STRATEGIC COST MANAGEMENT
Dedicated to the Sacred Memory of My Parents
Today, many changes have taken place in the business environment which is characterised by vigorous global and domestic competitions, globalization of markets and industry, providing value to customers becoming the focal point, advances in manufacturing system and technology, growth of service industry, rapid technological change, increasing deregulation, total quality management. These changes have influenced greatly the working, survival and sustainability of business organizations who have realised the need to create and sustain competitive advantage. To succeed in competition, business organizations need to develop strategy and action plans to set themselves apart from competitors and to provide value to their customers with their quality product and service.

The changes which have taken (or are taking) place in business and industry have affected cost accounting, cost management and management accounting. It has been realised that the traditional cost accounting and management accounting systems cannot provide useful, timely information for product costing, performance evaluation, and activities and process management. The cost systems used by business firms are not helpful to them in facing today's competitive environment and in providing a competitive advantage among the competitors. Furthermore, managing a business is now not merely a managerial or functional process; it is a strategy — focussed. Business firms now desperately need to identify, analyse and develop methods and opportunities for improving the costs with a view to drive profit and performance.

The text, Strategic Cost Management, presents a comprehensive coverage of modern cost management techniques to fulfill the needs of business organizations in the new competitive environment. This book provides a new framework to the vital issue of cost management, use of cost information to design a firm’s competitive strategy and provide enhanced value to customers, shareholders and other stakeholders. The book creates a logical linkage between the concepts and procedures and how these can be used in practice by business organizations. It discusses cost management techniques in detail and their role in strategic decision-making of a firm and building and sustaining competitiveness.

**Structure of the Book**

The book is divided into four parts:

**Part One**

**Part Two**

**Part Three**

**Part Four**
understand concepts and theories underlying strategic cost management. Each chapter has the following components;

- Comprehensive and Updated Coverage — The book presents latest adequate materials on cost management concepts, techniques and use of information for strategic planning and decision making.
- Learning Objectives — These appear at the beginning of each chapter.
- Examples and Illustrative Numerical Problems — Real — world illustrative problems have been included in the chapters for better understanding of cost management principles and techniques.
- Review Questions — Thought — provoking and real-life theory questions are given at the end of each chapter to test students’ understanding of materials presented in the chapter. These review questions require critical analysis and can be used as written assignments or as a basis of classroom/group discussion.
- Exercises — Exercises are included as end of chapter materials and support learning objectives given in the beginning of each chapter. They help in restrengthening the students’ understanding of chapter concepts before they take review problems and cases requiring computation.
- Review Problems — Problems with answers with varying degrees of difficulty have been given in the most chapters. Students are required to apply their deeper knowledge of chapter materials to solve these problems since they would help them in better learning and understanding of the subject matter. These numerical problems generally involve more than one issue and contain difficult computations, straightforward requirements calling for decisions, interpretations or ‘what if’ answers.
- Cases — Almost all chapters in the book have managerial cases implying more complexity, analysis and synthesis. They would help students to extend their thought process to new situations and to shift from classroom to the business world to enhance their analytical power and to use multiple concepts to solve them.
- Adapted Problems — Numerous adapted CMA (USA), C.A., I.C.W.A., M.B.A., M.Com., problems are included to help students prepare for these examinations.

With the above pedagogical and appealing features, the text presents a balanced blend of conceptual framework, cost management techniques, use of cost accounting information and emerging themes in today’s business world. The organisation and discussion of materials are clear, concise, readable and fine tuned.

The text has been primarily written for postgraduate students of commerce, management and accountancy in Indian universities, management institutes, business schools and professional institutes. In particular, the book is an ideal text for M.Com., and M.B.A. students. It will be equally useful to the students who are pursuing C.A., I.C.W.A., C.F.A., Company Secretaryship and management and professional courses. The book can be used by practicing managers and professionals as well and by those who want to build career in strategic cost management.

I express my appreciation to Institute of Management Accountants, USA especially Priscilla S. Payne, Managing Director, for their generous permission to use problems and answers from past CMA examinations.

I welcome suggestions and views to further improve the quality of the book and to make it highly useful text in all respects for the students.

The author can be reached at jlsrivastava@hotmail.com.

PROF. JAWAHAR LAL
Acknowledgements

I have been stimulated to produce this text after many years of teaching management accounting to postgraduate students in University of Delhi and association with this subject since a long time. Some books on cost management have been published. But I believe that there is a need for a book on strategic cost management with discussion of quality materials, contemporary concepts and approaches and student-friendly presentation.

