Chapter 1
The Role of Accounting Information in Ethical Management Decision Making

LEARNING OBJECTIVES

Chapter 1 addresses the following questions:

Q1 How do uncertainties and biases affect the quality of decisions?
Q2 What types of decisions do managers make for an organization?
Q3 What is the role of accounting information in management decision making?
Q4 How can managers make higher-quality decisions?
Q5 What information is relevant for decision making?
Q6 What is ethical decision making, and why is it important?

These learning questions (Q1 through Q6) are cross-referenced in the textbook to individual exercises and problems.

COMPLEXITY SYMBOLS

The textbook uses a coding system to identify the complexity of individual requirements in the exercises and problems.

Questions Having a Single Correct Answer:

No Symbol	This question requires students to recall or apply knowledge as shown in the textbook.
e	This question requires students to extend knowledge beyond the applications shown in the textbook.

Open-ended questions are coded according to the skills described in Steps for Better Thinking (Exhibit 1.11):

❶ Step 1 skills (Identifying)
❷ Step 2 skills (Exploring)
❸ Step 3 skills (Prioritizing)
❹ Step 4 skills (Envisioning)

QUESTIONS

1.1 Organizational vision is the core purpose of the organization and shapes the current organization and its future. Decisions about the organizational vision are important because they communicate to employees and other stakeholders the overall direction of operations. Core competencies are the strengths of the organization relative to competitors. The choice of core competencies that an organization focuses upon is important to the success of the organization because value is added by these competencies. To be successful, the vision should be guided by the basic strengths of the organization. Organizational strategies are developed around core competencies. These tactics are important because they guide the long-term decisions, such as product lines that will be offered. Operating plans put into action the organizational strategies in the short term. These plans guide employees in their day to day operations.

1.2 Once operating plans are in place, organizations need to know whether the plans are being met or need to be changed to take advantage of new opportunities. To do this, actual performance needs to be measured and compared to the plans (monitored). To help managers move toward the organizational goals, incentives such as performance-based bonuses are offered (motivating).

1.3 See Exhibit 1.8 for a list of possible internal and external reports. Students may have thought of other reports as well. Following are examples of internal reports. Capital budgets support organizational strategies, the master budget supports operating plans, and variance reports (actual versus planned performance) help organizations monitor and motivate performance if they are tied to compensation contracts.

Financial statements are external reports that provide creditors and shareholders information about current and past operations. Tax returns are reports prepared for the government that also determine the amount of taxes due. Suppliers need reports about inventory levels to keep an organization's inventory levels up to date.

1.4 The type of information needed depends on the type of decision. For product-related decisions, managers may need information about competitors' prices and quality of products. For employee-related decisions, they may need to know the amount of experience employees have had or estimate costs to lay them off using information about length of service from human resources. If managers are developing a new good or service, they need information from suppliers about the cost of resources. Students may have thought of other types of decisions and information needed for them.

1.5 Cash flows that vary with the available alternatives for a decision are relevant because they relate directly to each separate decision that could be made. Summing these relevant cash flows provides quantitative information about the relevant costs and benefits for each alternative. However, some cash flows will not change, regardless of the decision made. These are irrelevant cash flows because they remain the same under all courses of action and have no influence on the decision.

1.6 Uncertainties are factors and information about which there is doubt. Decision makers may develop an estimate about cost or the effectiveness of a course of action, but they cannot know for certain that their estimates will hold in the future. Uncertainties reduce the quality of decisions. If managers use information that is highly uncertain to make decisions, outcomes could vary widely and they are less certain that they can achieve their desired outcomes. By improving the certainty of information, for example through research or a pilot project, managers are likely to decrease the variance of outcomes related to the decision and be more successful in their efforts. Therefore, the decision would be of higher quality.

1.7 Biases are preconceived notions adopted without careful thought. In this chapter, Motorola's managers were biased toward developing a global cellular phone network and did not gather enough information about cost, or about customer preferences, such as the size and style of phones. Poorer quality decisions result when managers fail to recognize and control for biases because important information is often overlooked.

1.8 Higher quality decisions are made by using higher quality information, that is, information that has few uncertainties and is relevant, complete, as certain as possible, and timely. This information needs to be prepared in reports that are easy to understand, readily available, and timely. Then a high quality decision-making process is used. This is a process that is thorough, as unbiased as possible, focused, creative, and visionary as it relates to strategies.

1.9 There are many reasons for behaving ethically. From an economic perspective, if everyone behaved ethically, less investment would be needed in police and security protection. In addition, written contracts would be less important, and a court system would not be needed to determine whether people are acting unethically and then penalize wrongdoers. More business would probably be transacted because people could trust each other. From a personal perspective, people would feel their world was more certain if they knew others would always treat them ethically. Even in a world where many people are unethical, organizations and individuals who act ethically develop better long term reputations and self-respect and improve social welfare.

1.10 The process of developing professional skills is never complete. It is impossible to be absolutely perfect at everything one does. In addition, technologies and business practices change over time, opportunities arise or wane, and individuals make new choices about their careers. Teachers, mentors, coaches, bosses, colleagues, or others may assist professionals strengthen existing skills and develop new ones. However, long-term success requires professionals to work proactively toward developing their own skills. Professionals are most likely to flourish if they assume responsibility for identifying and actively working toward developing their own professional skills.

MULTIPLE-CHOICE QUESTIONS

1.11 Which of the following statements is true?
a. Management accounting is guided by GAAP.
b. Management accounting information is mainly for external users.
c. Management accounting is future-oriented.
d. Management accounting information is mainly quantitative.

