should serve the purpose that it is intended for. A management accountant accumulates, synthesises and analyses the available data and presents it in relation to specific problems. He helps the management in taking decisions in an efficient and effective way so as to maximise the profitability of the organisation. A management accountant reviews all the decisions and analyses the data from management's point of view to determine how these decisions contribute to overall achievement of organisational objectives. The scope of management accounting is broader than the scope of cost accounting. In cost accounting, primary emphasis is on elements of cost, preparation of costing statement, cost analysis, interpretation and presentation for various problems of management. Management accountancy utilizes the principles and practices of financial accounting and cost accounting in addition to other modern management techniques for efficient operation of an organisation. The main thrust in management accountancy is towards determining policy and formulating plans to achieve desired objectives of management. As such the decision making process becomes the prime function of the management. Any decision taken by the management should result in the profitable business opportunity for the organisation as a whole. A decision can be taken
effectively and in proper way only when it is based on the cost aspect. The cost benefit analysis is required to be carried out in every alternative proposal before the management takes a final decision on it.

Cost accounting leads the way to cost control and cost reduction which ultimately results in the maximisation of profits.

1.3 DEFINITION OF MANAGEMENT INFORMATION SYSTEM:

A Management Information System is...
* An integrated user-machine system,
* For providing information,
* To support the operations, management, analysis and decision making functions,
* In an organisation.

The above definition itself covers the vital aspects of Information System and its role in decision making process. The first part of definition i.e. "integrated user-machine system" includes use of different types of equipments, computers, telephone systems and other communication media for exchange of different type of information required by different people in the organisation. In the early days complexity of business was on very lower side and the volume was also very low. As
such one could easily communicate to other personally. But with the fast growth of business sector and speedy industrialisation throughout the world, the need of machine to handle the information arose. Moreover with the new invention in the field of electronics, it became possible to collect and process the information very fast with more accuracy. As such the necessity of the machine processed has increased.

The second part of definition stresses the need for providing information to any person who require it. In the past, the information was supposed to flow from lower management to upper management only. However with the growth of the skilled manpower and technically qualified people working in different department and realising the importance of "Worker's Participation in the Management", it is felt necessary to exchange the information both ways. In the present day business environment the basic data comes from lower management which is being analysed and processed by the middle management and submitted to the top management for enabling it to frame policies of the organisation. Such policies are being communicated to the middle and lower management people even upto shop level workers for the implementation.

The third part of definition explains about the use of information. The ultimate purpose of any information
is 'to take decision'. One can call the 'information' as 'raw material' which is processed to get finished product as a 'decision'. In turn the 'decision' may be called as raw material at the implementation stage which will be used to produce required 'results'. Again while implementing the decision, several data or information may arise, which will be provided to other sections of the organisation. This may be called as information cycle - an important part of the organisational management process.

1.4 IMPORTANCE OF INFORMATION SYSTEM

As the new policies of Government of India, such as liberalisation, delicensing, decontrol of industries, have been already implemented, more & more industrial units are coming up as new one or the existing units are expanding/diversifying into new areas. Similarly the concept of 'dispersal of industries' i.e. industrialisation of backward areas has also been well accepted by the industrial sector. More & more companies are setting up their units in backward areas in order to get more incentives from the Government. The industrial units are not permitted in urban areas on account of pollution problems. However, many of such backward areas are having no proper infrastructure & communication facilities. As such establishing a factory in an area away from the city with only administrative office in the city
is inevitable. This necessarily requires to adopt an "Remote Control" concept supported by an efficient, well defined and properly implemented Information System.

There are some industrial units in and around Kolhapur which are controlled by the administrative offices in metropolitan cities like Pune, Bombay, Bangalore. Even a small factory unit established in industrial area away from the city requires an office in city for better communication and interaction with customers, public and Government Authorities.

Information plays a vital role in every aspect of management. It is required in planning, organising, leading and controlling. As such one cannot manage the business affairs without Information System. Regardless of the size of the organisation, it is required to have either formal or informal Information System.

