Chapter 1

Managerial Accounting: An Overview

Solutions to Questions

**1-1** Financial accounting is concerned with reporting financial information to external parties, such as stockholders, creditors, and regulators. Managerial accounting is concerned with providing information to managers for use within the organization. Financial accounting emphasizes the financial consequences of past transactions, objectivity and verifiability, precision, and companywide performance, whereas managerial accounting emphasizes decisions affecting the future, relevance, timeliness, and segment performance. Financial accounting is mandatory for external reports and it needs to comply with rules, such as generally accepted accounting principles (GAAP) and international financial reporting standards (IFRS), whereas managerial accounting is not mandatory and it does not need to comply with externally imposed rules.

**1-2** Five examples of planning activities include (1) estimating the advertising revenues for a future period, (2) estimating the total expenses for a future period, including the salaries of all actors, news reporters, and sportscasters, (3) planning how many new television shows to introduce to the market, (4) planning each television show’s designated broadcast time slot, and (5) planning the network’s advertising activities and expenditures.

Five examples of controlling activities include (1) comparing the actual number of viewers for each show to its viewership projections, (2) comparing the actual costs of producing a made-for-television movie to its budget, (3) comparing the revenues earned from broadcasting a sporting event to the costs incurred to broadcast that event, (4) comparing the actual costs of running a production studio to the budget, and (5) comparing the actual cost of providing global, on-location news coverage to the budget.

**1-3** The quantitative analysis would focus on determining the potential cost savings from buying the part rather than making it. The qualitative analysis would focus on broader issues such as strategy, risks, and corporate social responsibility. For example, if the part is critical to the organization’s strategy, it may continue making the part regardless of any potential cost savings from outsourcing. If the overseas supplier might create quality control problems that could threaten the end consumers’ welfare, then the risks of outsourcing may swamp any cost savings. Finally, from a social responsibility standpoint, a company may decide against outsourcing if it would result in layoffs at its domestic manufacturing facility.

**1-4** Companies prepare budgets to translate plans into formal quantitative terms. Budgets are used for various purposes, such as forcing managers to plan ahead, allocating resources across departments, coordinating activities across departments, establishing goals that motivate people, and evaluating and rewarding employees. These various purposes often conflict with one another, which makes budgeting one of management’s most challenging activities.

**1-5** Managerial accounting is relevant to all business students because all managers engage in planning, controlling, and decision making activities. If managers wish to influence co-workers across the organization, they must be able to speak in financial terms to justify their proposed courses of action.

**1-6** The Institute of Management Accountants estimates that 80% of accountants work in non-public accounting environments. Accountants that work in corporate, non-profit, and governmental organizations are expected to use their planning, controlling, and decision-making skills to help improve performance.

**1-7** Deere & Company is an example of a company that competes in terms of product leadership. The company’s slogan “nothing runs like a Deere” emphasizes its product leadership customer value proposition.

Amazon.com competes in terms of operational excellence. The company focuses on delivering products faster, more conveniently, and at a lower price than competitors.

Charles Schwab competes in terms of customer intimacy. It focuses on building personal relationships with clients so that it can tailor investment strategies to individual needs.

**1-8** Planning, controlling, and decision making must be performed within the context of a company’s strategy. For example, if a company that competes as a product leader plans to grow too quickly, it may diminish quality and threaten the company’s customer value proposition. A company that competes in terms of operational excellence would select control measures that focus on time-based performance, convenience, and cost. A company that competes in terms of customer intimacy may decide against outsourcing employee training to cut costs because it might diminish the quality of customer service.

**1-9** This answer is based on Nike, which has suppliers in over 40 countries. One risk that Nike faces is that its suppliers will fail to manage their employees in a socially responsible manner. Nike conducts Management Audit Verifications at its overseas plants to minimize this risk.

Nike faces the risk that unsatisfactory environmental performance will diminish its brand image. The company is investing substantial resources to develop products that minimize adverse impacts on the environment.

Nike faces the risk that customers will not like its new products. The company uses focus group research to proactively assess the customers’ reaction to its new products.

**1-10** Airlines face the risk that large spikes in fuel prices will lower their profitability. Therefore, they may reduce this risk by spending money on hedging contracts that enable them to lock-in future fuel prices that will not change even if the market price increases.

Steel manufacturers face major risks related to employee safety, so they create and monitor control measures related to occupational safety compliance and performance.

