

**Solutions
Manual****CHAPTER 1: COST MANAGEMENT AND STRATEGY****QUESTIONS**

1-1 Firms Using Cost Management. Here are some examples; there are many possible answers.

1. Walmart: to keep costs low by streamlining restocking and sales
2. Hewlett-Packard or Dell Computer: to keep costs low by improving manufacturing performance and by using target costing and other management techniques
3. Citicorp: to keep costs low by using activity analysis to identify key operations and to find those that add little or no value
4. A municipality or public agency: to keep costs low in order to provide the best possible service given available funds
5. Procter & Gamble or any similar large, diversified manufacturer: to assess the profitability of its different products
6. A small machine shop: to determine whether it should repair or replace a machine
7. A dance studio: to analyze and choose between different compensation plans for its teachers; and to determine whether it should open a new studio

1-2 Firms that will likely use somewhat different types of cost management information because of their unique competitive strategies include :

1. Microsoft: here the focus is on forming strategic alliances, innovation and competition; cost management is more important for other firms in the information technology business, such as Hewlett-Packard, and Dell Computer that compete in part on innovation but also on price
2. Versace: a high fashion firm competes on innovation and product leadership; the development and communication of attractive new ideas is the key to competitive success rather than cost management
3. Other firms in the fashion industry, such as Chanel, Coach, Gucci, and Armani: for reasons similar to Versace

4. Major league sports: dependent primarily on the development of fan support, good coaching and player acquisition

1-3 Cost management information is a broad concept. It is the information the manager needs to implement the strategy of the firm or not-for-profit organization -- both financial information about costs and revenues and relevant non-financial information about productivity, quality, and other key success factors for the firm. Typically, cost management is the responsibility of the Chief Financial Officer (CFO) who often delegates much of this responsibility to the Controller.

1-4 In the private sector, the Financial Accounting Standards Board, an independent organization, and the American Institute of Certified Public Accountants (AICPA) supply guidance regarding financial reporting practices. The Sarbanes-Oxley Act of 2002 also created the Public Company Accounting Oversight Board which reports to the SEC to oversee auditing standards and practices. The AICPA also provides educational opportunities. In the public sector, the Cost Accounting Standards Board (CASB) sets cost accounting standards for those doing business with the federal government, especially defense contractors. The Institute of Management Accountants (IMA) is the principal organization devoted primarily to management accountants in the United States. The IMA has magazines, newsletters, research reports, management accounting practice reports, professional development seminars, and monthly technical meetings that serve the broad purpose of providing continuing educational opportunities for management accountants. In Canada, the Society of Management Accountants provides a similar role. Similar organizations are present in most other countries around the world. The Financial Executives International (FEI) organization provides services much like the IMA for financial managers, including controllers and treasurers. Because of the nature of its membership, the FEI tends to focus on management and operational control issues, and less on the product costing, planning, and decision-making functions.

1-5 The Certificate in Management Accounting (CMA) is the most relevant certification program for management accountants since it focuses on the types of skills that are most in demand for management. Other relevant certificates include the Certified Public Accountant (CPA) and the Chartered Global Management Accountant (CGMA).

1-6 The four functions of management are:

1. Strategic Management -- information is needed by management to make sound strategic decisions regarding choice of products, manufacturing methods, marketing techniques and channels, and other long term issues.

2. Planning and Decision Making -- information is needed to support recurring decisions regarding replacement of equipment, managing cash flow, budgeting raw materials purchases, scheduling production, and pricing.

3. Management and Operational Control -- information is needed to provide a fair and effective basis for identifying inefficient operations, and to reward and support the most effective managers.

4. Preparation of Financial Statements -- information is needed to provide accurate accounting for inventory and other assets, in compliance with reporting requirements, for the preparation of financial reports and for use in the three other management functions.

1-7 Strategic management is the most important management function since it most directly relates to the overall success of the firm. In strategic management, top managers determine how the firm is to compete and what specific goals it must set and achieve to be successful. The determination of these strategies and goals drives all other activities in the firm.

1-8 Merchandising firms purchase goods for resale. Merchandisers that sell to other merchandisers are called wholesalers, while those selling directly to consumers are called retailers. Examples of merchandising firms include the large retailers, such as Sears, Walmart, and Target. Merchandisers use cost management information to control stocking, distribution, and customer service.

Manufacturing firms use raw materials, labor, and manufacturing facilities and equipment to produce products. These products are sold to merchandising firms or to other manufacturers as raw materials for additional products. Examples of manufacturers include General Motors, IBM, and Samsung. These firms use cost management information to control production costs.