In preparing the text, I have been benefited by opinions of colleagues in accounting and other disciplines in University of Delhi and other institutions, interaction with practicing managers, and speakers at management development seminars and programmes. I have also been motivated greatly by writings of many reputed researchers and writers who have contributed to cost management by their scholarly studies and publications. The text has included their writings and recommendations to provide students newer knowledge and theory.

I express my deep appreciation of assistance provided by the Institute of Certified Management Accountants of the Institute of Management Accountants, USA and permitting to use questions and answers from their past CMA examinations. I express my sincere thanks to Priscilla S. Payne, Managing Director of the Institute of Certified Management Accountants USA for providing prompt assistance and enabling me to complete this text.

I have been getting continuously all support and encouragement from my family — wife Pratibha, children Sanjay, Seema, Rajnish — in all my academic activities and in completing this project as well. I sincerely acknowledge and appreciate their valuable cooperation.

Attempts have been made to produce a quality text to fit students’ and others’ needs. However, there is always scope for improvement. I welcome comments and suggestions to improve the text with a view to make it more useful and better for the students.

PROF. JAWAHAR LAL
“Whoever is careless with the truth in small matters cannot be trusted with important matters.”

— Albert Einstein : German—Swiss—American Scientist

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PART ONE
OVERVIEW AND BASIC CONCEPTS

Chapter 1: Cost Management: Nature and Scope
Chapter 2: Basic Cost Concepts
CHAPTER 1

LEARNING OBJECTIVES

1. Define Cost Management
2. Explain Cost Management System (CMS) and Objectives of CMS.
3. Explain Strategic Cost Management (SCM).
4. Discuss Strategic Cost Management Linked to Strategies.
5. Explain Factors Influencing Cost Management.
6. Discuss Key Components of a Cost Management System.
COST MANAGEMENT

Cost Management is a broad concept than cost accounting, cost control, cost reduction. Cost management information is the information the management needs to effectively manage the firm and includes both financial information about cost and revenues as well as relevant non-financial information about productivity, quality and other key success factors for the firm to lead the firm to competitive success. In cost management, the objective is to increase productivity of resources and factors of production and to relate them to enhance profitability. It continuously looks for and identifies opportunities to have higher return on investment by studying customer needs, bringing improvement in the existing products or services, smoothening process and layout of manufacturing goods or services with a view to supply them to the customers and to ensure customer satisfaction so as to maximise margins and earn higher profits. In this way, cost management achieves its goals by creating and sustaining linkages among revenue, cost, products manufactured or services rendered and the use of resources and infrastructure of an organization.

Cost Management identifies, collects, measures, classifies and reports information that is useful to managers and other internal users in cost ascertainment, planning, controlling and decision-making.

Horngreen, Datar and Foster\(^1\) are of the opinion that the term cost management has no uniform definition. Therefore, these authors use cost management to describe the approaches and activities of managers in short-run and long-run planning and control decisions which increase value for customers and lower the costs of products and services. For example, managers make decisions regarding the amounts and kinds of materials being used, changes in plant processes and changes in product designs. Information from accounting systems helps managers to manage costs but the information and the accounting systems themselves are not cost management.

Cost management in its broadest sense includes all of the activities and related infrastructures that an enterprise employs to set and measure the achievement of its goals and objectives. Cost management provides the vital link between a firm’s strategy and its evaluation process, and seeks to determine whether business activities are aligned with and contributing to the successful execution of the strategy. This includes measuring not only enterprise — wide cost but also each organizational unit contribution to the overall cost.

Developing information within cost management requires that one should be aware about the cost structure of a business enterprise. Managers should know how to ascertain costs of different activities, processes, customers, goods, services and any other costing objects. Financial accounting does not deal with these costs and these costs are not found on the financial statements. However, knowledge about these costs is essential to help managers in productivity enhancement, strategic planning and management, total quality management, management control.

Cost control refers to management actions to keep the costs within standards and/or budget. Cost control can be defined as the comparative analysis of actual costs with appropriate standards or budgets to facilitate performance evaluation and formulation of corrective measures. It aims at accomplishing conformity between actual results and standards or budgets, keeping expenditures within prescribed limits. Cost control has the following features:

1. Creation of responsibility centres with defined authority and responsibility for cost incurrence.
2. Formulation of standards and budgets that incorporate objectives and goals to be achieved.
3. Timely cost control reports (responsibility reporting) describing the variances between budgets and standards and actual performance.