The securities scam of 1992, involving more than Rs.5,000 crores, can be taken as live example of lack or failure of proper internal control and information system in various banks and absence of computerised system for reconciliation of inter bank accounts. The report of the Joint Parliamentary Committee (JPC) appointed to investigate the scam, presented its reports in December 1993. The report focused on various system deficiencies as well as
shortcomings of institutions and held individuals responsible for administrative and financial supervision. It also highlighted the issue of culpability and accountability at various levels.

1.5 LITERATURE REVIEW ON INFORMATION SYSTEM:

In recent years various research studies have been completed in the area of Management Information System. Most of the studies are concerned with technical aspects of the subjects rather than practical approach for decision making purpose. Different organisations follow different systems for data collection and reporting. Due to the reason one or the other, the study of the cost and management accounting concepts in the decision making process has remained unnoticed. Moreover most of the studies were at macro level.

1.6 SIGNIFICANCE OF STUDY:

Management cannot avoid making decisions, even if the decision has to do nothing in a particular situation. Decision making is aimed towards specific goals and without data about these goals, decision will lack purpose and effectiveness. A good management decision should be both effective and efficient. An effective decision consumes minimum amount of resources to achieve the desired goal. Cost accountancy is a subject that provides knowledge to
take effective and efficient decision for cost control, ascertainment of profitability and internal as well as external reporting. Cost & Management accounting includes cost analysis, financial management, ratio analysis and application of quantitative techniques, marginal costing, standard costing, budgetary control etc. which are very important tools for cost control & cost reduction. The productwise profitability, departmentwise performance, processwise costs etc. can be determined from cost accounting data.

Management information means the information required by the management to perform its tasks more efficiently and discharge its responsibilities toward the organisation and its personnel. The information required by the management can be broadly divided into following types:

i. Financial
ii. Costing
iii. Quantitative information regarding production, consumption, sales etc.
iv. Market
v. Government rules, laws etc.
vi. Research & Development
vii. General

Out of the above, the first three types of
information are very important in view of the decision making function of the management. As such there is a need to have a properly designed and well implemented Cost based information system in the organisation. Such system will help the management in achieving the organisation objectives.

1.7 OBJECTIVES OF THE STUDY:

The Government of India has now changed the industrial policy for removing the entry barriers and opening of the economy to global competition. As a result of this, the importance of cost accounting has increased significantly in the changed national scenario.

The cost statements bring out, in detail, the different operations covering consumption of raw materials, productivity of labour and equipments and the overhead cost. The comparison of actual cost with standard or budgets help an organisation to evaluate the performance internally and to take necessary corrective measures. Various decisions and measures can be taken based on cost accounting data such as:

i. Optimum utilisation of capacity

ii. Expansion

iii. Modernisation
iv. Diversification

v. Rehabilitation of sick units

vi. Pricing

vii. Cost control and cost reduction

viii. Energy saving and conservation

ix. Alternative use of available resources

x. Make or buy

xi. Profit maximisation

xii. Control of waste

xiii. Improvement in efficiency and productivity

xiv. Product mix

xv. Capital expenditure

A significant part of an individual's working and personal time is spent in recording, searching for, and absorbing information. As much as 80% of a typical executive's time is spent in the processing and communication of information.

Computers have become an essential part of organisational information processing because of power of the technology and volume of data to be processed. The current challenge in information processing is to use the capabilities of computers to support knowledge work, including managerial activities and decision making. Computer based user-friendly system facilitates the decision making process. Use of computer in Management
Information System includes creation of database, analysis and comparison of data, derivation of variances and reporting of performance.