Restaurants face the risk that an economic downturn will reduce customer traffic and lower sales. They reduce this risk by choosing to create menus during economic downturns that offer more low-priced entrees.

**1-11** Barnes & Noble could segment its companywide performance by individual store, by sales channel (i.e., bricks-and-mortar versus on-line), and by product line (e.g. non-fiction books, fiction books, music CDs, toys, etc.).

Procter & Gamble could segment its performance by product category (e.g., beauty and grooming, household care, and health and well-being), product line (e.g., Crest, Tide, and Bounty), and stock keeping units (e.g., Crest Cavity Protection toothpaste, Crest Extra Whitening toothpaste, and Crest Sensitivity toothpaste).

**1-12** Timberland publishes quarterly corporate social responsibility (CSR) metrics (see [www.earthkeeper.com/CSR/csrdownloads](http://www.earthkeeper.com/CSR/csrdownloads). Three of those metrics include metric tons of carbon emissions, the percentage of total cotton sourced that is organic, and renewable energy use as a percent of total energy usage.

Timberland’s corporate slogan of “doing well by doing good” suggests that the company publishes CSR reports because it believes that its financial success (i.e., doing well) is positively influenced by its social and environmental performance (i.e., doing good).

**1-13** Companies that use lean production only make units in response to customer orders. They produce units just in time to satisfy customer demand, which results in minimal inventories.

**1-14** Organizations are managed by people that have their own personal interests, insecurities, beliefs, and data-supported conclusions that ensure unanimous support for a given course of action is the exception rather than the rule. Therefore, managers must possess strong leadership skills if they wish to channel their co-workers’ efforts towards achieving organizational goals.

**1-15** Ethical behavior is the lubricant that keeps the economy running. Without that lubricant, the economy would operate much less efficiently—less would be available to consumers, quality would be lower, and prices would be higher.

Exercise 1-1 (30 minutes)

1. Having the boss unilaterally impose a sales budget on the sales manager is a bad idea for three reasons. First, the boss may not have access to information possessed by the sales manager that would result in a more accurate forecast. Second, the sales manager is unlikely to be committed to achieving a budget that she did not help create. Third, if the sales manager fails to achieve actual results that meet or exceed the budget, it would be easy for the sales manager to justify this outcome on the grounds that she had no input in creating the budget.

2. The company would probably not be comfortable with having the sales manager create the budget with no input from her boss. First, the boss is likely to possess a broad understanding of strategic issues that should be incorporated into the budgeting process. Second, the sales manager may be inclined to purposely underestimate future sales to increase her chances of producing actual results that exceed the budget. If she can produce actual results that exceed the budget it is likely to increase her pay raise and bonus as well as her chances for promotion.

3. If the company used the sales budget for the sole purpose of planning to deploy resources in a manner that best serves customers, then it is possible that the boss and the sales manager would both be focused on producing the most accurate forecast possible. They would strive for accuracy because if they overestimate sales it is likely to result in bloated inventories and if they underestimate sales it is likely to result in lost sales.

4. If the company used the sales budget for the sole purpose of motivating employees to strive for excellent results, then the boss may be inclined to challenge the sales manager by establishing a budget that intentionally exceeds expected sales. If the sales budget has absolutely no impact on the sales manager’s pay raises, promotions or bonuses, then she may be inclined to embrace the challenge of “aiming high” when establishing the sales forecast.

Exercise 1-1 (30 minutes)

5. If the company used the sales budget for the sole purpose of determining pay raises, promotions, and bonuses, then the sales manager will be inclined to understate the sales budget to maximize her pay raise, bonus, and chance of promotion. The boss would expect the sales manager to understate the sale budget, so he would seek to increase the budget above the sales manager’s proposed forecast.

6. When a budget is used to deploy resources, to motivate employees through the use of stretch goals, and to evaluate and reward employees, it creates inevitable conflicts. As a resource deployment tool, the budget should be as accurate as possible. As a motivational tool, the budget should intentionally seek to stretch employees to perform to their full potential. When budgets are used to evaluate and reward employees, the employees will have a strong inclination to establish easily attainable goals to maximize their chances for large pay raises and bonuses as well as their chance for promotion.