4. Formulation of corrective measures to eliminate and reduce unfavourable variances.

5. A systematic and fair plan of motivation to encourage workers to accomplish budgetary goals.

6. Follow-up to ensure that corrective measures are being effectively applied.

Cost control does not necessarily mean reducing the cost but its aim is to have the maximum utility of cost incurred. In other words, the objective of cost control is the performance of the same job at a lower cost or a better performance for the same cost.

Cost reduction may be defined as a planned, positive approach to bring costs down. It implies real and permanent reduction in the unit cost of goods manufactured or services rendered without impairing the (product or goods) quality or suitability for the use intended, that is, without reducing their value in terms of utility or satisfaction to the customers. The goal of cost reduction is achieved in two ways: (i) by reducing the cost per unit and (ii) by increasing productivity. The steps for cost reduction include elimination of waste, improving operations, increasing productivity, search for cheaper materials, improved standards of quality, finding other means to reduce unit costs.

Cost reduction has to be achieved using internal factors within the organization. Reduction of costs due to external factors such as reduction in taxes, government subsidies, grant, etc., do not come under the concept of cost reduction. It should not be the result of wind falls.

With the globalisation of the Indian economy, it is necessary to reduce costs so that prices of our goods are really competitive in the world markets. This requires a massive effort on cost reduction in Indian industries. Thus, cost reduction techniques occupy a prominent position in any organization aiming to maximise profits.

Management should always attempt to remove difficulties generally found in cost reduction programmes. Some such difficulties are as follows:

(i) Workers and employees may not welcome cost reduction programmes and may resist their implementation.

(ii) Cost reduction programmes are generally carried out on an ad hoc basis.

(iii) The schemes may be applied in some areas but it should cover all activities.

(iv) Cost reduction programmes may be implemented hurriedly, whereas, they should be carried out after careful thought and in a planned manner.

Cost reduction is a much wider concept than cost control. As stated earlier, cost control aims at controlling costs within prescribed limits with the help of budgets and standards. The following are the differences between the two:

| Cost control process involves: (a) setting targets and standards, (b) ascertaining actual performance, (c) comparing actual performance with targets, (d) investigating the variances, and (e) taking corrective measures. | Cost reduction is not concerned with setting targets and standards and maintaining performance according to standards. It involves critical examination of the various products, processes, |
Both cost control and cost reduction are continuous processes in an enterprise. In all organizations, there should be planned, dynamic programme for cost reduction so that cost standards required for cost control may be improved continuously. However, cost reduction programme is neither a substitute nor it can replace a cost control system which emphasizes prompt investigation into variances and taking immediate corrective actions.

COST AVOIDANCE AND REDUCTION
According to Guan, Hansen and Mowen, a cost management system consists of two subsystems: the cost accounting system and the operational control system.

**Cost Accounting System:**

**Operational Control System:**

---

**EXHIBIT 1.1**
EXHIBIT 1.1. Subsystems of an Accounting Information System
Objectives of Cost Management System (CMS)

1. Accurate product/service costs:

2. Assessing product and service profitability:

3. Understanding internal processes and activities:

4. Controlling costs:

5. Assisting in achieving strategies:
strategic plan,

value chain,

Activity-based management

defines strategic cost management in the following words:

“It (SCM) is cost analysis in a broader context, where the strategic elements become more conscious, explicit and formal. Here, cost data is used to develop superior strategies enroute to gaining sustainable competitive advantage.... A sophisticated understanding of a firm’s cost structure can go a long way in the search for sustainable competitive advantage. This is strategic cost management.”

Competitive and structural changes in business have focused the attention of business enterprises on the enhancement of their cost management processes and systems. Strategic

EXHIBIT 1.2: Consequences of Lack of Strategic Information

- Decision-making based on guesses and intuition only
- Lack of clarity about direction and goals
- Lack of a clear and favourable perception of the firm by customers and supplier
- Incorrect investment decisions; choosing products, markets, or manufacturing processes inconsistent with strategic goals.
- Inability to effectively benchmark competitors, resulting in lack of knowledge about more effective competitive strategies.
- Failure to identify most profitable products, customers, and markets.