Ans: C

1.12 Which of the following statements is *not* true?
a. Unavoidable cost is relevant in decision-making.
b. Avoidable cost is relevant in decision-making.
c. Additional investment is relevant in decision-making
d. Cost saving is relevant in decision-making

Ans: A

1.13 Which of the following is not one of the components of ethical decision making?
a. Identify ethical problems as they arise.
b. Objectively consider the well-being of others and society when exploring alternatives.
c. Clarify and apply ethical values, and choose a course of action which avoids the exposure of wrong doing.
d. Work toward ongoing improvement of personal and organizational ethics.

Ans: C

1.14 Which of the following statements is *not* true?
a. Monitoring and motivating is part of an implementation function.
b. Budgeting is a part of a control function.
c. Performance measure is a part of a control function.
d. Budget is a quantitative expression of a plan.

Ans: B

1.15 Which of the following characteristics is *not* high quality information?
a. Timely
b. Relevant
c. Complete
d. Circumvent

Ans: D

EXERCISES

1.16 Types of Manager Decisions - Microsoft Corporation

A. (4) Measuring, monitoring & motivating (specifically monitoring) because it is ***comparing*** actual versus expectations

B. (2) Operating plans because it involves looking at ***short-term plans***

C. (3) Actual operations because this is part of normal operations (developing new products)

D. (3) Actual operations because this is part of normal operations (customer support for existing products)

E. (2) Operating plans because it involves developing ***short-term plans***

F. (4) Measuring, monitoring & motivating because it involves ***comparing*** actual to expectations and discussing variances from budget with managers (and measuring their performance as managers). Presumably the managers know in advance that their performance is measured based (or at least partially based) on these variances from budget, which should ***motivate*** their performance.

G. (1) Organizational strategies because it involves a ***long-term*** decision to expand facilities

1.17 Types of Personal Decisions

A. A student's vision might be a particular type of career, or job they would like to have after graduation.

B. A student's core competencies include his or her knowledge, leadership skills, abilities to communicate, to analyze and solve problems, to sell ideas to colleagues, to develop spreadsheets, any skill or talent that is well developed.

C. A student's long-term strategies include completing a particular degree in college, acquiring certain licenses (such as CA) and other qualifications, selecting a group of organizations within which to work, and determining means of financing an education.

D. Short term planning includes the particular schedule of classes over the next year, determining whether it is necessary to work during the school year, finding a place to live.

E. Actual results are scores on exams and projects, and grades for the semester or quarter. Financial results are the monthly and quarter or semester costs incurred.

F. Students might prepare a financial budget and a time management budget and compare their actual results to the plans they have made. Some students might set up rewards for themselves if they achieve certain goals, such as a good grade for an exam or class, or for meeting planned study goals (set in hours).

1.18 Relevant Costs - Avery Car Rental

The question calls for a computation to determine the number of kilometres driven over four days so that the rental cost would be the same under the two options. The easiest way to solve this is to first write the total cost for each option using number of kilometres as an unknown variable. Then set the two costs equal to each other and solve for the number of kilometres. Let x be the number of kilometres driven:

$26 per day*4 days + $0.20 per km*x = $35 per day*4 days + $0.08 per km *x
$0.12 * x = $36
x= 300 kilometres

1.19 Relevant Costs - Driving

A. The current average cost per kilometre most likely includes depreciation and insurance. These would be irrelevant because they would not change depending on the option that Susan chooses for driving to this client's office.

B. Susan has no cost and receives no reimbursement if she uses a company car. If she uses her own car, her incremental cost will be $0.25 per kilometre times 100 kilometres, or $25. She will receive a reimbursement of $0.30 per kilometre times 100 kilometres, or $30. So, she will be $5 ($30 - $25) better off if she drives her own car.

(*Note*: It is not clear which option would make Susan's company better off because the incremental cost of operating the company car is unknown.)

1.20 Relevant Costs, other factors - NetFlix

A. The question calls for a computation to determine the number of DVDs rented per month so that the total cost would be the same under the two options. The total cost for the Netflix option is $21.95. The total cost of the Blockbuster option is $3.95 times the number of DVDs rented. These costs will be the same when:

$21.95 per month = $3.95 per DVD * x number of DVDs per month
x = 5.60 DVDs per month (students should actually round this to 6 since they cannot rent 0.6 of a DVD)

The cost of the Netflix option will be higher if students rent fewer than 5.6 DVDs per month, and it will be lower if students rent more than 5.6 DVDs per month.

B. If students often pay extra charges because they fail to return DVDs to Blockbuster in a timely manner, they might prefer NetFlix. If they prefer to order from home, they may prefer NetFlix. If NetFlix carries movies that students cannot get at Blockbuster, they may prefer NetFlix. If they like to rent movies spontaneously and do not want to plan their rentals in advance, then they would prefer Blockbuster. If students like to rent newly-released movies, they might be able to get them more quickly at Blockbuster than through Netflix.

1.21 Relevant Costs, uncertainties - Toys for Boys

A. Selling the cars as-is would provide $5 per car * 10,000 cars = $50,000.
Painting and selling the cars would provide [($8 selling price – $2 painting cost) per car * 10,000 cars] .= $60,000.
The company would be $10,000 better off if it paints the cars.

B. The gray cars have not sold well at $8.00, and the managers cannot know whether they will sell at $5.00. The red cars appear to be selling well for $8.00 each, so that alternative is probably more certain in terms of selling the cars. However, the managers might not be sure whether the cost to paint the cars will be $2 each. If the managers are fairly certain that the cost will be $2 each, then the painting option probably has less uncertainty overall. If the managers believe that the painting costs could vary substantially from the $2 estimate, then the painting option might have more uncertainty.