Service firms provide a service to customers that offers convenience, freedom, safety, or comfort. Common services include transportation, financial services (banking, insurance, accounting), personal services (physical training, hair styling), medical services, and legal services. These firms use cost management information to identify profitable services and to control costs incurred in providing services.

Governmental and not-for-profit organizations provide services, much like the firms in service industries. However, the service provided by these organizations is such that there is often no direct relationship between the amount paid and the services provided. Instead, both the nature of the services to be provided and the customers who receive the services are determined by government or philanthropic organizations. These organizations use cost management information to determine and control the costs of the services they provide.

- 1-9** The answers here can vary from large manufacturers such as Boeing to small retail stores. If the class has trouble getting started, the instructor might use some of the firms mentioned in question 1-1 or from the instructor's own experience and understanding. Again, if the students have a hard time, the instructor might ask them to think of firms close to their homes, or to think of firms in a given industry, etc.
- 1-10** For some firms, a popular web site can be an important differentiating factor. Firms such as Amazon.com, Etrade, eBay and many retailers have achieved powerful competitive advantage through their web sites, offering fast delivery and enhanced customer service. Other firms such as Walmart use the Internet to achieve cost advantage by using Internet based systems for transactions processing, production scheduling, purchasing, employee recruiting, etc.
- 1-11** The management accountant is a full business partner with management in Stage 4 of cost system development. At this stage, the highest level, the management accountant has an integral role with management to implement the organization's strategy.
- 1-12** The factors in the contemporary business environment that affect business firms and cost management are:
1. Increased global competition, which means an increasingly competitive environment for all firms and thus the need for cost management information to become more competitive; the need for competitive non-financial information in addition to financial information in cost management reports;
 2. Lean manufacturing, in which companies reduce costs by using flexible manufacturing methods, statistical quality control, and many of the techniques developed by Japanese manufacturers; lean manufacturers adopt lean accounting to measure and sustain the improvements made from lean manufacturing.
 3. Use of information technology; cost management information is used to facilitate the introduction of new manufacturing and product technologies (e.g., determining which technologies will most contribute to profitability), to develop new ways to manage customer and supplier relationships using the Internet; and to use enterprise resource management to develop and report cost management information in a lower cost, more comprehensive, and timely way;
 4. A focus on the customer, which requires cost management reports to include critical information about customer satisfaction, changing customer preferences, etc.;
 5. Changes in management organizations which require new reporting practices to recognize the new focus on cross-functional teams in which employees from all areas of the firm work together to make the firm successful;

6. Changes in the social, political, and cultural environment of business, which requires an expansion of cost management reporting to include critical success factors related to the expectations of those beyond the ownership of the firm including employees, local government officials, and community leaders.

1-13 Refer to Exhibit 1-3 in the text, reproduced here.

Comparison of Prior and Contemporary Business Environments

	Prior Business Environment	Contemporary Business Environment
MANUFACTURING		
Basis of Competition	Economies of scale, standardization	Quality, functionality, customer satisfaction

Manufacturing Process	High volume, long production runs, significant levels of in-process and finished inventory	Low volume, short production run, focus on reducing inventory levels and other non-value-added activities and costs
Manufacturing Technology	Assembly line automation, isolated technology applications	Robotics, flexible manufacturing systems, integrated technology applications connected by network
Required Labor Skills	Machine paced, low-level skills	Individual and team paced, high-level skills
Emphasis on Quality	Acceptance of a normal or usual amount of waste	Strive for zero defects

Question 1-13 (continued)

	Prior Business Environment	Contemporary Business Environment
MARKETING		
Products	Relatively few variations, long product life cycles	Large number of variations, short product life cycles
Markets	Largely domestic	Global
MANAGEMENT ORGANIZATION		
Types of Cost Management Information Needed	Almost exclusively financial data	Financial and operating data, the firm's strategic success factors
Management Organizational Structure	Hierarchical; command and control	Network-based organization forms; teamwork focus -- employee has more responsibility and control; coaching rather than command and control
Management Focus	Short term: short term performance measures and compensation; concern for sustaining stock price; short tenure and high mobility of top managers	Long term; focus on critical success factors, commitment to the long term success of the firm, including adding shareholder value

1-14 The thirteen contemporary management techniques are:

1. The Balanced Scorecard (BSC) and the Strategy Map. The BSC is an accounting report that includes the firm's critical success factors in four areas: financial performance, customer satisfaction, internal processes, and learning and growth. The Strategy Map is a method, based on the balanced scorecard, which links the four perspectives in a cause-and-effect diagram.