**TRADITIONAL COST MANAGEMENT VERSUS STRATEGIC COST MANAGEMENT**

Traditional cost management depends on conventional cost accounting and data generated in this system. Basically variance analysis is done in respect of each element of costs — material, labour and overhead — to evaluate performance, to control costs and to take corrective actions. Overhead variances encourage management to maximize production as a way to absorb overhead costs and to avoid unfavourable variances. Managers are rewarded or penalised for unfavourable variances in their respective performances. Traditional cost-management aims at meeting the standard costs. It institutionalizes and provides in the system normal allowance for waste, scrap, rework, etc. Traditional cost management considers only financial measures developed under cost accounting system to judge the performance and reward/punish the managers accordingly.

Exhibit 1.3 shows the difference between traditional cost management and strategic cost management.

**EXHIBIT 1.3: Traditional Cost Management Versus Strategic Cost Management**

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<th>Strategic Cost Management</th>
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<td>1. Standard cost system with normal allowance for scrap, waste, rework; zero defect standard is not practical</td>
<td>1. No allowance for scrap, waste, rework; zero defect is the concept</td>
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<tr>
<td>2. Overhead variance analysis; maximize production volume (not quality) to absorb overhead</td>
<td>2. Overhead absorption is not the key; standard costs and variance analysis are deemphasized, in general</td>
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<td>3. Variance analysis on raw material price; procurement from multiple suppliers to avoid unfavorable price variance; low price/low-quality raw materials</td>
<td>3. No control on raw material price; certify vendors who can deliver right quantity, right quality, and on time.</td>
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<td>4. No emphasis on nonfinancial performance measures</td>
<td>4. Heavy use of nonfinancial measures (parts-per-million defects, percentage yields, scrap, unscheduled machine down times, first-pass yields, number of employee suggestions)</td>
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<td>5. No tracking of customer acceptance</td>
<td>5. Systematic tracking of customer acceptance (customer complaints, order lead time, on-time delivery, incidence of failures in customers’ locations)</td>
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<td>6. No cost of quality analysis</td>
<td>6. Quality costing as a diagnostic and management control tool</td>
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**CONTROL PHILOSOPHY**

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<td>1. The goal is kaizen</td>
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<td>2. The annual target is to meet the standards</td>
<td>2. Industry norms set the floor</td>
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<td>3. Standards are to be met, not exceeded</td>
<td>3. The annual target is to beat last year’s performance</td>
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<td>4. Standards are tough but attainable</td>
<td>4. Try to beat this year’s target (continual improvements)</td>
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<tr>
<td>5. A regularly exceeded standard is not tough enough</td>
<td>5. Each achievement level sets a new floor for future achievement</td>
</tr>
</tbody>
</table>


**STRATEGIC COST MANAGEMENT LINKED TO STRATEGIES**

As said earlier, strategic cost management is tied with strategies that provides a company with reasonable assurance of long-term growth and survival which, in turn, yields sustainable competitive advantage.

**Strategies**

A firm succeeds by implementing a strategy, that is, a set of policies, procedures and approaches to business that produce long-term success. Finding a strategy begins with determining the purpose and
long-range direction, and therefore, the mission of the company. The mission is developed into specific performance objectives, which are then implemented by specific corporate strategies, that is, specific actions to achieve the objectives that will fulfill the mission. Organizations need to link goals to overall strategies. This can happen only if people and teams understand the value creation process and embrace the framework as a part of their culture. The framework for cost management should continuously be challenged to ensure that the information needs are kept current as strategies change to meet competitive pressures and opportunities.

Hilton, Maher and Selto\textsuperscript{8} observe that to develop a strategy, managers answer two basic questions: (1) where do we want to go? and (2) how do we want to get there. One cost management role is to provide “financial reality” to the answers to these questions and to the development of a successful strategy by focusing the organization on providing more value at lower cost.

Strategic decision-making determines “where” and “how” by choosing and implementing actions that will affect an organization’s future abilities to achieve its goals. For example, strategic decisions might include launching an innovative product line to meet an emerging market or organizing to be the lowest-cost producer of an existing product.