1.22 Relevant Costs, uncertainties, other factors - College Living Arrangements

A. First, students should note that they will still own the car under all three alternatives. Therefore, the monthly payments of $220 will exist under all three alternatives and are not relevant to this decision. The average maintenance costs of $37 per month may contain some costs that are relevant (assuming that maintenance costs increase with the number of kilometres driven); however, this cost is also likely to include costs that do not depend on whether the car is driven to school. For simplicity, this solution assumes that none of the maintenance costs are relevant. Second, note that the estimated monthly use of the car above the 200 kilometres for commuting to campus will be incurred regardless of which option is chosen.

Based on cost only, the one-ride bus ticket (Bus B) is the best alternative as shown below:

Relevant Semester Costs of Three Alternatives

Drive to School		Bus A – Semester pass		Bus B – One-ride tickets	
Parking	$150.00	Ticket cost	$225.00	Ticket cost $2/trip * 24 trips/mo*4 mos	$192.00
Gasoline: 200 km/mo*4 mos @ $0.10/km* *($60/600 km)	80.00				
	$230.00		$225.00		$192.00

B. Gasoline costs for driving the car might be different than estimated because gasoline prices might rise or fall, and students might achieve higher or lower mileage per litre. In addition, maintenance costs might be lower if one of the bus options is chosen. However, it may be difficult to predict the portion of maintenance costs that are likely to vary with kilometres driven. If students choose either of the bus options, they might find that they drive their car to campus sometimes. If they choose the bus semester pass, they might find that they use the bus more than expected. During times of bad weather, students may need to take the bus even though they chose the option to drive.

C. Here is a partial list of things that are not necessarily quantifiable in dollars, but could be relevant to this decision:

- Flexibility of the bus schedule (both times and routes)
- How students value their time
- The ability to use the bus ride time in a useful manner (for example, by studying or relaxing)
- The stress students experience under each alternative (some people are nervous driving, and others hate being in a crowded bus)
- The risk of damage to cars in the school parking lot versus the parking lot at an apartment (students have insurance, but there is a deductible)
- Reliability of bus service, that is, on-time service history, labour relations, financial solvency

PROBLEMS

1.23 Uncertainties - College Course Sequence

A. Many potential uncertainties may be identified, including the following:
- Which courses teach skills that will be needed in other courses?
- Will enough class sections be offered at appropriate times?
- Will enough space be available in a particular course?
- Who will teach a particular course?

B. Many answers are possible for this question. Following are some explanations for the uncertainties listed in Part A:

- *Which courses teach skills that will be needed in other courses?* Some courses are specifically identified as prerequisites for other courses. However, considerable flexibility may exist in the sequence of courses taken. When there is flexibility, students are often uncertain about the types of skills taught in particular courses and the extent to which skills in one courses are required for another. For example, a cost accounting course may teach spreadsheet and communication skills that will be useful in other accounting courses.

- *Will enough class sections be offered at appropriate times?* Sometimes course offerings change from year to year or even at the last minute based on a variety of factors, including course demand, instructor availability, departmental personnel changes, university budgets, and so on.

- *Will enough space be available in a particular course?* It is not possible to know for sure how many other students will attempt to register for a particular course. In addition, it may be uncertain whether a particular professor will be permitted or will allow students to enrol on an overload basis.

- *Who will teach a particular course?* Even when instructors are scheduled for a course, sometimes there are last minute changes. Students are uncertain whether the teacher will be someone from whom they can learn. Even if other students have recommended an instructor, students are uncertain about whether they will enjoy the course and learn from the instructor.

1.24 Relevant Information - Office Photocopy Machine

A. The annual lease payment is relevant since it will not be incurred if the photocopy machine is purchased. Similarly, the purchase price is relevant because it will not be incurred if the machine is leased. There are many other possible answers to this question.

B. Any cost that would be incurred under both options would be irrelevant. Examples include the cost of supplies such as copier paper and toner. There are many other possible answers to this question.

C. To choose between options, it is necessary to investigate how the two options would differ. By definition, relevant costs differ across options and help the decision maker choose between options. If irrelevant information is included, costs would be over-estimated for one or both options which could lead to a poor quality decision.

1.25 Uncertainties, Degree of - Community Children's Hospital

A. There are more possibilities than are listed, but here are some of the uncertainties the CEO faces in the "buy hotel" alternative:
   - Vacancy rates (i.e. demand for rooms)
   - Optimal pricing structure for the rooms
   - Hotel operating costs
   - Tax consequences of running a for-profit business as a sideline to a not-for-profit business (uncertainty alleviated if she purchases tax advice)
   - Ways that hotel maintenance may differ from hospital maintenance
   - Security in this neighbourhood in the future
   - Long-term future of a hotel in a declining neighbourhood

B. There are more possibilities than are listed, but here are some of the uncertainties for the "heart monitor" decision:
   - Future demand for neo-natal equipment at the hospital
   - Expected wages for the special technician (although she can easily find this out)
   - Maintenance or operating costs for the monitors that are not disclosed by the medical supply vendor
   - Expected useful life of the monitors
   - Hospital's ability to charge patients for the new equipment
   - Effect of the new equipment on how nurses spend their time

C. The "buy hotel" alternative probably has a greater degree of uncertainty because it is outside the core competencies of the hospital and CEO.

