*CHAPTER 1*

The Changing Role of Managerial Accounting in a Dynamic Business Environment

FOCUS ON ETHICS (Located before the Chapter Summary in the text.)

The focus-on-ethics inset for Chapter 1 is the IMA Statement of Ethical Professional Practice. Instructors can use this list of ethical standards to lead a class discussion. The discussion can also range to consideration of how these standards were violated by managerial accountants involved in the various accounting scandals uncovered over the past several years. It is also useful to discuss the procedures that managerial accountants can follow when they believe they know about ethical lapses in their organization.

# ANSWERS to Review Questions

1-1 The explosion in e-commerce will affect managerial accounting in significant ways. One effect will be a drastic reduction in paper work. Millions of transactions between businesses will be conducted electronically with no hard-copy documentation. Along with this method of communicating for business transactions comes the very significant issue of information security. Businesses need to find ways to protect confidential information in their own computers, while at the same time sharing the information necessary to complete transactions. Another effect of e-commerce is the dramatically increased speed with which business transactions can be conducted. In addition to these business-to-business transactional issues, there will be dramatic changes in the way managerial accounting procedures are carried out, one example being e-budgeting, which is the enterprise-wide and electronic completion of a company’s budgeting process.

* 1. Plausible goals for the organizations listed are as follows:

(a) Amazon.com: (1) To achieve and maintain profitability, and (2) to grow on-line sales of books, music, and other goods.

(b) American Red Cross: (1) To raise funds from the general public sufficient to have resources available to meet any disaster that may occur, and (2) to provide assistance to people who are victims of a disaster anywhere in the country on short notice.

(c) General Motors: (1) To earn income sufficient to provide a good return on the investment of the company's stockholders, and (2) to provide the highest-quality product possible.

(d) Walmart: (1) To penetrate the retail market in virtually every location in the United States, and (2) to grow over time in terms of number of retail locations, total assets, and earnings.

(e) City of Seattle: (1) To maintain an urban environment as free of pollution as possible, and (2) to provide public safety, police, and fire protection to the city's citizens.

(f) Hertz: (1) To be a recognizable household name associated with rental car services, and (2) to provide reliable and economical transportation services to the company's customers.

1-3 The four basic management activities are listed and defined as follows:

(a) Decision making: Choosing among the available alternatives.

(b) Planning: Developing a detailed financial and operational description of anticipated operations.

(c) Directing operations: Running the organization on a day-to-day basis.

(d) Controlling: Ensuring that the organization operates in the intended manner and achieves its goals.

1-4 Examples of the four primary management activities in the context of a national fast-food chain are as follows:

(a) Decision making: Choosing among several possible locations for a new fast-food outlet.

(b) Planning: Developing a cost budget for the food and paper products to be used during the next quarter in a particular fast-food restaurant.

(c) Directing operations: Developing detailed schedules for personnel for the next month to provide counter service in a particular fast-food restaurant.

(d) Controlling: Comparing the actual cost of paper products used during a particular month in a restaurant with the anticipated cost of paper products for that same time period.

1-5 Examples of the objectives of managerial accounting activity in an airline company are described below:

(a) Providing information for decision making and planning, and proactively participating as part of the management team in the decision making and planning processes: Managerial accountants provide estimates of the cost of adding a flight on the route from New York to Miami and actively participate in making the decision about adding the flight.

1. Assisting managers in directing and controlling operations: Managerial accountants provide information about the actual costs of flying the routes in the airline's northeastern geographical sector during a particular month.

(c) Motivating managers and other employees toward the organization's goals: A budget is provided for the cost of handling baggage at O'Hare Airport in Chicago. The budget is given to the airline's baggage handling manager, who is expected to strive to achieve the budget.

(d) Measuring the performance of activities, subunits, managers, and other employees within the organization: Quarterly income statements are prepared for each of the airline's major geographical sectors, and these income reports are used to evaluate the earnings performance of each sector during the relevant time period.