**Competitive Advantage**

Competitive advantage is creating better customer value for the same or lower cost than offered by competitors or creating equivalent value for lower cost than offered by competitors. Customer value is the difference between what a customer receives (customer realization) and what the customer gives up (customer sacrifice). What is received by a customer is called the *total product*

\textit{Cost Leadership: lower cost}

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\textsuperscript{*} This discussion is adapted from Michael Porter, Competitive Advantage, the Free press, 1985. The Porter concept of competitive strategy is widely used.
A drawback of the cost leadership-strategy is that the firm has the tendency to cut costs in a way that undermines demand for the product or service, for example, by deleting key features of the product. The cost leader remains competitive only so long as the consumer sees that the product or service is (at least nearly) equivalent to competing products that cost somewhat more.

**Differentiation:** The differentiation strategy is implemented by creating a perception among consumers that the product or service is unique in some important way, usually by being of higher quality. This perception allows the firm to charge higher prices and outperform the competition in profits without reducing costs significantly. Most competitive advantage is created by providing something to customers that is not provided by competitors. Thus, product characteristics must be created that set the product apart from its competitors. Differences in products can be functional, aesthetic, or stylistic. Most industries, including automobile, consumer electronics, and industrial equipment have differentiated firms. Customers value differentiation in those product lines for which the perception of quality and image is important, as in cosmetics, jewellery, and automobiles.

Furthermore, the value added to the customer by differentiation must exceed the firm’s costs of providing the differentiation. If customers see the variations as important and if the value added to the customer exceeds the cost of providing the differentiation, then a competitive advantage has been established.

**Focusing:** A focusing strategy is selecting or emphasizing a market or customer segment in which to compete. One possibility is to select the markets and customers that appear attractive and then develop the capabilities to serve these targeted segments. Another possibility is to select specific segments where the firm’s core competencies in the segments are superior to those of competitors. A focusing strategy recognizes that not all segments (e.g. 

As used in the definition, “choosing market and customer segments” is actually focusing; “delivering value propositions” is choosing to increase customer realization and/or decrease sacrifice and, therefore, entails cost leadership and/or differentiation strategies, or a combination of the two. Developing the necessary capabilities to serve the segments is related to all three general strategies.

Porter\(^{11}\) illustrates the importance of competitive advantage linking it to the activities.

“A institution can outperform rivals only if it can establish a difference that it can preserve. It must deliver greater value to customers or create comparable value at a lower cost, or do both. The arithmetic of superior profitability then follows: delivering greater value allows an institution to charge higher average unit prices; greater efficiency results in lower unit costs. Ultimately, all differences between companies in cost or price derive from the hundreds of activities required to create, produce, sell, and deliver their products and services, such as calling on customers, assembling final products, and training employees. Cost is generated by performing activities, and cost advantage arises from performing particular activities more efficiently than competitors. Similarly, the differentiation arises from both
also observe that a firm succeeds by adopting and effectively implementing one of the strategies explained earlier. Recognize that although one strategy is generally dominant, a firm is most likely to employ all the strategies at the same time. However, a firm following the strategies is likely to succeed only if it achieves one of them significantly. A firm that does not achieve at least one strategy is not likely to be successful. This situation is what Michael Porter calls “getting stuck in the middle.” A firm that is stuck in the middle is not able to sustain a competitive advantage. Distinctive aspects of two competitive strategies are displayed below in Exhibit 1.4.

EXHIBIT 1.4: Distinctive Aspects of Cost Leadership and Differentiation

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Cost Leadership</th>
<th>Differentiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic target</td>
<td>Broad cross section of the market</td>
<td>Focused section of the market</td>
</tr>
<tr>
<td>Basis of competitive advantage</td>
<td>Lowest cost in the industry</td>
<td>Unique product or service</td>
</tr>
<tr>
<td>Product line</td>
<td>Limited selection</td>
<td>Wide variety, differentiating features</td>
</tr>
<tr>
<td>Production emphasis</td>
<td>Lowest possible cost with high quality and essential product features</td>
<td>Innovation in differentiating products</td>
</tr>
<tr>
<td>Marketing emphasis</td>
<td>Low price</td>
<td>Premium Price and innovative, differentiating features</td>
</tr>
</tbody>
</table>


FACTORS INFLUENCING COST MANAGEMENT

1. Changes in Business Environment and Competition
2. Manufacturing Technologies

is the ability to deliver the product or service faster than the competitors\textsuperscript{14}.

The service sector in a country’s economy has increased in importance. The service sector now constitutes a large segment of a country’s economy and its manpower.