1.26 Decision-Maker Bias - Gene Horita

A. Gene is basing his understanding of accounting careers on his father's experience. There are many different types of accounting careers, and not all of them involve long hours during tax season or at any other time. In addition, it is possible that Gene's father would have spent most of his time at work regardless of his career. Gene may not know much about careers in information systems, but he is idealizing careers in this field. Sometimes when employees are working against a deadline in preparing a new software product, a lot of overtime is incurred.

B. Gene could analyze his perspective and control for his biases by doing some informational interviewing with people in both accounting and information systems careers. He could check with both the accounting and information systems departments at his college and ask for phone numbers of alumni who have been successful in their careers. Through conversations with these people he will get a better understanding of the different options available for each career path.

He could also secure internships in both areas to have an inside view of these career paths, although it may be difficult to get an internship without declaring a major.

1.27 Open-Ended Problems

A. The managers cannot be certain how much the company will save in labour and insurance costs if it decides to purchase the new equipment. There also may be unforeseen costs in modifying the company's production processes, such as employee training, system testing, and production down time. In addition, a reduction in labour cost probably means that the company will reduce its labour force, and the new equipment might require employees having different skills than in the past. The managers cannot be certain how a reduction will affect the morale and work quality of workers who remain, and the new workforce might cost more per employee than the old one.

B. Either internship would provide work experience for Amira, but she cannot be certain how much and what types of learning would occur with each option. Also, she might have preferences for living in one location versus the other, but she cannot perfectly foresee the living and social arrangements in each setting.

1.28 Relevant Information, Uncertainties, Information for Decision-Making - Janet Baker

A.1 and A.2 The costs of each option are listed below:

"Residence hall" Alternative		
Couch	$350	Not relevant because the cost occurred in the past
Couch storage	$35/mo (4 mos)	Relevant
Tuition	$7,500 (4 mos)	Not relevant because it is the same across the alternatives
Books	$450 (4 mos)	Not relevant because it is the same across the alternatives
Room & board	$2,900 (4 mos)	Relevant

"Apartment" Alternative		
Apartment rent	$400/mo (6 mos)	Relevant
Utilities	$75/mo (6 mos)	Relevant
Groceries	$200/mo (6 mos)	Relevant
Couch	$350	Not relevant because the cost occurred in the past
Tuition	$7,500 (4 mos)	Not relevant because it is the same across the alternatives
Books	$450 (4 mos)	Not relevant because it is the same across the alternatives

A.3 Some assumptions need to be made here because of the different time spans for the data. The apartment is to be leased for a minimum of 6 months, but the residence hall alternative is only good for 4 months. What does Janet do for the 2 month period after she cannot live in the residence hall any longer? Are the semesters contiguous so that she can choose two 6-month leases in an apartment versus three 4-month periods in the residence hall? If the semesters are contiguous, then the cost per month can be computed after annualizing the information.

Relevant monthly costs for the "residence hall" alternative:

Room & board ($2,900/4)	$725
Couch storage	35
	$760

Relevant monthly costs for the "apartment" alternative:

Apartment rent	$400
Utilities	75
Groceries	200
	$675

A.4 Given the assumption that semesters are contiguous (and that costs can be annualized), the apartment seems to be less expensive for Janet than the residence hall by $85 per month.

B. Costs Janet Would Know For Sure:

	Source of Information
Residence hall	Information published by the university
Tuition	Information published by the university
Couch	Already purchased; know purchase price

Costs Janet Would Estimate With Little Uncertainty:

	Why Not Known for Sure
Couch storage (Assume Janet investigated prices of storage units)	Until a rental agreement is signed, the cost could vary because the rental rate could change or the storage unit could be rented to someone else
Rent (Assume Janet has identified a potential apartment and was given a rent quote)	Until a rental agreement is signed, the cost could vary because the rental rate could change or the apartment could be rented to someone else. Also, the rent could change after the initial six months unless an agreement is signed for a longer period.

Costs Janet Would Estimate With Moderate or High Uncertainty:

	Why Not Known for Sure
Utilities (Assume friends or the apartment manager have given Janet an estimate)	Janet cannot be sure how much the utilities will cost. For example, suppose Janet and her roommate need to heat their apartment during the winter. Janet does not know how warm she and her roommate will keep the apartment, and she does not know how cold the winter will be. Also, she cannot know whether the utility rates will change during the year.
Groceries (Assume Janet estimated her own grocery costs)	Unless Janet has purchased her own groceries in the past, she might not know how much food costs or how much and what types of food she would eat. In addition, she might share costs with her roommate, making it more difficult for Janet to anticipate the food costs. Also, there can be unanticipated changes in food prices.

C. Additional information that might be relevant to Janet's decision

1. Costs not identified by Janet:

- Janet might need to purchase more furniture if she lives in an apartment. She might need a bed, dresser, desk, chair, dining room set, lamps, etc.
- Janet might need to purchase a range of household equipment and supplies under the apartment alternative, such as a vacuum cleaner, microwave oven, dishes, cookware, etc.
- If Janet purchases furniture and other household items, she will need to consider what to do with them at the end of the semester. Will she sell them? Will she move them to another living situation? Will she put them into storage? There may be additional costs after the end of the semester, especially if her lease is for a time period longer than the semester.
- If Janet chooses the residence hall alternative, she might incur living costs during the break between semesters.
- If the apartment is not within walking distance of the university, she might incur additional transportation costs.
- Janet needs to consider the possibility that her roommate might not pay for her full share of costs. Janet could be held responsible for more than one-half of the rent, utilities, and other apartment costs.
- There are a number of other additional costs that would differ under the two alternatives that students may list.

