双语教学丛书

成本管理

——商务决策战略（第2版）

Cost Management

Strategies for Business Decisions

(Second Edition)

（案例与习题集）

罗纳德·W·希尔顿（Ronald W. Hilton）
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出版说明

为了方便读者使用，我们将《成本管理——商务决策战略》(第 2 版)(Cost Management: Strategies for Business Decisions (Second Edition)) 分成原理与方法、案例与习题集两部分加以出版。本书中的案例与习题是对原理与方法的具体应用，帮助学生深入理解成本管理的内容。本书涉及近 50 个相关项目，包括道德问题、国际问题、小组工作、网络的应用和交流技巧，并且用不同的标志加以区分。作业的类型包括：

复习题。复习题与每章主题相关。答案可以直接由每章的内容综合而成，要求进行简短的书面或口头表达。回答这些问题要求达到每章的学习目标。

判断分析题。判断分析题将每章的学习内容进行延伸，应用于新的、复杂的或不确定的环境。回答这类问题不能生搬硬套，而需要通过类比或逻辑推理对每章的内容进行分析，可以用于小组讨论。

练习题。是对每章问题相对直接的重要和应用。学生可以直接通过应用每章的分析过程得到答案，也可以通过在图书馆或上网查找更多的信息得到答案。完成练习题要求基本达到每章的学习目标。

思考题。思考题要求对某一特殊问题进行更加深入的分析，或要求将几个相关问题结合起来进行分析，因此，比练习题更加富有挑战性。思考题通常能表现实际情况，在难度上相当于专业考试水平。有能力解答各章思考题表明学生对各章学习目标已经掌握到中等水平。

案例。案例是最具有挑战性的。案例通常以真实或现实的公司环境为背景，表现了成本会计实践所面临的不确定的决策环境。案例一般都没有标准答案，是进一步学习或小组学习、课堂讨论和演示的最佳机会。

目　　录

PART I

Setting the Stage

The Importance of Analyzing and Managing Costs

CHAPTER

1

Cost Management and Management of the Value Chain

Review Questions

1.1 Review and define each of the chapter's key terms.

1.2 What is the primary objective of cost management?

1.3 What is the concept of the value chain, and why is it important for cost management?

1.4 What is strategic decision making? Give examples of several strategic decisions.

1.5 What are some cost management techniques that help make better management decisions?

1.6 What are cross-functional teams, and why are they important?

1.7 How do companies use benchmarking to make important decisions?

1.8 How does outsourcing affect an organization's value chain?

1.9 What is a virtual organization?

1.10 How do cost-management analysts use cost-benefit analysis to help determine the scope of an organization's operations?

1.11 What is a process?

1.12 How would you measure the cost of a process? Is this always an out-of-pocket cost?

1.13 How do you distinguish between quantitative information and qualitative information?

1.14 What are the eight elements of leading and managing change?

Critical Analysis

1.15 "Cost accounting and cost management really are the same functions and operations." Do you agree or disagree? Explain.

1.16 Peter Drucker, the famous management consultant, has said, "Every three years, an organization should challenge every product, every service, every policy, every distribution channel with the question: If we were not in it already, would we be going into it now?" Why is this question important? How can cost managers help pose and answer this question?

1.17 Assume that you are a vice president of the largest department store in the region. The store president has called you in to give you a challenging assignment: "Though we are the largest store, only 10 percent of the region's residents are our customers. Find out why the other 90 percent are not." Why could this be a critically important assignment? How would you organize a team to find the answers?

1.18 Refer to Exhibit 1–2. How could US EAST determine whether it has a competitive advantage in the processing of accounting transactions? What would it mean to employees of US EAST if it does or does not have an advantage?

1.19 A recent survey by KPMG, one of the world's largest business services firms, determined that 88 percent of other large U.S. companies have outsourced at least some parts of their value chains or support services. One of the most commonly outsourced services is income tax reporting. Assume that you are a cost-management analyst of a large company. How would you determine whether to outsource tax services? How might this trend in outsourcing tax services affect individuals interested in careers in the taxation field?

1.20 "If every manager minimizes the cost of the process he or she supervises, overall costs of the company will decrease." Do you think this would be a wise strategy? Why or why not?

