CHAPTER - 1
INTRODUCTION

1.1 GENERAL ENVIRONMENT OF MARKET

The development of today’s international markets and the fast spreading use of the internet or computer technology have created a highly competitive and transparent market environment. The present business environment is characterized by global competition, the high rate of automation, environmental and safety issues, short product life-cycle and consumers’ need for innovative and high quality products at sound prices. In today’s time of fast technological changes, strong global and domestic competition, especially for manufacturing companies total cost management is essential to maintain corporate profitability and competitiveness. “In today’s environment, nothing is constant or predictable - not market growth, customer demand, product life cycles, the rate of technological changes or the nature of competition” (Hammer & Champy, 1993). Today the management mantra for a company is conquer the costs before the costs conquer you and cost refers total cost to the customer. The cost leadership strategy does not suggest compromise in technology, quality or product differentiation. Low costs of product have no advantage, if the customers are not ready to buy the low cost product of a company. Hence cost management must be driven with customers as the focus. The survival triplet in current environment for any company is how to manage the cost of product/service, quality and performance.

1.2 CHANGES IN MARKETS AND FOCUS ON CUSTOMERS

Expansion of international markets and trade is like a key of development that drives the extensive changes in the current business environment. The growing number of multinational firms shows that there are opportunities for growth and profitability in global markets. As a result of globalization of markets competition is increasing and this has changed the markets from sellers to buyers markets. According to Fralix (2001) in the
early years the mass production was produced and could be sold in markets because supply was low and comparatively demand was high. The mind-set of most manufacturers was: this is what we make - if you want it, buy it (Johnson, 1992). In other words the manufacturing companies focused only increasing output and their attitude was that they could sell whatever they build. Therefore the manufacturing firms produced products according to their own specifications not to customer specifications. In recent years demand exceeding supply and customers are more sophisticated, more knowledgeable and less loyal than in the past. Lynch (1999) argued that now customers demand products or services that meet their expectations like delivery on time, defect-free and low prices products. Nonaka (1994) recognized that current society has become a “knowledge society” necessitating business organizations to think about innovation like technical innovation and product innovation.

1.3 COST CHALLENGE

Dealing with today’s competition is a big challenge for companies enough even when they have all the right information and if they respond to the wrong information then it can be the situation of loss. If a firm fails to reduce costs as speedily as its competitors then its existence will be in danger and profit margins will be squeezed. Customers demand high quality products/services at low prices and the shareholders demand a high return on their investment therefore costs has become a residual. Today the challenge for a manufacturing company is being able to provide services within the predetermined cost framework. Thus cost management has become an ongoing continuous improvement area for every company. Today the market leaders want to stay ahead of the competitors in market through continuously finding the gap between their product cost and that of their competitors and then try to redeploy their resources for profitable growth. The cost challenge is one of the most serious tasks facing by manufacturing companies from the last decades. In such a testing environment a company’s survival depends on innovative products that satisfy the levels of quality and price expected by market (Bonzemba & Okano, 1998). Manufacturers face trouble to match the low prices with global competitors and still offer the highest quality products to customers (Helms et al., 2005). This situation has created fierce and rising cost pressures on manufacturers. The success
of manufacturing companies depends on the methods and techniques that are adopted by them to manage costs. Availability of vehicles at competitive low price is a key performance indicator for automobile manufacturing companies. Pretorius et al. (2003) suggested that costs and the way in which costs affect pricing and the profit margin should be closely considered. Attentiveness of the cost system and cost manners in cost management together with awareness about market help firms to perform well with competitive pressures than merely to lower its prices. If company does not have able managers who can manage well the production cost then the cost of product will increase and increasing production cost is a big problem for any company because it will decrease profit of company. The inability to apply competent cost management systems remains the most important source of all business problems. The challenge in managing costs can be categorized in different activities that cause them and then manage the activities that cause the costs. According to Garrison et al. (2006) from last two decades business environment is characterized by terrific changes and the rate of innovation in products and services have increased. Many managers realized the requirement of new ways of working in companies.

1.4 FOCAL POINT OF CONCERN

The concept of cost management is taking more and more popularity in today’s increasingly competitive business environment. In competitive markets product prices are decided by the market because a large number of competitors can provide similar or substituted products at keen or reasonable prices and consumers expect higher value for their money. Increasing global competition in the industrial environment forces a company to focus the continuous improvement about the quality and functionality of product or services offered by the company and also improve their competitiveness. Consumers are rational and can compare quality, durability and prices of a product from one market to other markets, therefore companies should focus customer’s demands directly to design the right products. In recent times mostly organizations management think that their organizations will not succeed if they fail to regularly offer goods or services at the right time and in the right place (Cooper & Slagmulder, 1997; Ansari & Bell, 1997; Ansari et al., 2007). To face this situation a producer likes to sell their
products at a price that market expects and which is right for the continuing survival and growth of the company and also desired by producers to make a financial return on the products sold. Consistent development of low cost and high quality products that meets the market’s expectations and makes a profit for company is a key to a company’s survival. Growth of a firm in such a challenging environment depends on its capacity to produce innovative products that satisfy both the aspects of quality and price expected by the market. In this competitive environment customers demand low price but high quality products and to meet customers’ demands at low prices, companies are taking further steps to reduce price of products either by cutting profit margins or by lowering costs, however stockholders want high dividend, therefore to realize this a more mature cost-conscious culture should be established. Reducing a firm’s product cost is the only basis of increased earnings because selling price and profit margin are set by competitive pressures and management policies. Today selling prices of products or services are non-controllable for any company, therefore company’s profitability depends more on effectiveness of cost management. The long-term financial success of any company depends on whether the prices of their products or services exceed their costs by enough to financial growth.