2. Factors other than costs:

- Janet has uncertainties under both options about how she will get along with her roommate; however, there might be more opportunities for disagreement and conflict under the apartment alternative. Janet needs to consider the pros and cons of each roommate situation.

- Janet's personal preferences for living in an apartment versus living in the residence hall are likely to be a major factor. Personal preferences might include a desire for greater personal freedom, security, physical space, ability to cook, and so on.

- Janet needs to consider the difference in flexibility in the two options. For example, if she chooses the apartment, she is committed for a minimum of six months' rent and possibly a wide range of other costs such as furniture purchases, etc. These commitments might make it difficult for her to change her mind.

D. The cost comparison will help Janet plan her finances and decide whether she can afford each alternative.

E. Students need to recognize their own preferences, which are a function of their own previous experiences and tastes. For example, they might not want to spend time commuting to and from school. However, Janet might consider this to be less important than living in an apartment in a part of town she enjoys more. Students might have had good or bad experiences with roommates in a residence hall, which causes them to be biased toward or against that option. One way for students to control biases is to first recognize their own preferences. Then they can look for ways in which their preferences affect what they consider to be relevant or important. Another way is to talk about this problem with other people who are likely to have preferences different than theirs.

F. This question was partially answered in Part E. Some people weigh some factors more than others and these weights affect the choices they make. It is possible to come up with many different ways for Janet to prioritize the various factors from Parts A and C in deciding which option is best for her.

G. Janet might learn something about her ability to manage her funds. She might learn more about whether she likes or dislikes various aspects of living in an apartment such as:

- Cooking her own meals
- Commuting from an apartment off campus
- Her roommate

Janet also might learn more about her ability to manage costs is a less structured situation.

H. There is no one answer to these parts. Sample solutions and a discussion of typical student responses will be included in assessment guidance on the Instructor's web site for the textbook (available at www.wiley.com/canada/eldenburg).

1.29 Relevant Information, Recommendations - Francisco

A. Relevant costs for deciding whether to go camping or stay home this year:

- $1,000: this is not relevant because it represents the ***past*** cost of the camper
- $150 (1,000 kilometres x $0.15): the gas & oil portion of this is relevant because it is incremental
- $220: depreciation is not relevant because it is related to the ***past*** cost of the camper and insurance is not relevant because Francisco will insure the camper whether they take the trip or not.
- $250: the cost of groceries is relevant only to the extent that it exceeds the cost of groceries while at home.
- $100: the cost of beverages is relevant only if it exceeds the cost of beverages while at home.
- Entertainment costs (movies, etc.) that the family might incur if they stay at home during their vacation time that they would not incur if they go camping instead

B. The relevant costs for deciding whether to continue to use the camper or to sell it and stay in motels in the future:

- $1,000: this is not relevant (but the estimated cash inflow from selling the camper will be relevant)
- $150: this is now relevant because it is an estimate for the future costs of using the camper. The family will probably drive their car if they sell the camper, so that option will incur some level of gasoline, oil, tires, and maintenance cost.
- $220: depreciation is not relevant, but insurance is now relevant because it differs across the alternatives
- $250: the cost of groceries is relevant only to the extent that it exceeds the cost of groceries while at home, also may need to consider differences in patterns of eating in restaurants.
- $100: the cost of beverages is relevant only if it exceeds the cost of beverages while at home.
- Motel costs: If they sell the camper, the family will incur costs to stay in motels.
- Storage costs of the camper (if any) would no longer be required if the camper is sold.

C. Other factors that Francisco might consider include:

- The enjoyment that his children receive from camping (if they do in fact enjoy it) and whether their preferences will change as they grow older
- The enjoyment that Francisco receives from camping
- Francisco's wife's displeasure with camping and enjoyment of the alternatives
- Expected selling price of the camper

D. Some students might recommend that Francisco keep the camper because they view it as better than staying in motels. Others might suggest that Francisco should experience more things than just state and national parks. Still others might think that a camper must be too small for a 5-person family, so Francisco should sell it. Personal biases often sway the way that people look at information for a problem. They often ignore information that contradicts their preferences. Francisco and his family do not necessarily have the same experiences and preferences as students when responding to this question. One way for students to control biases is to first recognize their own preferences. Then they can look for ways in which their preferences affect what they consider to be relevant or important. Another way is to talk about this problem with other people who are likely to have preferences different from theirs.

E. As outsiders, it is difficult for students to give advice because they cannot know which priorities should be used to solve this problem. Accordingly, the best advice students could give Francisco might be to discuss it with the family and come up with the best solution/compromise for the family. They could also recommend that Francisco remain open to his own biases.

1.30 Ethical Decision-Making, Relevant Information, Uncertainties, Biases - Larry

A. The ethical issue is whether it is proper for Larry to help Annie with her homework. Larry's interests potentially conflict with those of Annie, his professor, and other students in the course.

B. When identifying alternatives, there is a tendency to automatically filter out some of the options. When answering a question like this one, students should try to be as creative and open as possible. Below are some of the alternatives available for this problem; students may think of others.

   Because there is only half an hour before class begins, Larry has fewer alternatives than he would have if more time were available. He can choose to help Annie, or he can refuse. He also has alternatives about how he responds to Annie. Whether or not he chooses to help her, there are many different things he could say to her and many different ways he could act toward her. This situation might also affect the future of his relationship with Annie. In addition, he could potentially go beyond the explicit requirements of the professor; he could tell the professor about Annie's request. If Larry helps Annie and then she signs a statement saying that that the homework had been her own effort, he could inform the professor.