1.21 Some years ago, General Motors installed industrial robots worth billions of dollars in its automobile assembly lines, believing that the robots would increase the efficiency of its manufacturing processes and improve profitability. In fact, General Motors lost many billions of dollars more despite the fact that it was able to make automobiles more quickly using the robots. What reasons can you think of to explain this paradox?

1.22 For many years, department stores prospered because they enhanced the process of shopping, which for many people was a break from the routine of housework and child care and was an opportunity to obtain information about available products and services. What changes have occurred in recent years that might explain the rise in shopping in "virtual stores" via the Internet? What do these changes imply for the retail processes of traditional department stores?

Exercises

Exercises, problems, and cases include the learning objective they cover. Also included is a logo indicating whether the material focuses on ethics, group work, communication skills, or Internet use. A spreadsheet logo indicates that an Excel template is available on the website for that problem.

Exercise 1.23
Characteristics of Successful Cost-Management Analysts
(LO 1)

Internet Communication

Review the IMA analysis of management accounting practice (*www.imanet.org*) and prepare a memo or visual presentation (instructor's choice) that explains one of the following:

a. The most important personal attributes of successful financial managers.

b. The most important competencies for entry-level financial managers.

c. The financial management activities that will increase the most in the future.

d. The four quotations from in-person interviews that you find most interesting.

Exercise 1.24
Cost-Management Techniques
(LO 1)

Global

New Zealand recently transformed many of its government agencies into private corporations. This is a difficult process that many developing and former communist and socialist countries have been implementing. Match the following general techniques of cost management with the management decisions in these new corporations that were most likely to be assisted by using the techniques.

Cost Management Technique

a. Learning about how operations work

b. Organizing resources into efficient activities and operations

c. Measuring actual and expected costs of activities, products, and services

d. Identifying profitable products, services, customers, and distribution

Management Decision

____The design of incentive bonuses of up to 12 percent of salary by Electricity Corporations (ECNZ) for middle managers based on meeting difficult profit goals

____The use of seminars called "What If I Owned the Business?" by Television Corporation (TVNZ) to introduce staff to issues of competition

e. Identifying opportunities for improvements in the value of products and services
f. Communicating effectively
g. Motivating and evaluating personnel

____ECNZ's decision to restructure into four major operating divisions: Production, Marketing, Power Transmission, and Construction
____The decision by Coal Corporation (CoalCorp) to evaluate every job currently performed to determine which is essential to the goal of profitability
____TVNZ's new focus on estimating the costs of television programming and production
____The decision by Public Works Corporation (WORKS) to sell its poorly performing Property and Computing Services divisions
____TVNZ's analysis of the programming and advertising practices of its new commercial rival, TV3.

Adapted from B. Spicer et al., *Transforming Government Enterprise.*

Exercise 1.25
Teamwork
(LO 1)

Select the decision-making team that most likely would be best for each of the following operations or decisions. Explain your choices.

Type of Team

a. Individual (no team)
b. Small doubles tennis team whose members have special skills that complement each other's strengths and weaknesses
c. Large soccer team whose members have assignments but work closely together
d. Large swimming team whose members have individual responsibilities and normally do not interact but share in team outcomes

Operation or Decision

____Word processing center of a large university where most of the work is preparing exams, copying articles, and preparing promotional materials
____Development of a new business curriculum to meet specific educational needs
____Design of advertising campaign to counter a rival's new product announcement
____Development of a new video game for Nintendo
____Writing a new cost-management textbook
____Completion of a complex project with a short, rigid deadline
____Completing an application to graduate school
____Competing in a collegiate intramural volleyball league

Exercise 1.26
Management Decision Making
(LO 1)

Review the elements of management decision making in Exhibit 1–1. Assume that you are considering beginning a small business that will sell coffee, espresso, and possibly various other drinks in a university's engineering center. Outline a plan to begin this business. First, for each decision-making element, describe several decisions you must make. Second, try to arrange these decisions in roughly the order you must make them, from the earliest to the latest or ongoing decisions. Third, describe the information you will need to make these decisions.