1.5 COMPETITIVE ADVANTAGE

Today for sustainable competitive advantage costs must be managed both aggressively and wisely. The long term survival of a company requires a sustainable competitive advantage. Competitive advantage is normally taken by developing new products and services that satisfy the customers and it can also be developed by improving business processes to obtain better quality and cost reduction by adding value. Today customers want more value products from their money, thus according to their demands product they buy should be better, cheaper and faster. To manage this company must have harmony between design and the production process. Therefore it is required to identify new ways or methods to find more qualitative ideas to decrease the costs of product. There are many ways for a company to face competition in the market like company can offer a high quality product, low price product, shortening the production line and free of defective product. In order to satisfy customers, a firm requires maximizing its efficiency
throughout the entire value chain. Different organizations in competitive surroundings for saving their existence and competitive power should be aware about their products costs, competitor’s product cost and also well presents their products in competitive world in relation to costs (Cooper & Kaplan, 1999). From this point of view the continuous reduction of the costs may involve five main areas for the overall management of product costs of organization which are: (1) taking into consideration the environment or markets & competition, (2) integration of the skills or involvement of all departments, (3) role of supply chain partners, (4) full concentration on viewing effects of the current decisions about product of firm on its future results or outcomes and (5) use of some connections or techniques to manage or control the current activities of the firm. If there are few competitors of a firm and if demand of their products exceeds supply then firm has chance to simply mark up costs and prices to get a sufficient profit but in opposite situation when competition increases and supply of products exceeds demand then market forces to set low prices. Through cost management, managers can take decisions that will enable the firm to achieve a strategic competitive advantage (Buckingham & Loomba, 2001). In taking a strategic competitive advantage cost management focuses on the long-term competitive success of the firm.

1.6 HISTORY OF MODERN COST MANAGEMENT

1.6.1 ACCOUNTING

In general accounting is the process of identifying, measuring and communicating economic information to users of the information for their decisions. Horngren & Foster (1991) stated that: the accounting system is the principal quantitative information system in almost every organization and should provide information for three broad purposes: (1) Internal routine reporting to managers. (2) Internal non-routine or special reporting for strategic decisions. (3) External reporting through financial statements to outside parties. Drury (1992) claimed that traditionally management accounting is interested in providing internal routine reports and internal special reports to managers or to people within the organization while financial accounting provides information to parties outside the organization. Garrison (1982) mentioned that management accounting focuses on
relevance and flexibility of data. Accounting information is vital in determining the most suitable strategic direction for the company. It directs managerial actions, motivates behaviors and creates the cultural values which are necessary to obtain an organization’s strategic objectives (Ansari & Bell, 1997).

1.6.2 COST ACCOUNTING

Management accounting was first recognized as cost accounting (Wilson & Chua, 1988). Cost accounting is a result of the industrial revolution (Johnson, 1981). Cost accounting is defined as the equivalent of direct costing designed to provide financial information for management decision-making and control (Johnson, 1981). Cost accounting offers knowledge for both at strategic and operational level. The first indication of cost accounting was the job order costing in a company of Italy (Abs et al., 1954). Cost accounting continued to develop as a result of greater industrialization and the increasing size of firms further in the nineteenth century and through the middle of twentieth century (Garner, 1947). Caplan (2006) stated that in the early decades of the twentieth century industrial engineers establish methods to control production which focused the standards for materials, labor and machine time through which actual results could be compared. As a result standard costing systems was developed which is still widely used by manufacturing companies for planning and control (Caplan, 2006). Later in the twentieth century cost accounting started to change into management accounting. Horngren et al. (1999) explained the difference between cost accounting and management accounting. According to Horngren et al. (1999) cost accounting refers mainly getting as accurate or precise costs as possible while management accounting focuses different costs for different purposes. The factor that changes the costing to a managerial term was the development of new corporate structures such as multinational enterprise, multidivisional organization and the growth of industries (Wilson & Chua, 1988). These new structural forms required extra information that led to a development of the narrow costing systems (Wilson & Chua, 1988). With these changes the term cost accounting could no longer satisfactorily described the accounting function within an organization and gradually management accounting term was adopted. In 1972 The Institute of Cost and Works Accountants even changed its own name to the Institute of
Cost and Management Accounting. Literature shows that after nineteenth century the attention changed from cost accounting to management accounting. According to Johnson & Kaplan (1987) in the nineteenth century the scope of cost accounting became more than just a tool for monitoring internal conversion processes.