C. The problem does not provide information about what the professor will do in cases where students violate the homework policy. The course syllabus might explicitly state what would happen. For example, the students might receive a grade of zero on the assignment, receive a flunking grade in the course, or be referred to a university ethics committee. The university or program might also have policies about what will occur if a student is found to "cheat" in a course. Those policies might include probation or expulsion. If the students violate the course and/or school policies, then they risk these outcomes. If the course syllabus and other school guidelines are not explicit about the outcomes, then the students would still face risks but they will be less certain about the nature of the risks.

D. Information that is relevant to Larry is anything (including facts, arguments, opinions, ideas, theories, concepts, observations, values, perceptions, beliefs, influences, etc.) that might help him evaluate and choose a course of action. Thus, Larry's information for this problem includes many things, such as the professor and school policies, his knowledge about what has occurred with students under similar circumstances, his own prior experiences, the nature of his relationship with Annie, and his own values and beliefs.

E. This is an open-ended problem because there is no one response by Larry that will be absolutely "correct." Most people are likely to agree that it would be ethically inappropriate for Larry to help Annie with her homework. However, as discussed in Part B, there are other aspects to Larry's decision. How should he respond to Annie? Should he inform the professor? Larry cannot be certain exactly what he should do. In addition, educational research suggests that students are likely to learn more when they collaborate with others. Therefore, some people might argue that the professor's policy is inappropriate. Does the ethical response to this problem change if Larry views the course policy as contradictory to what is best for his education?

F.

1. Given that Annie made her request only half an hour before class was to begin, she is probably concerned primarily with avoiding a low score on her homework assignment. Unless she is an exceptionally quick learner, she will not learn the material before class. Annie finds herself in this position because she has chosen to do something else instead of completing her homework. Perhaps she was partying with friends, had an assignment due or test in another course, was unexpectedly asked to work overtime, or had a family emergency. Whatever the reason, Annie apparently believes it is appropriate to ask for Larry's help. She implicitly values the completion of her assignment as more important than other potential values such as complying with the professor's policy, avoiding putting Larry in an uncomfortable position, or competing fairly with other students in the course. Annie might have rationalized her behaviour as follows: "Everyone else is doing it." "The professor's policy is silly." "This won't hurt anyone." "I don't have any choice; my boss required me to work last night [or I was sick, or my friend was in an automobile accident, or I had to meet with my group for another class]."

2. Larry's perspective is less clear because information is lacking about the nature of his relationship with Annie, his values, or his willingness to assume risk. Perhaps he believes it is his obligation to help Annie. He might be more inclined to help her if he knows that she had an unavoidable reason for not completing her own assignment. Or, perhaps he considers her request to be inappropriate regardless of her reason. He might be angry that she has asked him to violate a course policy or to violate his ethical values. He might or might not be afraid of the potential risks. Or, he might be concerned primarily with making a decision that is consistent with his own ethical values. He might also be concerned about the best way to help Annie learn the course material.

3. The professor most likely believes that students will learn more if they assume responsibility for working on their own homework assignments. The professor might have observed cases in the past where students worked together and copied each others' work, thus defeating student learning. The requirement for students to sign a statement suggests that the professor wants to ensure that students are aware of the course policy and encourage them to assume ethical responsibility for following it. This requirement also suggests that the professor is likely to hold students accountable for violating the policy. Thus, the professor is likely to respond in a negative way if he or she discovers that students have worked together.

G. The importance of ethical conduct for students is no different than its importance in the business or personal environments. Ethical conduct improves mutual trust and enhances an individual's reputation. Unethical conduct has the opposite effect. School is also a place where students work toward developing life-long behaviours and attitudes. Unethical conduct in school is likely to lead to unethical conduct in other arenas. Attention to ethical conduct in school can help students establish appropriate patterns of behaviour and encourage them to reflect upon and improve their ethical conduct in the future.

H. If Larry and Annie are sufficiently open with each other, they could use this opportunity to explore their ethical values and conduct. They could discuss the various dimensions of this problem (Parts A-G above) and help each other clarify the values they would like to adopt. They could also relate this situation to ethical dilemmas that are likely to arise in their professional lives. What types of circumstances could occur where they are asked to do something that violates a policy? When choosing a course of action, does it matter whether they believe that others would be harmed? Does it matter if mitigating circumstances exist?

1.31 Ethical Decision-Making, Relevant Information, Uncertainties, Biases - Entry-Level Accountant

A. The ethical issue is whether it is proper for the entry-level accountant to work on a personal project for the roads department director and then bill his/her time to the employer (the city). The accountant's interests are potentially in conflict with those of the director, the boss of the accountant's home department, and the city's citizens and taxpayers.

B. When identifying alternatives, there is a tendency to automatically filter out some of the options. When answering a question like this one, students should try to be as creative and open as possible. Below are some of the alternatives available for this problem; students may think of others.

   One option is to refuse to work on the personal project. The accountant could then ask for other work to do or go home. Other options are to work on the personal project, and then to either bill the time to the city or choose not to report the time. Whether or not the accountant chooses to work on the personal project, there are many different things he/she could say or ways to act toward the director. For example, the accountant could express anger at the request, or express concern for the director's personal situation and offer to help on his/her own time. The accountant could seemingly agree to go along and then leave the time off of the time sheet. In addition, the accountant could potentially report this incident to his/her usual boss or to others (e.g., the accountant could follow the suggestions provided in his/her professional association's *Code of Ethical Principles*).

C. If the accountant goes along with the director's request and his/her boss finds out, the accountant risks losing his/her job or boss's trust. This situation could also have long-term repercussions. It is more difficult to regain a tarnished reputation than to create and maintain a positive one. Even if the accountant keeps his/her job, he/she may be overlooked for promotion or for interesting future work opportunities.