Exercise 1.27
Strategic Decisions
(LO 1)

Internet

Two of the world's largest soft drink companies are PepsiCo and Coca-Cola. Find their most recent annual reports in either your library or on the Internet (look, for example, at the companies' Websites or the Securities and Exchange Commission's EDGAR site, *www.sec.gov*). From the presidents' letters, identify and list similarities and differences in these two competitors' declared strategies.

Exercise 1.28
Cost-Benefit Analysis
(LO 2)

Quantorus Corporation manufactures disk drives for computers by assembling parts and components from hundreds of suppliers. Cost-management analysts have been analyzing 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. On the next page are estimated annual costs of three alternative decisions to manage this aspect of operations.

Alternatives for Supply of Disk Drive Components	Cost per Year (US$ thousands)
1. Continue current supply and assembly operations—detect and replace faulty components	$2,331
2. Thoroughly inspect incoming components before they are assembled	$1,708
3. Develop close relationships with a few selected suppliers that will guarantee the performance of all components	$1,387

Required

a. Describe and explain other possible costs and benefits of each alternative.

b. How do you think cost-management analysts might have developed these cost estimates?

c. Which alternative do you recommend? Why?

Exercise 1.29
Benchmarking
(LO 2)

Communication

Find a recent article in a professional magazine, such as *Strategic Finance, Journal of Cost Management,* or *Harvard Business Review,* that describes an actual use of benchmarking.

Required

a. Prepare an outline of the article that identifies the following:

- Reasons for benchmarking at this organization.
- Areas of operations that this organization had benchmarked
- Sources of information for benchmarking at this organization.
- Who maintains and uses the benchmark data at this organization.
- Whether benchmarking was a success, and how "success" was defined and measured.

b. Present your own evaluation of the success of this benchmarking effort.

Exercise 1.30
Value-Chain Analysis
(LO 2)

Match the following operations with appropriate elements of an organization's value chain.

Value-Chain Element	Operation or Decision
a. Research and development	____Dell Computer's replies to customers' questions via email
b. Design	____Electronic ordering link between Container Industries, Inc., and a division of DuPont Corp. that supplies raw plastic pellets to Container Industries
c. Supply	
d. Production	____Purchase by 3-Squared, Inc. of McData Corp. to acquire its data communications technology
e. Marketing	
f. Distribution	____Pick up of StorageTek Corp.'s packaged disk drives by United Parcel Service for delivery to customers
g. Customer service	____Development of animation for Yahoo! home pages
	____RCA's outsourcing of the assembly of its portable CD players to a company in Mexico
	____Updating Canterbury New Zealand's electronic Internet catalogue of sport and casual clothing

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Exercise 1.31
Cost-Benefit Analysis
(LO 2)

For each of the following decisions, describe what other than out-of-pocket cost information might cause individuals to choose the alternative (excluding advance knowledge of outcomes):

Decision	Out-of-Pocket Cost of the Decision	Out-of-Pocket Cost of Alternative
a. Do not renew contract with external custodial service	$250,000 per year	$300,000 per year
b. Eliminate one-third of the employees at the regional warehouse	$2,200,000 per year	$3,000,000 per year
c. Outsource the manufacture of a key component to the biggest-selling product	$1,600,000 per year	$2,760,000 per year
d. Cut back spending on employee training	$500,000 per year	$1,440,000 per year
e. Replace manually operated machines with computer-controlled machines	$6,500,000 per year	$1,200,000 per year

f. Send a passport and visa application to the nearest Australian consulate by regular return mail	$1.00 per application	$34.00 per application
g. Decline the optional damage coverage on your rental car in Greece	$35 per day	$45 per day
h. Upgrade all personal computers in the office from operating on Microsoft Windows 3.1 to Windows NT	$5,000 per workstation (includes new computer and software)	$400 per workstation (includes increased memory and hard drive)

Problems

Problem 1.32
Benchmarking
(LO 2)

Consider the following data on last year's accounting operations that were obtained by Contaminant Measuring Systems, Inc. (CMS), from an industry trade association that gathers and reports benchmarking data from all members of the association anonymously.