1.6.3 MANAGEMENT ACCOUNTING

The American Institute of Management Accountants defines management accounting as the process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of financial information used by the managers to plan, evaluate and control within an organization. Management accounting helps in best utilization of resources. Drury (1992) agreed that the management accounting system provides information for management activities such as decision-making, planning and control. Cost information is needed for decision making and managers use relevant cost information for both strategic and operational decisions like for determining the selling price and for measuring product profitability etc. The decisions of managers are concerned with future events, therefore cost information are important for planning and control functions. Kaplan & Atkinson (1998) explained two specific purposes of management accounting, they said management accounting is a system that collects, classifies, summarizes, analyses and reports information that will assist managers in their decision-making and in their control activities. It shows that management accounting has two main purposes (1) to support managers in decision-making which is called accounting for managers or management decisions and (2) to support in planning and control activities which are called accounting for management control. Traditionally, accounting for management decisions involves terms such as process costing, job order costing, marginal costing, cost-volume-profit analysis, standard costing and variance analysis etc. Accounting for management control is more likely to deal with terms such as responsibility, budgeting and performance measurement. There is also little confusion in literature between management accounting and cost accounting. Cost accounting and management accounting are two different terms. Some authors define both in same way. However, Horngren & Foster (1991) and Drury (1992) said that cost accounting is just a part of management accounting and it deals solely with the
determination of cost of goods sold and gathering cost information for stock valuation for external reporting. Emmanuel et al. (1990) highlighted that employees may not take interest in organization due to lack of three basic reasons: (1) lack of direction, (2) lack of motivation and (3) lack of abilities. Management accounting system plays a central role in organization to solve these problems. Hiromoto (1991) stated that current management accounting systems are considered continuous innovation and the new aspects such as behavior influencing focus, market-driven management and dynamic team-oriented approach. Management accounting must build a regular awareness environment of strategic messages in all parts and departments of the organization to involve employees in innovative activities. Workers are important and presently called knowledge workers because they dealing with production process and machines. Today other support activities such as quality control, supply chain management, information technology, customer service and new product development have risen extensively. Johnson & Kaplan (1987) stated that western firms have realized that, to sustain in competitive market it is necessary to start looking at new management accounting tools. All this necessitates a far greater approach of management accounting and also a need to improve the flow of non-financial information. Literature states that management accounting is not recently developed; it was established in the 1920s for providing the basis for management control, effective cost management and performance measurement.

1.6.4 EVOLUTION OF MANAGEMENT ACCOUNTING

Mostly popular cost and management accounting techniques were developed during the nineteenth century and first quarter of the twentieth century (Johnson & Kaplan, 1987). Managerial accounting systems developed during the nineteenth century and that time these were only used to examine the output of internally directed processes. In late nineteenth and early twentieth century the new cost management techniques were developed for analyzing productivity and increasing profits to firms. According to International Federation of Accountants Committee the evolution of management accounting includes four main stages (IFAC, 1998). These four stages cover the trends of management accounting from earlier 1950 to 1995 as described with figure below:
Stage 1: Prior to 1950
The main focus of management accounting was on cost determination and financial control by the use of budgeting and cost accounting technologies.

Stage 2: By 1965
The main focus of management accounting was on information for management planning and control due to the rising importance of the availability of information technology through the use of decision making analysis and responsibility accounting.

Stage 3: By 1985
Attention was turned to the reduction of waste of resources used in business processes by the use of process analysis, strategic management and cost management technologies.

Stage 4: By 1995
Consideration had shifted to the creation of value through the use of new technologies and the effective use of resources which examine the link among customers, shareholder and organizational innovation.

It is clear that management accounting has radically evolved within the last decades in response to the change in the business environment and companies have to reformulate their strategies in order to survive and remain competitive in the market. Largely management accounting has been shifting or changed from a narrow to broader activities and functions.
1.6.5 CHANGE IN MANAGEMENT ACCOUNTING PRACTICES

Management accounting practices may develop skills that enable a firm to handle its organizational business more competitively and it can enhance competitive advantage. Modern management accounting practices have built the skills of innovative costing methods. In last few decades many philosophies and principles were developed as new management accounting tools to manage cost or cost management to meet intense competition. Bastl et al. (2010) included activity based costing, lifecycle costing, target costing and kaizen costing mainly as the innovative methods. Many management accounting techniques have developed in order to respond to the increasing challenges in the competitive market. The traditional costing techniques have been used widely by the different companies and the contemporary costing techniques are being adopted at a slower rate (Adler et al., 2000). The modern management accounting techniques are being adopted by mainly big manufacturing companies. Sulaiman et al. (2004) grouped the management accounting techniques into traditional and contemporary techniques as presented in table 1.1.

<table>
<thead>
<tr>
<th>Traditional techniques</th>
<th>Contemporary techniques</th>
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<tbody>
<tr>
<td>• Absorption costing</td>
<td>• Activity-based costing</td>
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<td>• Variable costing</td>
<td>• Benchmarking</td>
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<td>• Standard costing</td>
<td>• Target costing</td>
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<td>• Transfer pricing</td>
<td>• Theory of constraints</td>
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<td>• Budgeting</td>
<td>• Kaizen costing</td>
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<td></td>
<td>• Activity-based management</td>
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<td>• Economic Value Added</td>
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<td>• Strategic planning</td>
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<td>• Balanced Scorecard</td>
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Table 1.1: Traditional versus modern/contemporary management accounting techniques
Source: Adapted from Sulaiman et al. (2004)

Literature shows that the majority of existing management accounting techniques has been developed after the 1950s. After 1950s the perception behind the recent management accounting techniques development was the attention to the working people and customers of organizations. Since 1950, above 30 cost and management accounting techniques have been developed (Smith, 1999). Soutes et al. (2005) classified the management accounting techniques into different evolution stages of management accounting, (explained by International Federation of Accountants Committee) and these are:

- **Stage 1**: absorption costing, financial and operational control, variable costing and the annual budget.
- **Stage 2**: standard costing, activity based costing, capital budgeting and decentralization.
- **Stage 3**: value-based management, life cycle costing, transfer pricing, responsibility centers, target costing and kaizen costing.
- **Stage 4**: strategic planning, balanced scorecard, economic value added, market value added and performance measurement method.