Many services — among them accounting services, transportation, and medical services are exported. Experts predict that this sector will continue to expand in size and importance as service productivity grows. Deregulation of many services (\textit{e.g.}, airlines and telecommunications in the past and utilities in the present) has increased competition in the service industry. Many service organizations are scrambling to survive. The increased competition has made managers in this industry more conscious of the need to have accurate cost information for planning, controlling, continuous improvement, and decision-making. Thus, the changes in the service sector add to the demand for innovative and relevant cost management systems\textsuperscript{15}.

A key change in the business environment is increased \textit{consumer expectation} for product functionality and quality. Firms are concentrating on the delivery of value to the customer with the objective of establishing customer loyalty. This has resulted into shorter product life cycle, as firms seek to add new features and make new products as quickly as possible, thereby increasing the overall intensity of competition.

As a results, there is a need to evaluate process or activity to justify whether it is important to the customer. The cost management system must track information relating to a wide variety of activities important to customers (\textit{e.g.}, product quality, environmental performance, new product development, and delivery performance). Firms must compete not only in technological and manufacturing terms but also in terms of the speed of delivery and response.

In past years, a business firm typically succeeded by focusing on only a relatively small number of products with limited features and by organizing production into long, low-cost, and high-volume
production runs aided by assembly-line automation. The new business process focuses instead on customer satisfaction. Producing value for the customer changes the orientation of managers from low-cost production of large quantities to quality, service, timeliness of delivery, and the ability to respond to the customer’s desire for specific features.

5. Advances in Information Technology and E-commerce

Perhaps the most fundamental of all business changes in recent years has been the increasing use of information technology, the Internet, and e-commerce. Many significant developments have taken place in the areas of information technology. With automated manufacturing, computers are used to monitor and control operations. Because a computer is being used, a considerable amount of useful information can be collected, and managers can be informed about what is happening within an organization almost as it happens. An enterprise resource planning (ERP) system is a centralized database system that integrates all functional areas of a firm and provides access to real-time data from any functional area of the firm. Using this real-time data enables managers to continuously improve the efficiency of organizational units and processes.

The second major advance supplies the required tools: the availability of personal computers (PCs), online analytic programs (OLAP), and decision support systems (DSS). The PC serves as a communication link to the company's information system, and OLAP and DSS supply managers with the capability to use that information. Often, a PC acts as a networking terminal and is connected to an organization's database, allowing managers to access information more quickly, do their own analyses, and prepare their own reports.

The third major advance is the emergence of electronic commerce. E-commerce is any form of business that is executed using information and communications technology. Internet trading, electronic data interchange, and bar coding are examples of e-commerce. Internet trading allows buyers and sellers to come together and execute transactions from diverse locations and circumstances. Internet trading allows a company to act as a virtual organization, thus reducing overhead.

These technologies have fostered the growing strategic focus in cost management by reducing the time required for processing transactions and by expanding the individual manager's access to information within the firm, the industry, and the business environment around the world.

6. Organizational Management

Management in organization has changed in response to the changes in marketing and manufacturing. Because of the focus on customer satisfaction and value, the emphasis has shifted from financial and profit-based measures of performance to customer-related, nonfinancial performance measured such as quality, time to delivery, and service. Similarly, the hierarchical command and control type of organization is being replaced by a more flexible organization form that encourages teamwork and coordination among business functions. In response to these changes, cost management practices are also changing to include reports that are useful to cross-functional teams of managers, the reports reflect the multifunctional roles of these teams and include a variety of operating and financial information; product quality, unit cost, customer satisfaction, and production bottlenecks, for example.

The new business environment requires firms to be flexible and adaptable and to place greater responsibility in the hands of a more highly skilled workforce. Additionally, the changes tend to focus the firm on factors outside the production of its product or provision of its service to the ultimate consumer and the global society in which the consumer lives.
Exhibit 1.5 compares prior business environment with contemporary business environment and displays the changes in manufacturing, marketing and management in organizations.