**Exercise 1-2** (10 minutes)

The student would feel unfairly criticized for unloading 150 pieces of luggage in 13 minutes. The student would perceive that, according to the boss’s expectations, he should be able to unload 10 pieces of luggage per minute. Therefore, if an airplane contains 150 pieces of luggage, he should be allowed 15 minutes to unload the airplane’s luggage. By unloading 150 pieces of luggage in 13 minutes, the student would rightly claim that he beat the boss’s expectation by two minutes.

When companies design control systems, they compare actual performance to some pre-existing expectation. The pre-existing benchmark needs to make sense so that is can result in meaningful managerial insights and fair-minded assessments of employee performance. This is the fundamental underlying principle of flexible budgets, which will be explained in a subsequent chapter.

**Exercise 1-3** (30 minutes)

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| Examples of Decisions | Application in a University Setting |
| *What should we be selling?* |  |
| What products and services should be the focus of our marketing efforts? | How should we allocate our marketing resources, among our undergraduate programs, our graduate programs, our research accomplishments, and our athletic programs? |
| What new products and services should we offer? | Should we introduce a new major for undergraduate students? |
| What prices should we charge for our products and services? | What prices should we establish for our travel abroad programs? |
| What products and services should we discontinue? | Should we discontinue our MBA program? |
| *Who should we be serving?* |  |
| Who should be the focus of our marketing efforts? | How much of our marketing budget should we channel towards attracting undergraduate students versus graduate students? |
| Who should we start serving? | Should we introduce on-line programs that enable us to serve customers across the globe? |
| Who should pay price premiums or receive price discounts? | How much should we charge for out-of-state tuition? |
| Who should we stop serving? | Which one of our branch campuses should we close? |
| *How should we execute?* |  |
| How should we supply our parts and services? | What portion of our faculty should be adjunct faculty? |
| How should we expand our capacity? | Should we increase our average class size to accommodate more students? |
| How should we reduce our capacity? | Should we cut costs by eliminating administrative jobs or faculty jobs? |
| How should we improve our efficiency and effectiveness? | Should we increase our research expectations for our faculty? |

**Exercise 1-4** (20 minutes)

1. Failure to report the obsolete nature of the inventory would violate the IMA’s Statement of Ethical Professional Practice as follows:

**Competence**

• Perform duties in accordance with relevant technical standards. Generally accepted accounting principles (GAAP) require the write-down of obsolete inventory.

• Prepare decision support information that is accurate.

**Integrity**

• Mitigate actual conflicts of interest and avoid apparent conflicts of interest.

• Refrain from engaging in any conduct that would prejudice carrying out duties ethically.

• Abstain from activities that would discredit the profession.

**Credibility**

• Communicate information fairly and objectively.

• Disclose all relevant information.

• Hiding the obsolete inventory impairs the objectivity and relevance of financial statements.

Members of the management team, of which Perlman is a part, are responsible for both operations and recording the results of operations. Because the team will benefit from a bonus, increasing earnings by ignoring the obsolete inventory is clearly a conflict of interest. Furthermore, such behavior is a discredit to the profession.

(Unofficial CMA solution)

**Exercise 1-4** (continued)

2. As discussed above, the ethical course of action would be for Perlman to insist on writing down the obsolete inventory. This would not, however, be an easy thing to do. Apart from adversely affecting her own compensation, the ethical action may anger her colleagues and make her very unpopular. Taking the ethical action would require considerable courage and self-assurance.

**Exercise 1-5** (60 minutes)

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| --- | --- | --- |
|  | Company | Strategy |
| 1. | Deere | Product leadership: “Nothing runs like a Deere” |
| 2. | FedEx | Operational excellence: “When it absolutely, positively has to be there overnight” |
| 3. | State Farm Insurance | Customer intimacy: “Like a good neighbor, State Farm is there” |
| 4. | BMW | Product leadership: “The Ultimate Driving Machine” |
| 5. | Amazon.com | Operational excellence: Huge selection of products that are promptly delivered straight to your door |
| 6. | Charles Schwab | Customer intimacy: “Talk to Chuck” |