Literature states that during 2000 the focus of management accounting was on controlling inventory and distribution costs with the integration of supply chain management. Each evolution stage of management accounting is established according to the changing conditions in the management environment. Kaplan (1994) outlined that the 1980s and 1990s were recognized as revolution regarding the innovation in management accounting procedures. Bjornenak & Olson (1999) also supported this observation by saying that in 1980s and 1990s many management accounting innovations or methods were supplied in the literature during the past three decades. However some management accounting innovations or methods received adequate attention by users. The management accounting covers various planning and control tools and concepts such a: costing systems such as job order costing, process costing, overhead allocation method, activity based costing, budgeting, target costing and target pricing, value engineering, standard costing and variance analysis as important managerial control tools (Horngren et al., 2006). Approaches such as activity based costing, activity based management, total
quality management, target costing, kaizen costing and some other concepts emerged as modern cost management tools (Bonzemba & Okano, 1998). Bjornenak & Olson (1999) identified the latest management accounting techniques which were as follows: activity-based costing, activity-based management, local information systems, balanced scorecard, life cycle costing, target costing and strategic management accounting. However, there is no universal consent in literature about constitution of techniques as recent management accounting innovations or methods (Cadez & Guilding, 2008). The most popular developed techniques adopted by the Australian practitioners were activity based costing, activity based management, balanced scorecard, benchmarking, strategic management accounting and target costing (Chenhall & Langfield, 1998). Different authors grouped management accounting techniques into traditional and modern techniques differently. Literature shows many management accounting techniques, finally some of these can be categorized into traditional and contemporary management accounting techniques as: (1) traditional management accounting includes techniques such as standard costing, absorption costing, normal costing, job order costing, process costing, transfer pricing and budgeting etc. (2) advanced or contemporary management accounting includes techniques such as activity-based costing, total-life-cycle costing, value chain analysis, target costing, kaizen costing and balanced scorecard etc. New management accounting methods have replaced earlier cost management procedures (Johnson & Kaplan, 1987).

1.6.6 DRIVERS OF CHANGE IN MANAGEMENT ACCOUNTING

Horngren (1989) observed that in the late 1950’s management accounting focused on advocating better practices in organization and relevant costs for special decisions and in the late 1980’s the recent emergence of production and operations has increased the field of management accounting. During the last years a significant change had made in the cost accounting and management (Maher & Deakin, 1994). This change was the result of many factors such as increasing competitive environment, the growth of worldwide markets, information technologies, the focus on the customer and change in the forms of organization (Blocher et al., 1999). Wu & Boateng (2010) discussed some factors that may be reasons of changing role of management accounting practices such as awareness
of senior managers and employees, the size of an organization and foreign partners. In 1980s and 1990s innovations or new methods in management accounting had been identified (Kaplan, 1994). Literature shows that the main motivation behind the introduction of innovations in management accounting as new methods can be linked with the criticisms of traditional cost and management accounting practices (Horngren, 1995). The innovations in manufacturing processes, technology and information systems require essential innovations in cost and management accounting techniques and practices (Kellett & Sweeting, 1991). Burns & Scapens (2000) observed that competitive economic situation of the 1990s or the global competition was the major driver of change in management accounting. In the changing business environment the traditional management accounting was not adequate to meet the business environment changes hence updated and modified managerial accounting systems were needed to provide different informational needs (Allot, 2000). Lobo et al. (2004) pointed out both environmental and organizational factors that force change in management accounting as: (1) environmental factors included globalization of markets, increased competition, advances in information and production technologies and (2) organizational factors included core competencies, customer and supplier relationships, flatter organizational structures and team work. The traditional accounting techniques had failed to adapt these changes and these factors have changed the nature of management accounting. According to Allot (2000) the concept of management accounting includes its role is mainly to provide what managers need and want. Today management accounting has moved with wider issues in management.

1.7 COST MANAGEMENT

In recent years management accounting system has developed in new form to control activities. This new role influences the members of the organization to realize effective cost management to chase every potential cost reduction chance. In literature cost management is defined in different ways. Cost management is used for planning and controlling costs and it has different methods. Monden & Sakurai (1989) stated that some people consider cost management as cost reduction and cost control activities while other as only cost control. Accountancy SA (2009) defined cost management as a “proactive
process of identifying causes of costs, with the objectives of managing and minimizing the total costs associated with the production of products and services to customers”. Cooper (1996) opined that companies need to refined cost management systems to improve their performance. Horngren et al. (2006) defined cost management as the set of actions that managers take to satisfy customers while continuously reducing and controlling costs. Cooper (1995) defined cost management as the creation of stress to reduce and control costs. Kato (1993) mentioned that in today’s ever changing environment cost reduction is good but it should without sacrifice quality, functions and characteristics of the product. Therefore effective cost management requires that managers should enthusiastically look for cost reduction opportunities with the maintenance of product value for the customer’s point of view. Furthermore, Cooper (1995) argued that cost management includes all aspects of production and distribution of the product like the supply of purchased parts, design of products and other. On a basic level cost management is used for two aspects: (1) managerial decision making and (2) productivity improvement. The appropriate costing methods provide right type of information at the right time which helps the managers in decision making and these methods can be used for better productivity also. Cost management is presently one of the main topics of attention in the area of project management.