D. Relevant information is anything (including facts, arguments, opinions, ideas, theories, concepts, observations, values, perceptions, beliefs, influences, etc.) that might help in evaluating and choosing a course of action. Information for this problem might include the city's policies (e.g., a code of ethics), as well as the accountant's knowledge and perceptions about factors such as the work culture, the director and his evaluation of the accountant's performance, interest in doing the requested work (whether or not paid for the time), desire for overtime pay, and ethical values.

E. This is an open-ended problem because no one response is absolutely "correct." Most people are likely to agree that it would be ethically inappropriate for the accountant to work on the personal project and bill the time to the city. However, as discussed in Part B, there are other aspects to the decision. How should the accountant respond to the director? Will he be offended if the work is performed but it is left off the time sheet? If the accountant refuses to do the work, will he/she receive a poor evaluation from the director on the city-related work? Should the accountant inform his/her usual boss? Does the director regularly use city resources for personal purposes? If so, is it the accountant's responsibility to help prevent future occurrences? The accountant cannot be certain exactly what to do.

F.

1. To evaluate their own perspective on this problem, students should consider the pros and cons and how various options fit with their own priorities and ethical values. When placed in the position of an entry-level accountant, students might be reluctant to turn the director down. However, doing the work may not mean that they agree to bill the city for their time. Students will need to assess their comfort level with various responses. The quality of their working relationship and communication with their usual boss might also influence their response. If the usual boss is likely to support their position in this situation, they might be less concerned about how the director will respond. Students might also want to inform their boss about the situation to protect themselves in case the director gives them a poor performance evaluation. They will need to weigh their values, work interests, and potential repercussions in making their final decision.

2. The department director apparently believes it is appropriate to bill the city for personal work. This might be a one-time situation, in which he is thinking less clearly due to personal emotional problems. Or, the director might routinely misuse city resources. From his behaviour, he implicitly values the completion of this work at the city's cost as more important than other potential values such as using city resources efficiently, complying with city policies, or treating the accountant fairly. He might have rationalized his behaviour as follows: "I've worked for the city for years [or I'm not paid enough]; the city owes me." "I had to work on personal projects for my bosses when I was a new employee." "I wouldn't need to do this if I weren't going through a terrible divorce." "There's plenty of money in the budget." "This will give the entry-level accountant some good work experience."

3. Assuming that the accountant's usual boss does not have a close friendship or working relationship with the roads department director, the boss probably would not expect the accountant to perform this work or to bill the time to the city. The most important question is how the boss would respond if told about the situation, or if he/she learns about it from someone else. The boss might expect the accountant to handle the situation alone and view it as inappropriate if the accountant tells him/her about it. Sometimes "whistleblowers" are viewed with suspicion by others. Alternatively, the boss might see it as his/her job to mentor and protect the entry-level accountant. In that case, the accountant might lose some of the

boss' trust by not telling him/her about the situation and the boss learns about it from someone else.

4. Taxpayers clearly would not want the city to pay for personal work. The taxpayers might also prefer for this situation to be reported and investigated internally. If the director has asked the accountant to bill personal work to the city, then the director might have misused city resources in other ways. The taxpayers would like similar circumstances to be identified and dealt with to minimize the waste of future resources.

G. Ethical conduct improves mutual trust and enhances an individual's reputation. Unethical conduct has the opposite effect. An entry-level accountant wants to establish a reputation as someone who can be trusted. It is his/her responsibility to create and further develop a positive reputation.

H. There are many possible "scripts" that could be written. In writing a script, students should consider all of the factors identified in Parts A-G in choosing a course of action. Then they should consider how to communicate the decision to the director. Should they respond with concern and sympathy? Should they be firm and defend their actions? Should they agree to do the work and give themselves some more time to think about the billing aspect?

I. Most of the answer for this part is already addressed in Part F-3 above. Students will need to consider the type of relationship the accountant has with the boss and also consider the boss's preferences. In addition, students may wish to refer to the CGA's *Code of Ethical Principles*, specifically the following two sections:

Responsibilities to Society
Members have a fundamental responsibility to safeguard and advance the interests of society. This implies acting with trustworthiness, integrity, and objectivity. This responsibility extends beyond a member's own behaviour to the behaviour of colleagues and to the standards of the Association and the profession.

Trust and Duties
Members shall act in the interest of their clients, employers, and interested third parties, and shall be prepared to sacrifice their self-interest to do so. Members shall honour the trust bestowed on them by others, and shall not use their privileged position without their principal's knowledge and consent. Members shall strive to be independent of mind and in appearance.

1.32 Quality of Decisions - Maria and Tracey

A. Maria appeared to use the following information in making her investment decision:

- Information learned during investment course, including different types of investments and strategies for investing
- Information learned from an investment book
- Risk/return trade-off for different types of investments
- Need to balance risk against desired return
- Higher risk leads to higher returns on average, but can also lead to low returns or even loss
- Investment advisors recommend diversifying risky investments

- One way to diversify is to invest in mutual funds
- Maria's willingness to assume some risk, but not a high level
- Information about different mutual funds obtained from reading *Consumer Reports*

B. Tracey appeared to use the following information in making her investment decision:

- Investment strategies used by her boyfriend and other friends
- Her boyfriend's cousin's recommendation about a start-up video game company
- The opinion that the video games were very hot with teenagers and that the company would probably be acquired, resulting in big gains for investors
- Her desire for a big gain

C. Maria appeared to use reasonably high-quality information (see Exhibit 1.10). The information was obtained from various relatively objective and knowledgeable sources. She made use of a fairly large amount of relevant information to select an investment strategy, and then she used an understandable and objective source of information to help her select a mutual fund.