2. Value-Chain Analysis is a tool that helps the firm identify the specific steps required to provide a product or service.

3. Activity-based Costing and Management: Activity-based costing is used to improve the tracing of manufacturing costs to products and therefore the accuracy of product costs. Activity-based management (ABM) uses activity analysis to help managers improve the value of products and services and to increase the firm's competitiveness.

4. Business Analytics is an approach to strategy implementation in which the management accountant uses data to understand and analyze business performance.

5. Target Costing is a management method that determines the desired cost for a product upon the basis of a given competitive price, such that the product will earn a desired profit.

6. Life-Cycle Costing is a management method used to monitor the costs of a product throughout its life cycle.

7. Benchmarking is a process by which a firm identifies its critical success factors, studies the best practices of other firms (or other units within a firm) for these critical success factors, and then implements improvements in the firm's processes to match or beat the performance of its competitors.

8. Business Process Improvement is a management technique in which managers and workers commit to a program of continuous improvement in quality and other critical success factors.

9. Total Quality Management is a technique in which management develops policies and practices to ensure that the firm's products and services exceed the customer's expectations.

10. Lean Accounting uses value streams to measure the financial benefits of a firm's progress in implementing lean manufacturing.

11. The Theory of Constraints is a strategic technique to help firms effectively improve the rate at which raw materials are converted to finished product.

12. Sustainability means the balancing of the company's short- and long-term goals in all three dimensions of performance – social, environmental, and financial.

13. Enterprise Risk Management is a framework and process that firms use to manage the risks that could negatively or positively affect the company's competitiveness and success.

1-15 Many students will answer Walmart or Target since these are mentioned in the text. A variety of answers are possible and sometimes students will disagree, as for example, in discussing a fast food restaurant such as McDonald's. Some will argue that it is a cost-leader because the prices in fast food restaurants are typically low. But other students will argue that McDonald's is different than other fast food restaurants, and thus, differentiation. I ask them to focus on what brings in the customer: Is it price or some quality of feature? Then many of the students will say that for the most part fast food restaurants are differentiators. I'll ask if anyone could name a fast food restaurant they would go to just for price and price only, and I will get a few examples there, but not many.

1-16 This question is set to get a positive response and that is usually what I get. Then I try to spend some time getting some examples of why a strong ethical climate would be beneficial, and note the increasing importance of an ethical climate since the Sarbanes-Oxley Act. Also, a helpful resource is the article in the July 2005 *Strategic Finance*, "Is There Value in Corporate Values?" Reporting on a survey done by the Aspen Institute and the consulting firm Booz Allen Hamilton, the article notes that most respondents believe that strong corporate values build strong relationships and reputations. The article notes, as do many other surveys, that the firm Johnson & Johnson is perhaps the best known example of a company that has high corporate values. See for example the New York Times article on Johnson & Johnson: Katie Thomas, "Johnson & Johnson Praised for Taking Uterine Surgery Tools Off Market," *The New York Times*, August 1, 2014, p B3.

- 1-17** Again this question is posed for a positive response, and the main goal I have for the question is to have the class think through the decision as both a business and an ethical issue. According to a *Wall Street Journal* article at the time of this VIOXX issue (October 1, 2004, p B1), “Experts Praise How Merck Broke the News,” the announcement brought in positive publicity for the company. Interestingly, some of the firms hurt the most by the announcement were the media companies that were counting on Merck’s spending for VIOXX advertising.
- 1-18** Like most beverage companies, there is a strong differentiation. Refer the students to the information in Problem 1-50 which shows Coke as having one of the highest brand values of any company. There is at least a perceived difference between a Coke and Sam’s Club Cola, for example. Ask the class if they can come up with an example of a cost leader beverage, and some will mention low priced brands of cola or beer. It is interesting to note that as many soft drink companies (in 2017) are facing competitive problems due to consumer concerns about the amount of sugar in these drinks, the companies are looking for ways to reduce the cost and caloric content of their drinks. Coke for example is developing new smaller portions and focusing consumer attention on “lite” snacks and its diet products, as well as its bottled water products. (See cocacolacompany.com/brands).
- 1-19** A commodity is a product or service that is difficult to differentiate from competitors; gasoline and paper products are some examples. You can ask the class to provide additional examples. The crucial point for a commodity is whether there is any reason you would pay more for this item? As such, commodities are natural cost leadership products or services.
- 1-20** Most students will argue that they chose their bank because of service and location, thus differentiation. Others will say the rates are better, and then perhaps cost leadership. It is useful to distinguish the banking needs of say, a student, versus a small business like a car dealership which will rely more heavily on a variety of customer services and will likely see banks as more differentiated entities. One regional bank did a study and found that approximately ½ of its customers were “rate shoppers” while the other half were “relationship-oriented.” The bank had adopted customer-focused strategies to grow the customer-relationship side of its business. Smaller banks, in particular, focus on customer service to attract and retain customers.
- 1-21** There are a number of possible answers here. The main point of the question is that the cost leadership or differentiation classification applies across different types of firms in different industries. There are some industries (particularly those with commodities)