High technology companies which were mainly worried and working with time-based competition now under the highly competitive conditions they are focusing on cost based competition. If companies are aware about new costing methods then costs are still controllable for companies. Cost management is similar to wringing out a wet cloth even when the cloth seems dry. There is also a need to improve project cost control (Nixon, 1998). Cost management system is like a planning and it is established to attain mainly four goals: (1) measuring cost of consumed resources used in core activities of the organization, (2) elimination of low value added activities and related cost, (3) decide the efficiency and effectiveness of key activities performed in organization and (4) determining value of new activities that pick up future performance of the organization (Lisa, 2002). Cost Management is the area in accounting that deals with methods of costing products and services and it provides managers and higher authority relevant information to planning and control of costs in the short run and in the long run
(Horngren et al., 2006). The intention of cost reduction says correct and improve cost management, prevention of wasted and non-effective costs and also prevention of wasting resources not the cutting of improvement costs.

Cost management should be involved each stage of a product’s life cycle and cost reduction in different stages individually does not direct whole cost reduction of product. Shields & Young (1991) argued that the whole life costs should be the primary focus of cost management in changing market environment. Cost management can be used as a performance measure to facilitate an organization to incorporate change into the quality of product or service (Brimon & Antos, 1994). Costs cannot be managed if the origin of cost is not identified or causes of costs should be identified and costs do not simply occur but costs are caused by activities. Langfield et al. (2006) defined cost management, as the improvement of a firm’s cost effectiveness by understanding and managing the real causes of cost. However the critical focus of cost management is on costs though it also tries to improve other aspect such as quality and price of product. Drury (2008) said that cost management refers to those actions that managers take to reduce costs and the ideal situation is to take action that can both reduce costs and enhances customer satisfaction.

Hilton et al. (2006) defined cost management as a philosophy of seeking increased customer value at a reduced cost, an attitude that all costs are caused by management decisions and a reliable set of techniques that increases value and reduces costs.

Therefore finally cost management can be concluded as a system which involves actions taken by managers to reduce cost, to increase customer’s value and managers are aware about the effect of their decisions on the costs. In cost management both financial and nonfinancial information has importance for the success of the company and due to this reason the function of cost accounting and management has extended. Cooper (1995) argued that behavioral and organizational factors such as top management support, sufficient internal resources, training, commitment, motivation etc. influencing the success of cost management systems implementation. Cost management and cost control are sometimes used as similar terms. Drury (2008) stated cost management includes all those actions that are taken by management to reduce costs by studying the cost drivers and suggesting improvements in processes. This helps in process improvements and related cost reductions with customer satisfaction. According to Drury (2008) cost control
denotes the comparison of actual results with the budget or standard, analyzing variances that occur and finally establishing remedial actions to prevent deviations from the set standard. At present the firm’s cost management systems must be dynamic to adjust with the quickly changing environment, increasing range of products and manufacturing processes. Now cost management has turned from a traditional role to strategic cost management. Monden & Hamada (1991) pointed out that in keen competition cost management is essential to launch new products at lowest cost which can also meet customers’ demands as well as reduce costs of existing products by eliminating wastes.

1.8 TRADITIONAL COST MANAGEMENT SYSTEMS

Volume-based systems are also known as traditional/conventional costing systems. Traditional costing system was developed in the 1920s (Johnson & Kaplan, 1987). In 1920s manufacturing companies were working on mainly labour intensive techniques and production processes were also very simple (Kidd, 1994). The overhead cost was allocated on labour basis therefore, a product consuming more overheads cost because single absorption/allocation base was used to allocate overheads cost and it may not be appropriate and this is the key reason that traditional costing systems provide inaccurate product costs.

Traditional costing systems perform a poor job of attributing the expenses that do not support adequate allocation of resources to the production (Cooper & Kaplan, 1988a). In traditional costing total manufacturing cost is the sum of direct materials cost, direct labour cost and direct manufacturing costs and to obtain a full cost estimate including indirect or non-manufacturing overheads and the indirect manufacturing overheads cost for each product were usually distributed through two stage processes. First separate out the indirect cost which is directly used in the manufacturing processes of the concerned product like plant depreciation, supervisors’ wages and factory cleaning. Second for overheads cost allocation departments use different factors which are seemed most appropriate as base like direct labour cost base, direct materials cost base or machine hours base for overheads cost allocation which cannot be separated or for common costs. Traditional cost-based pricing which is illustrated in figure 1.2 is used to determine price
of new product when products were long-lived and there was comparatively little competitive markets.

![Diagram](image.png)

**Figure 1.2:** Traditional cost-based pricing for a new product

**Source:** Adapted from Morse et al. (1996)

Traditional costing methods are used to hold only the financial accounting requirements and the costs allocated to a specific product are not causally related to its value. Traditional costing methods focus primarily on lowering product costs.