(e) Assessing the organization's competitive position and working with other managers to ensure the organization's long-run competitiveness in its industry: Information about industry-wide performance standards is obtained and compared with the airline's own performance. For example, how does the airline stack up against its competitors in ticket prices, on-time departures, mishandled baggage, customer complaints, and safety?

1-6 Four important differences between managerial accounting and financial accounting are listed below:

(a) Managerial accounting information is provided to managers within the organization, whereas financial-accounting information is provided to interested parties outside the organization.

(b) Managerial accounting reports are not required and are unregulated, whereas financial-accounting reports are required and must conform to generally accepted accounting principles.

(c) The primary source of data for managerial accounting information is the organization's basic accounting system, plus various other sources. These sources include such data as rates of defective products manufactured, physical quantities of material and labor used in production, occupancy rates in hotels and hospitals, and average takeoff delays in airlines. The primary source of data for financial-accounting information is almost exclusively the organization's basic accounting system, which accumulates financial information.

(d) Managerial accounting reports often focus on subunits within the organization, such as departments, divisions, geographical regions, or product lines. These reports are based on a combination of historical data, estimates, and projections of future events. Financial accounting reports focus on the enterprise in its entirety. These reports are based almost exclusively on historical transaction data.

1-7 The cost accounting system is one part of an organization's overall accounting system, the purpose of which is to accumulate cost information. Cost information accumulated by the cost-accounting system is used for both managerial accounting and financial accounting purposes. Managerial accounting is the broad task of preparing information for making decisions about planning, directing, and controlling an organization's operations.

1-8 Managers in line positions are directly involved in the provision of services or the production of goods in an organization. Managers in staff positions support the organization's overall objectives, but they are indirectly involved in operations. Examples of line positions in a university are the president, who is the university's chief executive officer, and the provost, who is the university's chief academic officer. Examples of staff positions in a university are the university counsel, who is the university's chief lawyer, and the director of maintenance, who is charged with maintaining the university's facilities.

1-9 An organization's controller (or comptroller) is the chief managerial and financial accountant. The controller usually is responsible for supervising the personnel in the accounting department and for preparing the information and reports used in both managerial and financial accounting. The treasurer typically is responsible for raising capital and safeguarding the organization's assets. Among the treasurer's responsibilities is the management of an organization's investments, credit policy, and insurance coverage.

* 1. A college or university could use the balanced scorecard as a management tool just like any other business. There is one important difference, however, between a profit-seeking enterprise and a nonprofit organization like a university. A profit-seeking enterprise generally has long-term profitability as its foremost goal, and the other points on the balanced scorecard are oriented toward helping the enterprise achieve that goal of profitability. Universities, on the other hand, usually have multiple goals, which are sometimes in competition with each other. For example, a land-grant university may have teaching, research and public service as its three primary goals. Nevertheless, it is possible for a college or university to develop performance measures for each of the areas in the balanced scorecard. Some examples follow:
* *Financial:* Amount of the unrestricted endowment supporting the university’s activities, and the extent to which the university operates with a balanced budget.
* *Internal business processes:* Tenure rates for faculty, and the extent to which the university’s facilities are up to date and well maintained.
* *Customer*: Class evaluations by students, and job placement rates for students.
* *Learning and growth:* Dollars of research grants obtained, and publication of journal articles and books by faculty.

1-11 This quote from a managerial accountant at Caterpillar suggests that managerial accountants are *physically located* throughout an organization where the day-to-day work is being done, rather than being sequestered off by themselves as was the tendency some years ago. Managerial accountants are increasingly *deployed* as key members of management teams. Managerial accountants have roles as business advisors to all strategic areas of a business and are no longer just considered as information producers.

1-12 Managerial accounting information often brings to the attention of managers important issues that need their managerial experience and skills. In many cases, managerial accounting information will not answer the question or solve the problem, but rather will make management aware that the issue or problem exists. In this sense, managerial accounting sometimes is said to serve an attention-directing role.

1-13 Both manufacturing and service industry firms are engaged in production. The primary difference between these types of companies is that manufacturing firms produce inventoriable goods, whereas the services produced by service industry firms are not inventoriable. Services, such as air transportation or hotel service, are consumed as they are produced.