CMS Accounting Operation	CMS Cost per Year	CMS Cost per Transaction	Association Average Cost per Transaction (without CMS)
Accounts receivable	$ 48,300	$18.00	$15.00
General ledger	21,200	6.20	4.80
Accounts payable	32,500	9.30	7.00
Payroll	22,000	7.10	5.20
Credit & collections	8,900	10.25	6.00
Total	$132,900		

Required

a. How many of each type of transaction did CMS perform that year?

b. In nearly every case, the association average cost per transaction was less than CMS's cost. How might other companies operating in the same industry have lower accounting transaction costs?

c. If CMS could process accounts receivable transactions at the association's average cost, how much would it save each year at the same levels of transactions?

d. Security Detection Devices Corporation (SDDC) is a comparably sized competitor of CMS and has the same number of accounting transactions per year as CMS. SDDC, however, processes each accounting transaction for 20 percent less than the association average. What total cost advantage does SDDC have over CMS just in the area of accounting costs per year? What is the importance to CMS of knowing this cost advantage?

e. Why do many companies benchmark their performance against their own industry and the best in the world?

Problem 1.33
Outsourcing
(LO 2)

Core States Oil Company, Inc., is a large oil and gas producer headquartered in Oklahoma. Historically, most of its operations have been in the continental United States. However, in the past decade, Core States expanded its operations to 14 foreign locations where it operates alone or in conjunction with foreign companies or governments. Core States currently maintains a large department of 73 highly trained tax specialists who report to the chief financial officer and assist with planning for the tax impacts of management decisions for domestic and foreign operations. The tax department also prepares its many, complex tax returns. Core States is considering eliminating its internal tax department and outsourcing all of its tax planning and tax return preparation to a large international business services firm. A cost management team has prepared the following preliminary calculations:

Core States Tax Operation (number of personnel)	Cost per Year
Tax-related information systems	
Personnel (12)	$ 721,300
Computer hardware/software	135,600
Tax planning	
Domestic (11.5)	598,700
Foreign (8.5)	606,100
Tax return preparation	
Domestic (24)	1,159,200
Foreign (17)	979,200
Total	$4,200,100

Required

a. What is the most that Core States Oil Company should pay for tax services from an external provider if all but the information systems costs could be saved?

b. What considerations in addition to cost should be important to Core States' decision to outsource its tax services?

c. Evaluate the business services company's offer to provide tax planning and return preparation services for $2.8 million per year. This offer is contingent, however, on Core States' acceptance of another offer from the business services company to improve Core States' tax information systems at a one-time cost of $1.35 million. This improvement should reduce annual costs of the information system by $300,000 per year for the next five years and greatly improve the accuracy and responsiveness of the system. (Ignore the time value of money.)

Problem 1.34
Ethical Issue
(LO 4)

Ethics

Paul Martinez recently joined Toxic, Inc., as assistant controller. Toxic processes chemicals to use in fertilizers. During his first month on the job, Martinez spent most of his time getting better acquainted with those responsible for plant operations. In response to his questions as to the procedure for disposing of chemicals, the plant supervisor responded that Martinez was not involved in the disposal of waste and would be wise to ignore the issue. Of course, this just drove him to investigate the matter further. He soon discovered that Toxic was dumping toxic waste in a nearby public landfill late at night. He also learned that several members of management appeared to be involved in arranging for this dumping. He was unable, however, to determine whether his superior, the controller, was involved. Martinez considered three possible courses of action. He could discuss the matter with the controller, anonymously release the information to the local newspaper, or discuss the situation with an outside member of the board of directors whom he knows personally.

Required

a. Does Martinez have an ethical responsibility to take a course of action? Why or why not?

b. What course of action do you recommend? Why?

[CMA adapted]

Problem 1.35
Costs and Benefits of Internal Orders
(LO 2)

Ante Division is part of a large corporation. It normally sells to outside customers but, on occasion, sells to another division of its corporation. When it sells internally, corporate policy states that the price must be cost plus 20 percent. Ante received an order from Beta Division for 5,000 units. Ante's planned output for the year had been 25,000 units before Beta's order. Ante's capacity is 37,500 units per year. The costs for producing those 25,000 units follow:

	Total	Per Unit
Materials	$ 20,000	$ .80
Labor	100,000	4.00
Other manufacturing costs	100,000	4.00
Total costs	$220,000	$8.80

Based on these data, Ante's controller, who was new to the corporation, calculated that the unit price for Beta's order should be $10.56 ($8.80 × 120 percent). After producing and shipping the 5,000 units, Ante sent Beta an invoice for $52,800. Shortly thereafter, Ante received a note from the buyer at Beta stating that this invoice was not in accordance with company policy. Because Ante would incur the labor and "other" costs regardless of whether it accepted Beta's order, the unit cost should have been only $0.80 to cover Ante's opportunity costs. The price paid would be $0.96 ($0.80 × 120 percent) per unit, and the total payment to Ante should be $4,800.