which tend to be characterized by cost leaders and others (e.g., technology) that tend to be characterized by differentiators. Other industries may have a mix of different types of competitors. I ask them to consider the automobile industry and to identify cost leaders and differentiators.

- 1-22** It is certainly likely that a new product, with technologically advanced features, may begin as a differentiator and then as the market for the product matures and competitors enter the market for the product, the industry as a whole moves to more of a cost leadership type of competition. Consider computers as an example.

It is also possible that a cost leadership firm could shift to differentiation. That could happen for example when the firm acquires or develops a patent that provides the firm access to a new market in which the patent provides a differentiated advantage.

- 1-23** Often people think of strategy as simply planning, or “long term” planning. In the broadest sense, this is correct, though the planning in strategy formulation and execution is somewhat more complex, including developing an understanding of the business environment in which the firm operates and of the resources available within and outside the firm to help it compete effectively. The steps in executing a strategic plan are considered in chapter 2.

BRIEF EXERCISES

- 1-24** The IMA definition of management accounting states that:
- Management accounting is the process of gathering, reporting, and analyzing information for management decision making
 - Management accounting is a profession that involves preparation and analysis of cost information, budgeting, performance measurement and analysis, to assist managers in decision making
 - Management accounting** is a profession that involves partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization’s strategy.

- d. Management accounting is a set of practices in which accountants, working within companies, help managers to make better decisions based on accurate financial information

Answer c

Learning Objective: 01-01

Feedback: The IMA definition: "Management accounting is a profession that involves partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization's strategy." Answer c) is the best fit.

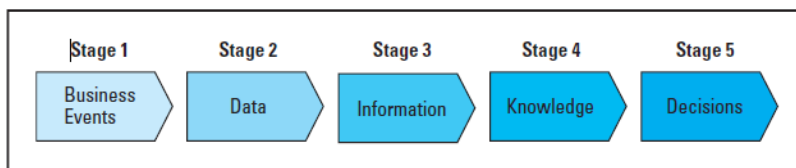
1-25 Which of the following is the correct sequence in which cost management information is developed and used?

- a. Business events, data, information, analysis, decisions
- b. Business events, data, analysis, information, decisions
- c. Business events, information, analysis, knowledge, decisions
- d. Business events, data, information, knowledge, decisions

Answer d

Learning Objective: 01-01

Feedback: Business events, data, information, knowledge, and decisions is the correct sequence, as used by the IMA in the definition of management accounting



1-26. Management accounting, as defined by the IMA, uses the expertise of the management accountant to

- a. Improve quality and reduce cost
- b. Implement a strategy of cost leadership or differentiation
- c. Implement a strategy of customer value and shareholder value

- d. Improve business processes and lean operations

Answer b

Learning Objective: 01-01, 01-04

Feedback: This question requires an understanding of the definition of management accounting, that is, management accounting “assists management in the formulation and implementation of an organization’s strategy.” It also requires an understanding of the two types of competitive strategy (from Michael Porter) – cost leadership and differentiation. Answer b is the only answer that fits the definition of management accounting and of strategy.

1-27. The management accountants in an organization probably report directly to the:

- a. Controller
- b. Treasurer
- c. Chief executive officer (CEO)
- d. Chief financial officer (CFO)

Answer a

Learning Objective: 01-01

Feedback: See Ex. 1-1; cost management experts report to the controller who in turn reports to the CFO; the CFO reports then to the CEO

1-28 Walmart, Costco, and Dollar General are retailers that probably compete on the basis of

- a. Quality and customer service
- b. Product differentiation
- c. Low prices
- d. Desirable locations

Answer c

Learning Objective: 01-04

Feedback: While answers a, b, and d are competitive features for any company, the key competitive success factor for cost leadership companies like Walmart, Costco, and Dollar General are low cost and low prices.