1-14 (a) *Practical capacity* is an organization’s upper limit on production of goods or services, calculated after taking into account normal occurrences such as equipment downtime, employee fatigue, illness, and breaks, and planned interruptions in production such as holidays and shutdowns.

(b) *Cost of resources supplied* is a measure of the spending on production resources, such as labor, machinery and various overhead costs, that have been made available for in support of the production planned during a particular period of time.

(c) *Cost of resources used* is a consumption-oriented measure that attempts to quantify the spending on the production resources used to create the actual amount of product or service output. It consider only the amount of resources provided that were actually needed for production.

(d) *Cost of resources unused* is the difference between *cost of resources supplied* and *cost of resources used*, i.e., the cost of the various production resources that are available for production but not needed for the amount of output actually produced. Cost of resources unused is often referred to as *cost of excess capacity*.

1-15 The statement is accurate: capacity supplied in the current period but not used for production is gone. If a pizza maker is available for four hours to make pizzas but only one pizza is ordered, she still has to be paid for four hours. There is no way to store that capacity to use it another time. However if an experienced store manager, realizing it is going to be a slow night, tells her after an hour to “go home and we’ll schedule you for three extra hours tomorrow,” then the capacity is never supplied, and therefore it does not go unused and is not “lost forever.” But the employee is only paid for one hour of work.

1-16 CMA stands for Certified Management Accountant. This title is the professional certification for managerial accountants administered by the Institute of Management Accountants. The requirements for becoming a CMA include fulfilling specified educational requirements and successfully passing the CMA examination.

1-17 (a) Competence: Ongoing development of knowledge and skills, performance of duties in accordance with relevant laws, adherence to regulations and technical standards, and preparation of complete and clear reports for management.

(b) Confidentiality: Refraining from disclosing, using, or appearing to use confidential information acquired in the course of the managerial accountant's work.

(c) Integrity: Avoiding conflicts of interest in activities that would prejudice the managerial accountant's ability to carry out his or her duties ethically, and refraining from other activities that would discredit the profession.

(d) Credibility: Communication of information fairly, objectively, and fully.

1-18 Non-value-added costs are the costs of activities that can be eliminated with no deterioration of product quality, performance, or perceived value.

1-19 Managers rely on many information systems in addition to managerial accounting information. Examples of other information systems include economic analysis and forecasting, marketing research, legal research and analysis, and technical information provided by engineers and production specialists.

1-20 Managerial accounting is just as important in nonprofit organizations as it is in profit-seeking enterprises. Managers in nonprofit organizations also need managerial-accounting information for decision making, planning, directing, and controlling operations.

1-21 Becoming the low-cost producer in an industry requires a clear understanding by management of the costs incurred in its production process. Reports and analysis of these costs are a primary function of managerial accounting.

1-22 A professional is a person engaged in a specified occupation that requires advanced training, skill, and a well-defined body of knowledge. According to this definition from Webster, a managerial accountant is a professional.

1-23 Some activities in the value chain of a manufacturer of cotton shirts are as follows:

(a) Growing and harvesting cotton

(b) Transporting raw materials

(c) Designing shirts

(d) Weaving cotton material

(e) Manufacturing shirts

(f ) Transporting shirts to retailers

(g) Advertising cotton shirts

Some activities in the value chain of an airline are as follows:

(a) Making reservations and ticketing

(b) Designing the route network

(c) Scheduling

(d) Purchasing aircraft

(e) Maintaining aircraft

(f) Running airport operations, including handling baggage

(g) Serving food and beverages in flight

(h) Flying passengers and cargo

1-24 Strategic cost management is the process of understanding and managing, to the organization's advantage, the cost relationships among the activities in an organization's value chain.

# Solutions to exercises

## Exercise 1-25 (20 minutes)

1. Estimates of any operating costs associated with the proposed luxury cars would be relevant. For example, estimates of the cost of gasoline, routine maintenance, and insurance on the new vehicles would be useful.
2. Data about the cost of maintaining the machine weekly or biweekly would be relevant. In addition, the production manager should consider information about the likely rates of defective products under each maintenance alternative.
3. Estimates of the cost of lost merchandise due to shoplifting and the cost of employing security personnel would be relevant to this decision.
4. Estimates of building costs for the library addition as well as estimates of benefits to the population from having the addition would be useful. Estimating the benefits may require value judgments about the benefits to the public from having additional library space and more books.