### 1.8.1 FAILURE / LIMITATIONS OF TRADITIONAL COST MANAGEMENT SYSTEMS

Traditional cost-accounting approaches have been used by manufacturers well over a long period but due to the changing nature of the modern manufacturing environment traditional cost-accounting approaches are no longer think suitable (Gagne & Discenza, 1993). Conventional cost management and cost plus pricing strategies are not very effective in current environment (Castellano & Young, 2003). In the same way Monden
& Lee (1993) said that standard cost systems are being used as the primary cost control measure for the last several decades but now this seems not much effective in present market environment. In today’s competitive environment such traditional cost-based pricing methods may not be successful. Morse et al. (1996) argued that fierce competitive pressures have reduced the lifecycle of products and the time to bring new products to the market. Morse et al. (1996) outlined that the cost-plus pricing methods do not involve suppliers in the early stages of product design even after the final product is designed, therefore the failure to involve suppliers causes of delays and it reduce possibilities of low cost production. Druker (2005) used the cost-driven pricing as a “deadly business sin” and stated that most American and European companies were using this system and often they dropped a perfectly good product because it was priced incorrectly. Morse et al. (1996) said that cost-based prices are no longer suitable in today’s competitive environment. Several old management methods and techniques are useful to improve one or more functions or processes in an industry but the old methods do not take the complete life cycle of product into consideration.

Traditional cost systems provide distorted information and too late to be used in reducing cost. Conventionally, the cost of products was constructed for balance sheet purposes and for information not for improvement. In traditional costing methods companies firstly develop products then calculate the product’s costs and after this add a profit margin to determine sale price but this price can be accepted or not in market. These limitations of traditional costing methods demanded the implementation of new management accounting systems that focuses on entire value and profitability of the product (Maskell & Baggaley, 2002). Cooper & Kaplan (1987) revealed that the main limitations of traditional costing systems occur from the use of volume related bases and traditional costing systems were appropriate decades ago for a less competitive environment considerably different from that of today. The major criticism of traditional costing systems is the distortion costing information which is not according changes in production technology. Cooper & Kaplan (1988) highlighted a number of factors that root the distortions of information resulting from the use of traditional costing systems and these factors are production volume diversity, complexity diversity, size diversity, material diversity and set-up diversity. Mishra & Vaysman (2001) stated that the
implementations of traditional costing systems are less expensive though these systems provide distortions in product costing. Managers if take decisions about the product-mix, cost control, pricing and other decisions according the distorted information then these may lead long-run losses for company. Kaplan (1988) pointed out some reasons of traditional costing systems failure these are: (1) lack of feedback about the use of resources and operational control (2) measurement difficulty of individual product costs and profits (3) not realization of competitive advantages, (4) depends on outside competitors and suppliers (5) not draw attention to those activities which generate the extra overhead cost and (6) weak control on activities.

Bastl et al. (2010) stated that traditional costing practices are unable to work in an inter-organizational focus and not allied costing information. Drury (1996) highlighted the main criticisms of conventional management accounting practice as: (1) these practices do not meet the requirements of today’s manufacturing and competitive environment, (2) traditional costing systems give misleading information for decision-making and (3) conventional management accounting focuses entirely on internal activities and give little attention to the external environment. Johnsons & Kaplan (1987) stated that traditional management accounting systems turn out ambiguous management information and the traditional bases of cost allocation become irrelevant in current environment. Many firms have realized that traditional costing systems like standard costing are inadequate to identify appropriate costs in manufacturing processes and now manufacturing firms are moving to adopt target costing and kaizen costing as an emerging strategic management tools. The old cost management systems fail to provide correct and quickly product costs information. Traditional cost systems have been severely criticized by different authors since the late 1980s. Finally the main drawbacks of traditional cost systems is that they provide inappropriate measures for indirect or overhead costs allocation and leading distorted product costs information.

1.8.2 TRADITIONAL COST MANAGEMENT SYSTEMS VS. NEW COST MANAGEMENT SYSTEMS

According to Drury (2008) during 1980s, traditional management accounting practices were criticized and new approaches that are more adjustable with today’s business
environment are advocated. The center of attention of the traditional management accounting practices was on just comparing actual results with fixed standard (typically a budget), to identifying and analyzing variances and taking corrective action to ensure that upcoming outcomes conformed to budgeted outcomes. Therefore the traditional management practices were based in the preserving of the standard or status quo and the ways of performing existing activities were not changed. The stress of the traditional management accounting practices was on cost control/containment rather than cost reduction while new approaches to cost management focus on cost reduction than cost containment (Drury, 2008). Traditionally, manufacturers were worried only about the cost incurred up to production time and not much attention was shown for the cost incur after production. Intensified competition of present market along with the high technology have been increased the responsibility of the manufacturers. New cost management systems become more important as manufacturers become more conscious about both environmental and customer service costs. Traditional management accounting systems were designed to use an era in which people worked without technology.

Now in cost management systems, costs become a device for continuous improvement and it is used by management to achieve a competitive advantage. Traditional cost management methods focus on cost containment (control) which tries to sustain previous condition while modern cost management methods focus on cost reduction and try to lower costs to pre-established levels. The traditional management accounting practices are criticized in the literature though these are used even in today’s environment by many manufacturing companies but big enterprise are now moving towards new management accounting systems for cost management. Traditional costing systems have a tendency to control the work of employees, not learning effect on the employees (Kaplan & Cooper, 1998). The new methods of cost accounting help to remove this problem by using financial information with non-financial information (Kaplan & Cooper, 1998).