**Exercise 1-6** (15 minutes)

|  |  |  |
| --- | --- | --- |
| *Industry* | *Type of Risk* | *Control* |
| Airlines | An airplane might crash. | Implement a preventive maintenance program. |
| Pharmaceutical drugs | A customer might be harmed by a drug. | Design tamper-proof packaging. |
| Package delivery | A package may get lost. | Implement an electronic package tracking system. |
| Banking | Customer credit card numbers may be stolen. | Implement computer system firewalls to foil computer hackers. |
| Oil & gas | An oil spill may damage the environment. | Create contingency response plans in the event of an oil spill. |
| E-commerce | The company’s website might crash. | Develop a backup system that can be easily activated. |
| Automotive | Customers may not like the appearance of a new car model. | Use focus groups to assess reactions to new model prototypes. |

**Exercise 1-7** (20 minutes)

1. If all automotive service shops routinely tried to sell parts and services to customers that they didn’t really need, most customers would eventually figure this out. They would then be reluctant to accept the word of the service representative that a particular problem needs to be corrected—even when a real problem exists. Either the work would not be done, customers would learn to diagnose and repair problems themselves, or customers would hire an independent expert to verify that the work is really needed. All three of these alternatives impose costs and hassles on customers.

2. As argued above, if customers could not trust their service representatives, they would be reluctant to follow the service representative’s advice. They would be inclined not to authorize work even when it is really necessary. And, more customers would learn to do automotive repairs and maintenance themselves. Moreover, customers would be unwilling to pay as much for work that is done because customers would have reason to believe that the work may be unnecessary. These two effects would reduce demand for automotive repair services. The reduced demand would reduce employment in the industry and would lead to lower overall profits.

**Exercise 1-8** (10 minutes)

The type of cognitive bias revealed by this data is called self-enhancement bias. This bias occurs when people overstate their strengths and understate their weaknesses relative to others. This bias may cause managers to be overly-optimistic when making plans for the future. This bias might also cause managers to readily blame others if control data indicates unsatisfactory performance. It can also lead managers to make poor decisions because they believe their managerial prowess can overcome any potential obstacles revealed by an objective data analysis. Managers can help reduce the potential adverse consequences of self-enhancement bias by establishing a “devil’s advocate” team of managers that are charged with challenging proposed courses of action.

**Exercise 1-9** (20 minutes)

The purpose of this exercise is to present students with an opportunity to debate the ethicality of competing courses of action. Some students may argue that the ethical choice is to tell the truth when speaking with the professor from Oregon Coastal University. Other students may argue that it is okay to be untruthful with the professor from Oregon Coastal University because it serves a “greater good” from the standpoint of future Mountain State University students that will be able to avoid Dr. Candler.

The power of rationalization is a very important topic when discussing ethics and decision making. When students are asked a generic question about the ethicality of breaking the law or lying, they quickly condemn these actions as unethical. However, when given specific contexts, such as the one presented in this problem, many students will rationalize unlawful or dishonest conduct.

**Exercise 1-10** (20 minutes)

The purpose of this exercise is to create a platform for students to debate the merits of the shareholder-focused and stakeholder-focused philosophies of business management. Student responses are likely to fall in three categories. First, those students who believe that the purpose of a company is shareholder wealth maximization will tend to agree with the quote. Second, those students who believe that companies should serve the needs of a broadly defined group of stakeholders may disagree with the quote. Third, some students may argue that the shareholder-focused and stakeholder-focused philosophies of business management are not mutually exclusive. In other words, these students may assert that effectively or ineffectively serving the needs of various stakeholders can have a major impact on a company’s financial performance. To support this point-of-view, direct students to the In Business box within Chapter 1 titled “Greenpeace Leverages the Power of Social Media.”

**Exercise 1-11** (20 minutes)

1. This question gives students a platform for discussing the merits of extrinsic motivators in organizations. Student responses should differ regarding the effectiveness of extrinsic rewards in creating an enduring commitment to a set of values or a course of action, thereby enabling a lively debate.

2. This question gives students an opportunity to discuss the roles of intrinsic motivation and extrinsic motivation in organizational management.

3. This question gives students an opportunity to discuss the implementation of compensation systems within organizations. To enrich this discussion, professors can ask students questions such as: (1) Would your incentives be tied to individual performance or team-based performance? (2) Would your incentives be tied to easily attainable goals or stretch targets? and (3) How would you handle the fact that financial incentive systems are often influenced by factors that are beyond the control of those being evaluated?

**Exercise 1-12** (20 minutes)

1. Most students are likely to recommend reinforcing the sections of the plane that were hit most often by enemy fire. Indeed, during World War II, American military personnel drew the same conclusion.