## Exercise 1-26 (25 minutes)

1. Developing a bonus reward system for managerial personnel is an example of motivating managers and other employees toward the organization's goals. To be effective, the bonus system must provide incentives for managers to work toward achieving those goals.
2. Comparing actual and planned costs is consistent with two objectives of managerial accounting activity: (1) assisting managers in controlling operations, and (2) measuring the performance of activities, subunits, managers, and other employees within the organization.
3. Determining manufacturing costs is related to all of the objectives of managerial accounting. It is especially closely related to the objective of providing information for decision making and planning.
4. Measuring inventory costs is most closely associated with the first two objectives of managerial accounting activity: (1) providing information for decision making and planning, and (2) assisting managers in directing and controlling operational activities. Since inventory costs are used in external financial reports, they are also relevant to measuring the performance of managers and subunits within the organization.
5. Estimating costs is particularly relevant to the objective of providing information for decision making and planning.

## Exercise 1-26 (continued)

1. Measuring operating costs is relevant to all of the objectives of managerial accounting activity.
2. Comparing operating statistics such as those mentioned for a hotel is particularly relevant to the following objective of managerial accounting: Assessing the organization's competitive position and working with other managers to ensure the organization's long-run competitiveness in its industry.

EXERCISE 1-27 (30 MINUTES)

Answers will vary widely for this exercise, depending on the company chosen by each student. Companies’ financial goals often include profitability, earnings per share, growth in the stock price, sales growth, and so forth. Managerial accounting can make an important contribution to all of these goals.

EXERCISE 1-28 (30 MINUTES)

Answers will vary widely for this exercise, depending on the company chosen by each student (or group of students).

# solutions to Problems

PROBLEM 1-29 (25 MINUTES)

1. Managerial accounting can be of significant benefit when it comes to solving the company’s problems. Managerial accounting is defined as the process of identifying, measuring, analyzing, interpreting, and communicating information in pursuit of an organization’s goals. Several of the problems lie in this area and may be attributed to a lack of formal planning, controlling, directing, and decision-making expertise.

For example, bulging inventories and the fact that growth “…has occurred in spite of what we’ve done” may indicate the absence of a formal planning system—one that involves developing a detailed financial and operational description of anticipated activities. Dangerously low cash balances and the need for short-term loans may be eliminated by the use of a cash budget, which depicts cash inflows and outflows over a period of time. The addition of ski equipment may or may not have been the proper decision. Did Nelson correctly identify all possible alternatives and then make the proper selection?

The canoe-building activities and white-water rafting trips may be losing money. Are costs skyrocketing hopelessly out of control? It is difficult to tell because the income statement does not provide adequate information—it is a summary of past transactions for the entire business. A performance report that identifies the company’s major areas of activity would be of assistance, especially if the report measured budgeted vs. actual costs and highlighted (directed attention toward) significant deviations for management attention. If such a report were prepared, managers could better direct operational activities and ensure that the company achieves its goals (i.e., the control function).

1. Yes, a cross-functional team would be useful in this situation. Several of the company’s problems affect multiple functional areas within the firm. For example, bulging inventories, which impact profitability and cash balances, may be the result of poor ordering practices and/or ineffective marketing programs. Issues related to the operation of a seasonal business may be overcome with the selection of different “off-season” product lines and aggressive marketing campaigns. These problems, coupled with the fact that a number of the key executives manage in “silos” and lack the “big-picture” outlook for the firm, seem to indicate the desirability of teams that have different employee backgrounds and interests (such as marketing, operations, and finance) represented.