According to Langfield et al. (2006) the major differences between the concepts of traditional and modern cost management systems are shown in table 1.2.
Manager’s control costs through predetermined goal, with the use of budgeted or standard cost and these systems mainly focus the cost results or outcomes.

- The major focus is on controlling costs of products in the organization.

- Managers control costs through reporting results on the basis of the functional areas like production, marketing and administration.

| • Reduces costs by finding wasted resources and eliminating these wastes through finding the factors that force costs. |
| • The major focus is on controlling costs and achieving better quality or value for the customer. |
| • Recognizes the customers’ requirements which are met by processes in cross functional areas. |

### Table 1.2: Traditional cost management systems vs. New cost management systems

**Source**: Adapted from Langfield et al. (2006)

Due to the criticisms of traditional methods changes or innovation take place in management accounting. The innovations in management accounting offer more significant, accurate and appropriate information for decisions within a proper time period to resolve the problems of traditional management accounting techniques (Preda & Watts, 2004). Hence managers are encouraged to use the new costing systems to avoid wrong decisions regarding products. As global competition has enlarged it has increased pressure on firms to follow excellence in terms of quality and cost, and with the use of outdated costing systems it is difficult to attain excellence in quality and cost. However, literature states that the conventional cost management focuses more on running processes and less on innovations. Nevertheless, later due to the better awareness of target costing in the 1990s (in the Western world), cost management give more attention on innovation processes and new product development (Cooper & Slagmulder, 1997).
1.9 MODERN / STRATEGIC COST MANAGEMENT

Cost management is often associated with cost reduction programs. However, the endeavors of cost management are to remove costs that stand no longtime potential of success (Voigt & Sturm, 2001). To keep costs down today the competitive environment demands the use of sophisticated cost management practices. Hence mainly in the field of innovations, cost management which is proactive can be fruitful. Now cost management focuses on change, cost reduction and continuous improvement. Cost management and management accounting has developed to response present business environment. Many cost management methods are known and developed by engineers to adjust and response against industrialization (Johnson & Kaplan, 1987). High competition requires adoption of modern cost management techniques to manage costs. To achieve higher global ranking and stability in international markets companies’ management are moving to consider new management style called strategic cost management. Today manufacturing firms focus on different aspect of cost management. To fulfill their goals mostly manufacturing companies have adopted a number of modern techniques such as just-in-time, total quality management, lean manufacturing, target costing and process improvement etc. and the objectives of all these techniques is to reduce cost of product and improve quality. Today the critical objective of manufacturing industries is increasing productivity, management of product cost and incremental improvements which can be achieved by using modern cost management techniques like kaizen costing and target costing. Now companies are taking interest in modern cost management systems and have moved to use these techniques. Modern cost accounting systems are effective and appropriate and provide information with multi-dimensional focus on customers, functions, processes, products, services, and activities.

Strategy is defined as a set of goals and precise action plans which leads the desired competitive advantage (Thompson, 1995). Clark & Fujimoto (1991) said that strategic thinking is merely the ability to adapt the organization so that it can do well in its future environment. Chandler (1962) defined strategy as “the determination of the basic long-term goals and objectives of an enterprise, the adoption of courses of action, and the allocation of resources necessary for carrying out these goals”. Strategy is about
performing different activities from competitors or similar activities performing in different ways. In general strategic management is related to long term planning about the organization’s future performance. The goal of strategic cost management is to create sustainable competitive advantage and it is difficult to maintain a competitive advantage in current market situations. Strategic management involves the execution and identification of goals and action plans. The rising pressures of technological innovation, global competition and changes in business processes have proved strategic cost management essential for any firm. As the part of strategic cost management long-term thinking involves expected changes in products and production processes to accommodate customer demands where flexibility is important.

The capability to make fast changes is critical (Blocher et al., 1999). Strategic cost management is not a technique or a tool but it is a philosophy or the process of integrating cost management, the objective of which is to reduce costs to best possible products/services with available resources. It is a specific term which helps in major strategic decisions and covers the use of cost and management accounting and all costing methods have a role to play in this system. According to Hansen & Mowen (2003) strategic cost management requires integrative thinking to identify and solve problems through a cross-functional view. The integrative approach combines skills of all functions like marketing, production, finance and accounting at the same time though the cross-functional teams. The integrative approach is suitable in a dynamic and competitive environment and it organizes cross-functional teams of specialists from different departments that all endeavors for a certain goal such as cost, quality, and lead time through integrated planning and execution system (Holland et al., 2000). The strategic variables cost, quality and time are rising as important cost management factors and these has moved from a traditional role to broad product costing and operational control in strategic cost management (Blocher et al., 1999; Hansen & Mowen, 2003).