Required

a. What are the costs and benefits of internally "sourcing" products and services? Which can be quantified and which cannot?

b. If the corporation asked you to review the current inter-company policy, what policy would you recommend? Why? (*Note:* You need not limit yourself to Beta Division's calculation or to current policy.)

Problem 1.36
Cost-Benefit Analysis
(LO 2)

Amanda's Coffee, Inc., operates a small coffee shop in the downtown area. Its profits have been declining, and management is planning to expand and add ice cream to the menu. The annual ice cream sales are expected to increase revenue by $30,000. The cost to purchase ice cream from the manufacturer is $20,000. The present manager will supervise the coffee shop and ice cream shop. Due to expansion, however, the labor costs and utilities would increase by 40 percent. Rent and other costs will increase by 20 percent.

AMANDA'S COFFEE, INC. Annual Income Statement Before Expansion	
Sales revenue	$38,000
Costs	
Food	15,000
Labor	12,000
Utilities	2,000
Rent	4,000
Other costs	2,000
Manager's salary	6,000
Total costs	$41,000
Operating profit (loss)	$ (3,000)

Required

Should management open the ice cream shop? Show an analysis of the costs and benefits of adding ice cream.

Problem 1.37
Cost-Benefit Analysis
(LO 2)

Change Management Corp. helps companies adapt organizational structures to current industry trends. Recently, one of its officers was approached by a representative of a high-tech research firm that offered a contract to Change Management for some help in reorganizing the company. Change Management reported the following costs and revenues during the past year.

CHANGE MANAGEMENT CORP. Annual Income Statement	
Sales revenue	$1,200,000
Costs	
Labor	570,000
Equipment lease	84,000
Rent	72,000
Supplies	54,000
Officers' salaries	350,000
Other costs	38,000
Total costs	$1,168,000
Operating profit	$ 32,000

If Change Management decides to take the contract to help the company reorganize, it will hire a full-time consultant at $134,000. Equipment lease will increase by 5 percent because it must buy certain computer equipment. Supplies will increase by an estimated 10 percent and other costs by 15 percent. The existing building has space for the new consultant. In addition, management believes that no new officers will be necessary for this work, and officers' salaries will not change.

Required

a. What costs would be incurred as a result of taking the contract?

b. If the contract will pay $150,000 in the first year, should Change Management accept it?

c. What considerations, other than costs, are necessary before making this decision?

Cases

Case 1.38
Analysis of Alternatives
(LO 2)

You have recently been hired as a new financial analyst by Corporate Express, the world's largest supplier of office supplies to large corporations. Corporate Express takes orders from its customers via the Internet, processes those orders with office supply manufacturers, and delivers the supplies to the corporate employees who ordered them. Corporate Express' customers do not need to hire anyone whose job is to order, receive, or distribute supplies, nor do customers need supplies inventories or warehouses. Large customers (such as Coca-Cola and Hewlett-Packard) save millions of dollars per year by outsourcing their office supply tasks to Corporate Express.

The vice president of marketing is concerned that the company's policy to serve only large companies does not fit its strategic goals. The VP of marketing believes it might be worthwhile to offer limited services to small, rapidly growing businesses because they could graduate to the full line of services offered to large companies. As a first step, the VP has asked you to analyze the costs and benefits of serving small and large customers.

You have developed the following information:

Annual Average Data	One Large Company	One Small Company
Number of orders per year	2,000	200
Sales value of supplies per order in dollars	$1,000	$400
Cost of supplies to Corporate Express as a percent of sales	80%	80%
Processing cost per order	$40	$40
Delivery cost per order as a percent of sales	5%	5%
Cost to create and maintain Internet access per customer per year	$2,000	$2,000

Required

a. Compute the annual profit generated from an average large or small company.

b. Would it be worthwhile to add 10 small customers to replace one large customer? Why or why not?

c. If other characteristics of small firms differ from those of large ones, would this change your evaluation? Give an example.

d. Do you recommend that Corporate Express consider this business alternative further?