PROBLEM 1-29 (CONTINUED)

1. Nelson’s business is operating in the tourism industry, which is notoriously cyclical. In that context alone, there are many constrained resources: for example, number of rafts for raft trips and employees to guide them. In the busiest season, the summer months of July and August, Nelson can probably keep a large number of rafts and guides profitably busy. Other times of the year, he has to lay off some of the guides and some of the rafts sit empty because he offers fewer rafting trips each week. But he is fortunate that these are resources that can be scaled to meet demand: some rafts can be put in storage and every rafting guide knows that his employment is seasonal. Still, resource capacity has to be considered in managing the company.

What about other resources that are not so easily adjusted? The store buildings, for example, are a resource to the company and many of their costs (depreciation, for instance) continue year round. Does that mean that a backpack sold in winter should be viewed as less profitable (or marked up more) than a backpack sold in summer, because there are fewer backpacks sold to cover the cost of the building? Managerial accounting says no, that the extra cost of the store buildings in winter is unused capacity and shouldn’t count against the cost of the backpack.

There are many other resources that could be listed. For each, you should describe what causes the capacity issue.

PROBLEM 1-30 (25 MINUTES)

1. The balanced scorecard is a business model that helps to assess a firm’s competitive position and ensures that the firm is progressing toward long-term survival. Although balanced scorecards differ from one firm to the next, most have a combination of financial measures, customer measures, internal business process measures, and measures of learning and growth.

2. Functional areas for the airline include marketing, finance, operations (e.g., maintenance, reservations, customer service, and scheduling), human resources, purchasing, accounting, planning, and information systems/technology.

3. Financial measures:

Net income Operating expenses per seat mile

Earnings per share Cost per meal served

Passenger revenue per seat mile Revenue growth

Customer-measures:

Load factors Number of bags lost

Number of passenger complaints Market share

Average wait time when calling Response time for resolving

reservations center customer problems

PROBLEM 1-30 (CONTINUED)

Internal Business Process measures:

Percentage of on-time arrivals Number of cities/new cities served

Percentage of on-time departures Number of aircraft in fleet Average trip length (in miles) Average age of aircraft in fleet

Percentage of tickets sold through Aircraft turnaround time between travel agents, reservation flights

agents, and the Internet

Learning and Growth measures:

Enhancements to product line Employee turnover

(new class of service) Employee satisfaction scores

New unique features of frequent-flier Employee training programs

club

4. Yes. By focusing on only one factor, other important facets of the business are ignored, which could lead to long-run problems. For example, paying too much attention to load factors may result in a decrease in profitability (e.g., the sale of too many inexpensive seats). A significant focus on profitability could result in the airline providing marginal service to its customers (poor meals; long wait times when calling reservations centers; a large number of lost bags by a small, poorly-trained crew, and so forth).

## Problem 1-31 (45 minutes)

1. Allen's considerations are determined largely by her position as an accountant, with responsibilities to AccuSound Corporation, others in the company, and herself. Allen's job involves collecting, analyzing, and reporting operating information. Although not responsible for product quality, Allen should exercise initiative and good judgment in providing management with information having potentially adverse economic impact.

Allen should determine whether the controller's request violates her professional or personal standards or the company's code of ethics, should the company have such a code. As Allen decides how to proceed, she should protect proprietary information and should not violate the chain of command by discussing this matter with the controller's superiors.

2. a. The controller has reporting responsibilities and should protect the overall company interests by encouraging further study of the problem by those in his or her department, by informing superiors in this matter, and by working with others in the company to find solutions.

PROBLEM 1-31 (CONTINUED)

b. The quality control engineer has responsibilities for product quality and should protect overall company interests by continuing to study the quality of reworked rejects, by informing the plant manager and his staff in this matter, and by working with others in the company to find solutions.

c. The plant manager and his or her staff have responsibilities for product quality and cost and should protect overall company interests by exercising the stewardship expected of them. Plant management should be sure that products meet quality standards. Absentee owners need information from management, and the plant management staff have a responsibility to inform the board of directors elected by the owners of any problems that could affect the well-being of the firm.