Strategic cost management is not merely cost management but it can improve revenues, productivity, customer satisfaction and position of the company. Strategic cost management is the success-driver of the company which can contribute in shaping the future of the company. Cooper & Slagmulder (1998) discussed that strategic cost management is the application of cost management techniques to reduce costs and to
improve the position of the company. Shank & Govindarajan (1993) stated that strategic cost management is the managerial use of cost information to hold the strategic objectives of the company. Strategic cost management has been studied for the use of target costing technique (Ansari & Bell, 1997). Literature states that cost management includes two main aspects in its scope namely, cost management system and cost management structure. Where cost management system includes activities like cost planning and cost monitoring and the techniques which can hold cost management activities and objects like resources, processes and products while cost management structure is related with cost management framework. Granlund (1996) acknowledged that strategic cost management is about managing costs for two aspects financial and competitive advantage. Cooper & Slagmulder (1997) noted that highly competitive markets have low profit margins and low customer loyalty. Now fierce competitions between competitors and consumers demands have increased the importance of strategic cost management. Cooper (1995) pointed out that a firm has to reduce its products costs as speedily as its competitors to maintain its profit margin for long time. Therefore all firms have to handle costs forcefully in order to survive in market.

1.10 ADOPTION OF COST MANAGEMENT SYSTEMS

The cost management concepts mainly can be categorized into two different sets. The first cost management concepts set is associated to innovation and new product development activities and the second cost management concepts set is associated to running operations and offerings. The first cost management concepts set can be managed with target costing method and the second cost management concepts set can be managed with kaizen costing. This thesis focuses on both sets of cost management concepts or both cost management methods are taken into consideration. Target costing and kaizen costing are two costing systems that have been used to execute the new costing approach. Target costing is that product cost which must be less for a product to generate a profit in the competitive marketplace (Winchell, 1989). The next situation leading ever developing form of business processes and it is called “the kaizen philosophy” (Roslender, 1996). Kaizen costing means continuous improvement which is concerned to reduce cost of a product during manufacturing stage (Cooper, 1995).
In today’s world of automation and intense competition, more accurate cost allocations and control are needed for success in market (Krumwiede & Roth, 1997). Target costing and kaizen costing systems are developed and these systems are given extensive attention because these systems do not adjust only manufacturing costs of products like the conventional cost systems, but also adjust other costs like administrative costs, marketing costs etc. Literature states that Target costing and kaizen costing systems can facilitate companies, cost reduction, cost control, better decision making and improved profitability. These benefits are creating competitive opportunities for companies. These cost management systems are being used by many competitive firms widely since1990s. A well-designed target costing system with kaizen costing can manage all three features quality, cost and time elements of the strategic cost management. Jariri & Zegordi (2008) labeled target costing as a tool of cost management. Cooper & Slagmulder (1997) claimed that target costing is adopted as a forward approach in contrast to the conventional cost management techniques. To attain success of company target costing and kaizen costing can be practical solutions as these have such attributes which firms or adopters can use to produce higher quality products or services at competitive low price. Target costing and kaizen costing techniques were originated in Japan and these techniques received increasing attention in manufacturing companies in reaching decisions regarding new products and existing products. Target costing and kaizen costing are important for strategic cost management. The competitive business environment raises requirement to use these techniques by companies to match the requirements of products and market. Target costing has demonstrated as highly successful system in reducing costs and increasing values of products in the automotive and manufacturing industries (Cooper & Slagmulder, 1997).

**Target Costing and Kaizen Costing** are recognized as most significant base for inter-company price setting and cost management in previous studies. Target costing and kaizen costing combined approach has been developed by Japanese automotive industry where this approach plays a vital role in the achievement of the quality and cost goals set in customer specifications. Strategic cost management well remarked the internal as well as external orientation and the term external can be referred to suppliers and customers while the term internal can be referred to employees of the organization. In a value chain
perspective the external information can enable a company to build linkages with suppliers as well as customers. Finally the term external can be referred to the market. It means focusing on the product that can satisfy customer’s needs but with appropriate product attribute costs.

Supply Chain Management has received considerable attention from manufacturing companies because now the manufacturing companies consider supply chain management as an opportunity for cost lowering. Literature shows that supply chain management is a way of better service rendering and customer satisfactions. Supply chain management is the management among key stakeholders and enterprise to attain the maximization of value creation for customer satisfaction.

Inter-Organizational Cost Management is a concept that requires the recognition of transaction cost with supply chain members. With the integration of Inter-organizational cost management the overall performance of an organization can be improved by managing its relationships with its supply chain members or external stakeholders such as suppliers and customers.

The target costing and kaizen costing systems are efficient systems used by the companies but the implementation of these systems require a dramatic change in the way in which costs are allocated to products and the implementation of these techniques is affected by the sources, strength of support level of people involved and the attitude of organization to solve the problems. According to literature both techniques have proved as effective cost management tools. In order to boost cost management many large companies have been adopted these techniques. Although the concepts of target costing and kaizen costing are simple but the implementation of these systems needs a broad collaboration inside and outside of the organization. These methods of cost management are market-driven approaches and the successful implementation of these systems require a wide organizational commitment, wide market research, design characteristics of the products, focus on customer demands, cross-functional teams and suppliers integration. Just about 1960s suggestion schemes developed at Japanese companies. The increasing participation contributed to build up a link between kaizen costing and target costing. In-advance planning of the manufacturing processes company determines quality, cross-functionally arranged cost management and quality assurance system (Toyota Motor
Corporation, 1987). In the key concept cross-functional management each function is managed independently in target costing development process. The activities to proper use the key success factors cost, quality, innovation and time of development of a product are passed throughout mainly at the development and design stages which involve a multi-functional team from the participating departments as well as other members of the supply chain mainly the suppliers (Ansari & Bell, 1997). In today’s highly competitive environment manufacturing firms cannot ignore target costing and kaizen costing techniques to increase their profits.