The study has the following specific objectives:

i. To review the use of cost & management accounting techniques in the selected organisations,

ii. To find out the possibilities of application of cost and management accounting techniques to solve the industrial problems,

iii. To observe the inter-sectoral comparison of the application and effectiveness of cost and management accounting techniques in the decision making process,

iv. To study the use of computer for creating database, processing of data, comparing the data, deriving variances, reporting of performance,

v. To design an ideal Computerised Cost Based Information System,

vi. To study the benefits by implementing the cost based information system on experimental basis for one of the selected units.
1.8 METHODOLOGY OF THE STUDY:

The present study is based on "Case Study Method of Research" supplemented by primary and secondary data. For the purpose of the study one unit is selected from each of the following four sectors:

i. Private sector
ii. Government sector
iii. Co-operative sector
iv. Service sector (banking)

Here an attempt is made to identify the problems in the selected units which can be solved with the help of Cost and Management Accounting Techniques. Thereafter a generalised Cost Based Information System has been developed with the aid of a computer to help the organisations in decision making process.

In order to achieve the above objectives, four different units are selected from four sectors on the basis of various factors like sickness in the industry, profit making as well as loss making units, larger employment, heavy investment, modern technology etc.
The selection of the units is as below:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Unit Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Private Sector</td>
<td>Eurotex Industries &amp; Exports Limited, Kolhapur.</td>
</tr>
<tr>
<td>b) Government Sector</td>
<td>Shri Shahu Chhatrapati Mills, Kolhapur. (Unit: Maharashtra State Textiles Corporation Ltd. - A Govt. of Maharashtra Undertaking)</td>
</tr>
<tr>
<td>c) Co-operative Sector</td>
<td>Ichalkaranji Co-operative Cement Industries Limited, Hatkanangale.</td>
</tr>
<tr>
<td>d) Service Sector</td>
<td>Ichalkaranji Janata Sahakari Bank Ltd., Branch Shahupuri, Kolhapur.</td>
</tr>
</tbody>
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**PRIMARY DATA:**

i) Data regarding the Information System followed by the organisation has been collected by way of personal interviews of the managers and functional heads of the selected units.

ii) Data regarding organisational structure, manufacturing
process etc. has been collected from documents and records of the selected units.

iii) Other necessary information is gathered through discussions held with the persons working in various departments particularly production, finance and costing departments of the selected units.

SECONDARY DATA:

The secondary data includes:

i) Published Data collected from various libraries particularly Management Institute and University from Kolhapur.

ii) Earlier research studies on "Reporting Systems" and "Management Information System" in different organisations and enterprises.

iii) Various seminar and research papers, published and unpublished material on Management Information System and reporting systems.

iv) Circulars, house magazines and other relevant data from the selected business enterprises.

v) Last five years annual reports, audit reports, inspection reports, forms used and procedures followed by the
The said data is further analysed for arriving at conclusions as to application of cost & management accounting techniques for decisions making purposes. For the purpose, a review is taken of some of the decisions of the respective units and the effects of costing & computerisation is studied for such decisions. The data collected from the above source is processed, analysed and interpreted and presented in the study.

The methodology adopted and followed with reference to the objectives of the study is given as under.

First of all, in order to review the information system, procedures and practices, various reports and relevant information were collected from the office files and records of the selected units. Then the researcher examined the contents of the various reports, periodicity, purpose etc. and identified the inter-unit and inter-sector differentials.

Then an attempt has been made to evaluate the use of cost information in decision making through information system of the selected business enterprises with the help of the views expressed by the top/middle/lower level executives, interview and personal discussion techniques.
were used to elicit the view of the executives at different levels. Appropriate statistical tools were applied to get the desired results. Subsequently, the results of the above analysis were corroborated with the information system used in the undertakings through various analytical reports.

Finally, conclusions are drawn on the basis of the facts revealed by the study and suggestions are offered keeping in view the problem areas.

1.9 LIMITATIONS OF THE STUDY:

The present study of the selected units is confined to:

i. Monthly/periodical performance reports based of cost information.

ii. Capital expenditure decisions.

iii. Use of cost accounting for pricing.

iv. Profitability improvement through use of cost information.

v. Decision regarding expansion of the capacity, closure of certain sections in view of losses

vi. Use of cost accounting techniques in Co-operative
sector and banking sector

vii. Budgeting as a tool for cost control

viii. Voluntary retirement scheme - cost benefit analysis

ix. Rehabilitation of sick unit.

x. Use of computer in application of cost accounting techniques in decision making process.