### EXHIBIT 1.5: Comparison of Prior and Contemporary Business Environments

<table>
<thead>
<tr>
<th></th>
<th><strong>Prior Business Environment</strong></th>
<th><strong>Contemporary Business Environment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturing</strong></td>
<td>Economies of scale, standardization</td>
<td>Quality, functionality, customer satisfaction</td>
</tr>
<tr>
<td>Basis of competition</td>
<td>High volume, long production runs, significant levels of in-process and finished inventory</td>
<td>Low volume, short production runs, focus on reducing inventory levels and other non-value-added activities and costs.</td>
</tr>
<tr>
<td>Manufacturing process</td>
<td>Assembly line automation, isolated technology applications</td>
<td>Robotics, flexible manufacturing systems, integrated technology applications connected by networks.</td>
</tr>
<tr>
<td>Manufacturing technology</td>
<td>Machine-paced, low-level skills</td>
<td>Individually and team-paced, high-level skills</td>
</tr>
<tr>
<td>Required labour skills</td>
<td>Acceptance of a normal or usual amount of waste</td>
<td>Goal of zero defects</td>
</tr>
<tr>
<td>Emphasis on quality</td>
<td>Relatively few variations, long product life cycles</td>
<td>Large number of variations, short product life cycles</td>
</tr>
<tr>
<td>Marketing</td>
<td>Largely domestic</td>
<td>Global</td>
</tr>
<tr>
<td>Products</td>
<td></td>
<td>Financial and operating data, the firm's strategic success factors</td>
</tr>
<tr>
<td>Markets</td>
<td></td>
<td>Network-based organization forms, team focus—employee has more responsibility and control, coaching rather than command and control</td>
</tr>
<tr>
<td>Management Organization</td>
<td>Almost exclusively financial data</td>
<td>Emphasis on the long-term, focus on critical success factors, commitment to the long-term success of the firm, including shareholder value.</td>
</tr>
<tr>
<td>Type of information recorded and reported</td>
<td>Hierarchical, command and control</td>
<td></td>
</tr>
<tr>
<td>Management organizational structure</td>
<td>Emphasis on the short-term, short-term performance measures and compensation, concern for sustaining the current stock price, short tenure and high mobility of top managers.</td>
<td></td>
</tr>
</tbody>
</table>


The growing pressures of global competition, technological innovation, and changes in business processes have made cost management much more critical and dynamic than ever before. Managers must think *competitively*; doing so requires a strategy. Strategic thinking involves anticipating changes; products and production processes are designed to accommodate expected changes in customer demands. Flexibility is important. The ability to make fast changes is critical as a result of the demand of the new management concepts of e-commerce, speed to market, and agile manufacturing. Product life cycles—the time from the introduction of a new product to its removal from the market—is expected to become shorter and shorter. Success in the recent past days or months is no longer a measure of ultimate success: the manager must be “driving” the firm by using the windshield, not the rear-view mirror.
KEY COMPONENTS OF A COST MANAGEMENT SYSTEM

Cost management is the analysis of activities to determine the best mix of activities and the optimal level of resources assigned to activities. According to Brimson the following are the key components of a cost management system.

1. **Activity Investment Management:** Activity investment analysis evaluates the impact of changing an activity process, such as introducing a new technology, on the cost, performance, and interdependences of activities. The analysis process systematically decomposes the company objectives and strategies into activity level goals that provide a foundation for judging the value of an investment. This facilitates measurement of the cost and nonfinancial performance impacts of the investment by defining the base line set of activities against which to measure change. Activity investment management embraces the concept of continual improvement by routinely challenging how activities are performed. It decreases the probability of selecting and implementing an inappropriate investment by evaluating capital investments relative to “efficient operations” rather than to existing cost structures.

2. **Cost Driver Analysis:** Cost driver analysis identifies activities that influence the cost and performance of subsequent activities. By reducing or eliminating the event that triggers the first activity in the chain, it may eliminate the need for all subsequent activities. For example, the detection of a defective part requires the part to be reworked or scrapped, the cause of the defect to be corrected, the problem documented, and other related activities. By eliminating the cause—the defective part—the need to perform all subsequent activities is eliminated because they are executed only when a defective part occurs. Costs are thus reduced. By identifying the cost drivers of a business process or an activity, a company can most effectively control costs.

3. **Activity Budgeting:** Assessing the factors that control activity volume is an important technique for budgeting the resources necessary to perform an activity. For example, one division of an electronics firm required 15 expeditors, whereas a sister division with a similar revenue required only six. At first glance it appears that the second division’s performance was significantly better. However, when one looks at factors such as the number of parts, number of vendors, and complexity of the manufacturing process, the reason for the difference in support department size becomes evident. The first division had many differentiated products that required significantly more expediting support than the sister division, which had a few high-volume products.

Understanding the number of activity occurrences is an effective tool in predicting the effect on support costs of different strategic decisions. A low-volume product line requires significantly more support cost than a high-volume line.