1-29. Cost management has evolved from a focus on measurement to one of identifying those measures that are critical to the organization's success. This means that cost managers are striving for this type of cost management system:

- a. Basic transaction reporting systems
- b. A system that focuses on reliable external financial reports
- c. A system that tracks key operating data and develops accurate cost information
- d. A system in which strategically relevant cost management information is an integral part of the system

Answer d

Learning Objective: 01-2

Feedback: This exercise considers Robert Kaplan's four-stage model of cost management system development: 1) basic transactions, 2) focus on reliable external reporting, 3) track key operating data for decision making, and 4) strategically relevant cost management information is integral to the system. Stage 4, integral strategically relevant information, is the goal.

1-30. A management method in which managers and employees commit to a process of continuous improvement is best described as:

- a. Total quality management
- b. Business process improvement
- c. Lean accounting
- d. The theory of constraints

Answer: b

Learning Objective: 01-03

Feedback: Answers (a), (c), and (d) are incorrect because: total quality management focuses on meeting customer expectations; lean accounting supports lean manufacturing, a method that uses value streams and a focus on inventory reduction and increasing the speed of manufacturing operations. Like lean manufacturing, the theory of constraints focuses on the speed of the flow of product through the manufacturing process. Business process improvement is the correct answer as it is a management method in which managers and workers commit to a process of continuous improvement.

1-31 Professional certifications are issued by the American Institute of Certified Public Accountants (AICPA), the Institute of Management Accountants (IMA), The Chartered Institute of Management Accountants (CIMA) and the Society of Management Accountants in Canada (CMA-Canada), among other professional accounting organizations. The Certificate in Management Accounting (CMA) is issued by:

- a. CIMA
- b. IMA
- c. CPA Canada
- d. AICPA

Answer: b

Learning Objective: 01-05

Feedback: The CMA certificate is issued by the IMA, Institute of Management Accountants

1-32. To determine whether a particular action is professionally ethical or not, using the Institute of Management Accountants Statement of Ethical Professional Practice, it is necessary to know:

- a. Whether the act is legal in your jurisdiction
- b. The intent and the business context of the act
- c. The amount of the fraud or theft that is involved
- d. Whether the management accountant is certified or not

Answer: b

Learning Objective: 01-6

Feedback: (b) is correct. (a) an act can be legal but not ethical; (c) the amount of the fraud or theft might influence the consequences to the perpetrator, but will not determine whether it is ethical or not; and (d) determining whether the act is ethical does not depend on whether or not the accountant is certified, though the consequences could be more significant for a certified management accountant.

1-33. Firms that want to grow quickly in the global marketplace often employ the cost leadership strategy because:

- a. This produces favorable customs rates and import duties
- b. Manufacturers around the world adopt lean manufacturing methods to bring their costs down
- c. This allows them to employ and benefit from enterprise management systems
- d. There are relatively few product variations across different countries

Answer: b

Learning Objective: 01-02,01-04

Feedback: Answer b is correct. (a) the cost leadership strategy is not likely to have any effect on customs rates or import duties, which are determined from product cost and other factors, (c) many global companies use enterprise management systems, but the motivations are related to the nature of their value chain, both upstream and downstream, and not their strategy (d) a number of products have significant variations across countries

1-34. The strategy map can be compared to the balanced scorecard (BSC) in that:

- a. The strategy map is a subset of the BSC
- b. The strategy map deals with the strategy component of the BSC
- c. The strategy map provides a guide to implementing the BSC by linking the critical success factors
- d. The strategy map and the BSC are unrelated

Answer: c

Learning Objective: 01-3

Feedback: Answer c is correct. (a) the BSC has perspectives which could be called subsets, but the strategy map is not a perspective or subset; (b) and (d) the strategy map provides a linkage of the critical success factors for **all** of the perspectives of the BSC,

1-35. The IMA ethical standard that requires the management accountant to act with integrity:

- a. Requires the management accountant to mitigate conflicts of interest
- b. Is not a part of the IMA Statement of Ethical Professional Practice
- c. Is necessary to ensure that the management accountant's credibility is not impaired
- d. Is necessary to ensure that the management accountant does not violate confidentiality

Answer: a

Learning Objective: 01-6

Feedback: The three aspects of integrity in the IMA statement are:

1. Mitigate actual conflict of interest. Regularly communicate with business associates to avoid apparent conflicts of interest.