Case 1.39
Outsourcing
(LO 2)

Many companies use the services of *internal auditors,* who perform various investigative and consulting tasks within organizations, such as reviewing divisional financial statements and making recommendations to improve operating performance (e.g., improving quality and customer service). In the past, this has provided both career paths for professional internal auditors and valuable training for new managers, who benefit from seeing firsthand many of the company's operations. In recent years, however, many companies have begun to outsource their internal auditing services.

Consider this recent discussion between the new chief financial officer (CFO) and the long-time director of internal auditing (DIA) at Jeans 'R Us, a large manufacturer of casual and fashion denim clothing, which has experienced serious declines in profitability.

CFO: We need to look very hard at all of our support services and consider whether we can afford them. We need to talk seriously, because I think that outsourcing internal auditing will save the company millions of dollars. In our current situation, we need to save costs wherever we can.

DIA: I think you are being shortsighted. I believe our staff can provide the best possible service to management because it understands our business. An external provider of internal audit services just will not appreciate the unique aspects of our business and our culture.

CFO: I understand that internal audit has had a long tradition here, but based on our budget constraints, I think we have no choice but to use an outside service. The service provider we are considering has a worldwide staff with wide-ranging expertise that we can utilize. You know that many of our manufacturing plants are foreign operations and require the auditors to be fluent in speaking and writing the local language and to understand the local culture. Furthermore, all of our data communications rely on information technology that changes every year. To keep internal auditing staff with these talents at Jeans 'R Us will just be too costly. And what about all of the travel expenses in the internal audit department?

DIA: I'm sorry, but you don't appreciate that internal audit is a strength of the company that has been built over the years by a trust between the internal auditors and the operational and financial management. You cannot replace that level of trust and understanding with outsourced internal auditors whose only loyalty is to the fee they will collect. Internal audit is a "partner" promoting valuable improvements, and top management has always supported it in that way. If you outsource internal audit, you will change the climate of cooperation and trust and free flow of information that you need. In the long run, you will end up paying a lot more for inferior service. Outsourcing internal audit will be a serious mistake. If you insist on this approach, I will go straight to the board of directors. By the way, you know that internal audit reports to the board each year on whether they can rely on the company's financial statements.

Required

a. Describe the possible costs and benefits of outsourcing internal auditing at Jeans 'R Us.

b. What pressures are motivating the arguments of both the CFO and the DIA?

c. How do you interpret the DIA's last comment?

d. Can you recommend a course of action that might satisfy the CFO, DIA, and board of directors?

Case 1.40
Proactive Role of Cost Management
(LO 1)

Boeing Company is the world's largest manufacturer of commercial jet airplanes. To meet growing demand, Boeing in 1997 decided to more than double its rate of production from approximately 17 to more than 40 planes per month. Boeing reported that this increase in production, which normally would be considered a fortunate turnaround, unfortunately could have cost the airplane manufacturer more than $2.6 billion in 1997–1998 for unnecessary costs. Unexpected delays and disruptions caused these extra costs. Financial analysts on Wall Street predicted that Boeing's production problems would persist for nearly a year (which proved to be true) as the company struggled to "ramp up" its production level. The next day, after the reports from Boeing and analysts, Boeing's common stock declined 7.6 percent, or $4.12 per share.

Required

a. If this event were announced today and Boeing's common stock lost $4.12 per share, approximately how much total (before-tax) wealth would Boeing's common shareholders lose today?

b. Describe Boeing's value chain in general terms.

c. What parts of Boeing's value chain would be affected by doubling its production operations?

d. Explain how Boeing's decision to quickly double its production level actually could reduce its profitability.

e. Cost-management support of management's decision to double output might have saved Boeing and its stockholders a lot of money (and prevented some unflattering publicity). Describe in general terms what support operations you might have anticipated to support Boeing's doubling of production.