3. Allen needs to protect the interests of the company, others in the company, and herself. Allen is vulnerable if she conceals the problem and it eventually surfaces. Allen must take some action to reduce her vulnerability. One possible action would be to obey the controller and prepare the advance material for the board without mentioning or highlighting the probable failure of reworks. Because this approach differs from the long-standing practice of highlighting information with potentially adverse economic impact, Allen should write a report to the controller detailing the probable failure of reworks, the analysis made by her and the quality control engineer, and the controller's instructions in this matter.

## Problem 1-32 (30 minutes)

1. Line activities are primary to the purpose of the organization. They are the activities that create and distribute the goods and services of the organization. Line reporting refers to the reporting relationship between different hierarchical management levels in line activities (e.g., the reporting relationship between the general supervisor and the plant manager).

Staff activities are services provided by departments in the organization in support of its line activities. The role of the division controller in the division is an example of a staff activity. The reporting relationship between the division controller and the division manager is an example of a staff reporting relationship.

2. a. The division controller is responsible to both the corporate controller and the division manager. The corporate controller assigns the division controller to the division and has final responsibility for promotion and salary. Thus, the division controller is an employee of the controller's department and reports to the corporate controller. At the same time, the division controller serves as a staff resource to the division manager. The division controller is required to file an independent commentary on the division's financial results, which could well differ from the division manager's commentary.

## Problem 1-32 (CONTINUED)

The division manager evaluates the division controller's performance and makes salary and promotion recommendations to the corporate controller.

1. The motivation of the division controller would be affected by this dual reporting relationship. The division controller is being evaluated by two people whose responsibilities are not always congruent. What may be considered good performance by one person may be considered unsatisfactory by the other. Thus, the division controller will have difficulty knowing what factors influence his or her progress in the company. The circumstances described in the problem do not provide positive motivation for the division controller.

# solution to case

**CASE 1-33 (40 minutes)**

**1. Andrea Nolan’s ethical responsibilities require that she not tell her friend, Rob Borman, about Progressive’s cash flow problems. Nolan, as a management accountant, must comply with the following standards for ethical conduct:   
  
*Confidentiality:***

* **Keep information confidential except when disclosure is authorized or legally required.**
* **Inform all relevant parties regarding appropriate use of confidential information. Monitor subordinates’ activities to ensure compliance.**
* **Refrain from using confidential information for unethical or illegal advantage.**

***Integrity:***

* **Mitigate actual conflicts of interest. Regularly communicate with business associates to avoid apparent conflicts of interest. Advise all parties of any potential conflicts.**
* **Refrain from engaging in any conduct that would prejudice carrying out duties ethically.**
* **Abstain from engaging in or supporting any activity that might discredit the profession.**

**2. Nolan has an ethical responsibility to inform Progressive that Borman has decided to postpone the paper order. As a management accountant, Nolan must comply with the following standards of ethical conduct:   
  
*Confidentiality:***

* **Keep information confidential except when disclosure is authorized or legally required.**
* **Inform all relevant parties regarding appropriate use of confidential information. Monitor subordinates’ activities to ensure compliance.**
* **Refrain from using confidential information for unethical or illegal advantage.**

**CASE 1-33 (CONTINUED)**

***Integrity:***

* **Mitigate actual conflicts of interest. Regularly communicate with business associates to avoid apparent conflicts of interest. Advise all parties of any potential conflicts.**
* **Refrain from engaging in any conduct that would prejudice carrying out duties ethically.**
* **Abstain from engaging in or supporting any activity that might discredit the profession.**

***Credibility:***

* **Communicate information fairly and objectively.**
* **Disclose all relevant information that could reasonably be expected to influence an intended user’s understanding of the reports, analyses, or recommendations.**
* **Disclose delays or deficiencies in information, timeliness, processing, or internal controls in conformance with the organization’s policy and/or applicable law.**

3. Nolan should resolve this matter by discussing the situation with her immediate superior. Nolan should tell her superior of her long-time friendship with Borman. However, she should make it clear that she has not and will not disclose confidential company information to Borman or any other outside party except when authorized or legally obligated to do so. If a satisfactory resolution to the problem is not achieved, Nolan should submit the matter to the next-higher managerial level. However, she should inform her immediate superior that she is going to take this step.