4. **Non-Value Added Analysis:** Non-value added activities result in profitless expense of time, money, and resources and add unnecessary cost to the products. A non-value added analysis identifies activities that can be eliminated with no deterioration of enterprise performance (cost, function, quality, perceived value). Non-value added analysis highlights wasteful activities.

5. **Best-Practice Analysis:** A best-practice analysis compares activity cost and performance between different departments, divisions, suppliers, and/or competitors to identify the most efficient way to perform an activity. Once, the activities with lowest cost and highest performance are identified, they can be analyzed to identify the source of excellence. The results of the analysis can then be shared with other groups within the company that perform the activity to determine the applicability to their operations.

6. **Activity Target Cost Analysis:** Activity target cost analysis determines activity cost and performance goals based on market demand for a product. Target costs are derived by estimating the market price necessary to capture a certain market share and then subtracting the desired profit margin.
Typically, a target cost is lower than the initial estimated cost to build a product. The challenge is to reduce the production cost to the target level. Activities provide an excellent basis for identifying opportunities to achieve targets. Identification of non-value added activities and best practices provides a basis to apply value engineering techniques to eliminate or improve the cost and performance of these activities.

7. Activity Strategic Analysis: Activity strategic cost analysis uses activity cost and performance data to develop enterprise strategies. Strategic cost analysis evaluates a company’s activities, from design to distribution, and determines where value to the customer can be enhanced or costs lowered.

REFERENCES


Managerial Accounting, 
Cost Management

Ibid.

Management Accounting, A Strategic Approach

Strategic Cost Management

Cost Management, A Strategic Emphasis

Cost Management, Strategies for Business Decisions

Competitive Advantage: Creating and Sustaining Superior Performance

What is Strategy

Ibid.,

et al., Ibid.,

et al., Ibid.

Activity Accounting
For Brand A, the operating and maintenance cost is ₹ 20,000. For Brand B, the operating and maintenance cost is ₹ 60,000. The sales agent for Brand A emphasized the lower operating and maintenance cost. He claimed that it was lower than any other PC brand. The sales agent for Brand B, however, emphasized the service reputation of the product. He provided John with a copy of an article appearing in a PC magazine that rated service performance of various PC brands. Brand B was rated number one. Based on all the information John Mathew decided to buy Brand B.
Required:
(i) What is the total product purchased by John?
(ii) Is the Brand A company pursuing a cost leadership or differentiation strategy: The Brand B company? Explain.
(iii) When asked why he purchased Brand B, John replied, “I think Brand B offered more value than Brand A.” What are the possible source of this greater value? If John’s reaction represents the majority opinion, what suggestions could you offer to help improve the strategic position of Brand A?

5. The tyre business is becoming increasingly competitive as new manufacturers enter the global marketplace. At the same time, customer expectations for performance, tread life, and safety continue to increase. An increasing variety of vehicles, from the small vehicles to the large SUVs, place more demands on tyre designers and on tyre manufacturing flexibility. Established brands such as Apollo and CEAT must look to new ways to compete and maintain profitability.

Required:
(i) Is the competitive strategy of a global tyre maker cost leadership or differentiation? Explain your answer.
(ii) What are the ethical issues, if any, for tyre manufacturers?

6. Crompton manufactures disk drives for computers by assembling parts and components from hundreds of suppliers. Cost-management analysts have been analysing costs to produce disk drives and have determined that a large proportion of the cost is caused by detecting and replacing faulty components received from suppliers. Most faulty components currently cannot be detected until they are assembled into products that then fail performance tests. Following are estimated annual costs of three alternative decisions to manage this aspect of operations.

<table>
<thead>
<tr>
<th>Alternatives for Supply of Disk Drive Components</th>
<th>Cost per year (₹ in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Continue current supply and assembly operations—detect and replace faulty components</td>
<td>2,331</td>
</tr>
<tr>
<td>(ii) Thoroughly inspect incoming components before they are assembled</td>
<td>1,708</td>
</tr>
<tr>
<td>(iii) Develop close relationship with a few selected suppliers that will guarantee the performance of all components</td>
<td>1,387</td>
</tr>
</tbody>
</table>

Required:
(a) Describe and explain other possible costs and benefits of each alternative.
(b) How do you think cost management analysis might have developed these cost estimates?
(c) Which alternative do you recommend? Why?