Case 1.41
Proactive Role of Cost Management
(LO 1, 2, 3)

Interview with Jamie O'Connell, president, CEO, and cofounder of Datacom, Inc., a leading designer and manufacturer of storage area network (SAN) switching devices.[1]

Author: How did you decide to drop other products and direct Datacom's resources toward the design and manufacture of these behind-the-scenes network switches? This was a major strategic decision, wasn't it?

O'Connell: This was a huge decision. We have staked the future of the company on it, but let's be clear about strategic decision making at Datacom. Before we made this decision, we—and I do mean all of us at Datacom—spent months understanding our strengths and weaknesses, our competitors' strengths and weaknesses, our customers' future needs, our business partners, and the future of data-network technology. *I* did not make this decision, *we* made the decision to focus on these very important, high-value switches.

Author: Is it really possible to involve everyone? Can you trust everyone with the responsibility of this kind of decision?

O'Connell: Yes, yes, and yes. Of course it takes time, but who knows our capabilities and customers better than our own employees? And anyone who won't take responsibility for shaping the future of this company should look for another job. In this competitive and dynamic industry, we need the help and input of everyone. This decision affects every employee, stockholder, business partner, their families, and the community. True, the ultimate decision was up to the board of directors and me, but we could not and did not make this decision in a vacuum. That would have been irresponsible.

Author: Can you talk a bit about the role of cost management personnel and the information that supported this decision?

O'Connell: One of the great strengths of our company is a finance group that understands the company's business and technology. I think that is essential in a technology-driven company of our size. Not only that, they truly understand cost management and how to effectively support our strategic decision making. These are not your typical green eyeshade bean counters. The CFO, in particular, brings what I call the "reality of finance" to our analysis of the future of data-storage technology. Most of us are engineers by background, and we tend to focus on the technology more than the business. We would not have made our decision to focus on fiber-optic switches so confidently and responsibly without the daily use of cost management insight and information. We might not have predicted the future of technology and the market perfectly, but we understood beforehand, as well as we could, our alternatives and their impacts on this company and its stakeholders. This was vital, strategic information. Without it, we might as well be playing the lottery with the company's resources. Current events are proving that we chose correctly, and we are positioned to be worldwide leaders in this rapidly growing market.

Required

a. CEO O'Connell of Datacom, Inc., referred to various elements of making strategic decisions. How can cost-management information support each of these elements?

b. What quantitative and nonquantitative costs and benefits might be relevant to Datacom's strategic decisions?

c. How can organizations choose which processes to perform and which to outsource to business partners?

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[1] Datacom is the disguised name of a real company, with approximately 200 employees and $200 million sales. SANs are high-capacity, high-speed configurations of data-storage devices, such as disk drives, that are accessible to computer networks through Datacom's fiber-optic switches.

CHAPTER 2

Product Costing Systems: Concepts and Design Issues

Review Questions

2.1 What is the difference between the meanings of the terms *cost* and *expense*?

2.2 What is the difference between product costs and period costs?

2.3 Is cost of goods sold an expense? Explain.

2.4 What are the three categories of product cost in a manufacturing operation? Describe each element briefly.

2.5 What does the term *variable cost* mean?

2.6 What does the term *fixed cost* mean?

2.7 Distinguish among material resources, conversion resources, and operating resources.

2.8 Distinguish between production and nonproduction resources. Give examples of each.

2.9 Explain the concept of traceability and the way it is used to classify resources as direct or indirect.

2.10 Is a resource always either direct or indirect? Explain.

2.11 What is a unit-level cost? How does it differ from an average cost? How does it differ from a variable cost?

2.12 Define and give an example of each of the following costs:

a. Opportunity cost
b. Outlay cost
c. Product cost
d. Period cost
e. Direct cost
f. Indirect cost

2.13 Is a committed cost the same as a fixed cost? Explain.

2.14 How does throughput costing differ from variable or absorption costing?

2.15 What are the differences among throughput, contribution margin, and gross margin on an income statement?

2.16 Explain how absorption costing can create an incentive to make more products than can be sold.

2.17 Timing is the key in distinguishing between absorption, variable, and throughput costing. Explain this statement.

2.18 When inventory increases, is absorption-costing or variable-costing income higher? Why?

2.19 Do throughput, variable, and absorption costing result in significantly different income measures in a JIT setting? Why?