2. Perceptive students may realize that this is a classic case of selection bias. Selection bias arises when decision makers rely on a sample that is not representative of the entire population being studied. In this case, the military was relying on a sample that included only those planes that had returned from combat. The sample did not include planes lost in combat.

During World War II statistician Abraham Ward recommended that the portions of the planes hit least often should be reinforced. “Ward reasoned that a plane would be less likely to return if it were hit in a critical area and, conversely, that a plane that did return even when hit had probably not been hit in a critical location.”

Note: The above quote appears on page 118 of Jerker Denrell’s article titled “Selection Bias and the Perils of Benchmarking,” from the *Harvard Business Review*, Volume 83, Issue 4, pp. 114-119.

**Exercise 1-13** (20 minutes)

The purpose of this exercise is to present students with an opportunity to debate the ethicality of competing courses of action. Some students may argue that the ethical choice is to report all gambling winnings to the Internal Revenue Service even though it will force them to pay additional federal income taxes. Other students may argue that it is okay to evade the additional income tax for various reasons, such as “everybody else does it so it is okay.”

The power of rationalization is a very important topic when discussing ethics and decision making. When students are asked a generic question about the ethicality of breaking the law or lying, they quickly condemn these actions as unethical. However, when given specific contexts, such as the one presented in this problem, many students will rationalize unlawful or dishonest conduct.

Note to instructors: Before beginning a classroom discussion, allow students to anonymously answer the question in writing. Summarize the results of the written responses and ask students to comment on them.

Appendix 1A

Corporate Governance

Solutions to Questions

**1A-1** Example of control activities include (1) watching high school athletes play prior to recruiting them, (2) scouting opponents prior to playing them, (3) monitoring each student-athlete’s classroom and study hall attendance, (4) conducting flexibility and weight training for the players, and (5) conducting practices in the pre-season and in between games.

**1A-2** Examples of control activities include (1) attending interviewing skills workshops, (2) attending resume writing workshops, (3) gathering background information about possible employers prior to interviewing with them, (4) developing effective study habits for each class, and (5) participating in extra-curricular activities that build skills important to employers.

**1A-3** Examples of control activities include (1) installing fire, radon, and carbon monoxide detectors, (2) paying for annual home heating system inspections, (3) installing locks on doors, (4) storing all potentially harmful products in safe locations away from children, (5) reducing the maximum allowable hot water temperature, (6) installing a home security system, and (7) installing plastic covers over electrical outlets.

**1A-4** Examples of controls include using security cameras, having undercover security guards on the premises, using mirrors to eliminate blind-spots in corners of the store, creating store layouts that require customers to pass the registers in order to exit, having employees monitor restrooms and dressing rooms, using security tags on merchandise, requiring cashiers to inspect items such as shoe boxes to ensure that they do not contain hidden merchandise, and placing small expensive items in locked cabinets.

**1A-5** Examples of internal controls include maintaining a locked cash register, limiting register access to one employee at a time, periodically reconciling the cash in the drawer with the register’s sales records, separating the duties of checking out customers, counting the cash in the drawer and reconciling it with the register’s sales report, and depositing the cash in the bank.

**1A-6** You should review a properly authorized purchase order to verify that the goods were actually ordered by the company for legitimate purposes. You should review the original price quotes from the seller to ensure that they agree with prices contained in the sales invoice. You should also review a receiving report to verify that the goods were received in the proper quantities and in satisfactory condition.

**1A-7** Examples of control activities include verifying the credit rating of customers before selling to them on credit, separating the duties of those responsible for generating sales leads and those responsible for the credit approval process, defining credit limits for each customer, and preparing an aging of accounts receivable to monitor subsequent cash collections.

**1A-8** Companies usually count their inventories once a year, towards the end of their fiscal year. The purpose of this control activity is to reconcile the inventory on-hand with the company’s accounting records. If a difference exists between the physical inventory and the accounting records, then an adjustment is required to align the accounting records with the physical count.

**1A-9** Using pre-numbered documents reduces the likelihood of unauthorized transactions. It also makes it easy to ensure that all documents are recorded and to quickly identify a missing document.

**1A-10** Budgets: (1) define goals and objectives that can serve as benchmarks for evaluating subsequent performance, (2) coordinate activities across the organization, (3) communicate management’s plans throughout the organization, (4) force managers to plan for the future, and (5) allocate resources to those parts of the organization where they can be used most effectively.