D. Tracey appeared to use fairly low-quality information (see Exhibit 1.10). Most of the information consisted of personal opinions from people who most likely were not knowledgeable about investing and might have been biased.

E. Maria appeared to use a logical decision-making process. She began by learning about investment strategies in a course, and then expanded her knowledge by reading a book. She then made an intermediate decision to invest in a mutual fund. That decision seemed to be based primarily on her willingness to assume some risk, the recommendation that she diversify her investment risk, and the fact that she did not have a large amount of money to spread across multiple investment opportunities. She then conducted additional research to identify a mutual fund that matched her personal willingness to assume risk.

F. Tracey appeared to base her decision on what "sounded good" based on personal opinions from her boyfriend's cousin. She appeared to be biased toward an opportunity that might earn a large gain.

G. Maria's decision-making process was fairly high quality (see Exhibit 1.10). She did not appear to be biased in her approach, and she used multiple sources of information to help her explore options. She identified some key factors that were important for her decision, identified her own values/priorities, and chose an investment option that was consistent with the information she had collected and with her values.

H. Tracey's decision-making process was fairly low quality (see Exhibit 1.10). She explored alternatives only by talking with her boyfriend and friends. As soon as she heard about an opportunity that might result in a big gain, she stopped exploring options and made her decision. In short, she "jumped to a conclusion" without careful thought.

I. Maria's decision-making approach was much higher in quality than Tracey's, as demonstrated in the answers to Parts A-H above. Notice, however, that in this case Tracey earned a higher return than Maria. When people hear that someone like Tracey earned a big gain, they often use it as evidence to argue that a higher quality decision making process is not needed. "If we can earn a big gain by finding a start-up company with a great product," they ask, "then why should we invest in something like a mutual fund, which has a lower average return?" In this investment decision, there is also a risk and return trade-off. Maria intentionally chose a lower level of risk, so she would not expect to earn an exceptionally high return. Tracey, on the other hand, was apparently willing to assume a higher level of risk (even though she might not have realized it), which on average might lead to a higher rate of return. However, Tracey did not carefully investigate her investment. If the company had not been acquired, she might have lost all or most of her investment. She now owns stock in only one company; her risk is not diversified. If the company does poorly in the future, then she may not be able to realize a large gain. Over time, people who use better decision making processes are more likely to obtain good results.

BUILD YOUR PROFESSIONAL COMPETENCIES

1.33 Focus on Professional Competency: Professional Demeanour

A. Development as a professional begins by obtaining the prerequisite knowledge and skills (often demonstrated by a University degree) needed for entry to a profession. Knowledge is the foundation stage as discussed in Exhibit 1.11 (Steps for better thinking). With a good solid foundation, the platform is ready to build upon in the future. Professional development then continues throughout a work career, as new knowledge and skills are acquired. Often, peoples' careers falter because they fail to engage in continuous development as a professional. Professional development does not consist solely of taking periodic continuing professional development courses. Instead, it involves proactively working toward continuous improvement.

The CA's, CMA's and CGA's descriptions of competencies such as Professionalism are relevant because they identify ideal behaviour. For example, the CA's Competency I-7 requires the CA to maintain and enhance the professional's reputation, the CGA Competency List requires the CGA to engage in continuing professional development as a lifelong process. These indicate that the professional will forever strive to remain current in their knowledge and abilities.

The competencies are guidelines that ensure the accountants think in a professional manner whether they are on the job or not (CMA 3.1.5 'maintains legal and ethical standards in both public and private life').

The competencies are guidelines developed for accountants but they can be applied to any profession to assist in the development of professionals who act and behave ethically in their careers and their personal lives. By heeding to these competencies, individuals will be better prepared to deal with issues and concerns as they arise. If we live with honesty and integrity in our daily activities, we will take it forth into our work environment and the people around us will act in the same manner.

B.

1. As discussed in Part A above, continuous improvement is a necessary part of professional development. Continuous improvement is particularly important for accounting professionals because they are called upon to maintain the public's faith and confidence. They are to avoid conflict of interest, protect confidentiality of information, treat others in a professional manner, and manage change, all of which increase the trust that the public places with accountants.

2. It is not possible to fully describe all of the standards of professional demeanour that will be needed over a professional career. For example, the "Enron and the Reputation of Accountants" box on page 18 of Chapter 1 described several challenges facing the accounting profession during the 2000s. Although the fraud at Enron and other companies involved only a small minority of accountants, all accounting professionals were subsequently held to higher standards of conduct such as increased independence of auditors

and board of director compensation committees. In addition, professionals must evolve over time as they change job positions or as technology and other business practices change.

3. There are many possible answers to this question. The goal is for students to identify a personal mistake and to think about what they learned from it. This question gives students practice reflecting on changes/improvements they have made or could make in the future.

4. Personal conduct consists of the various actions taken in relation to others. It includes ethical choices as well as interpersonal behaviours. Professionals can consciously choose to alter their personal conduct by first identifying the actions and behaviours they would like to exhibit, compare them to their present actions and behaviours, and then actively work toward achieving their goals.

C. Professionals often face conflicts between their career and personal goals. For example, a professional may believe that working long hours is necessary for professional advancement, which may interfere with personal goals such as spending more time with family. Professionals who fail to identify and prioritize their goals often take actions that are inconsistent with their goals, or they experience unnecessary stress. The process of identifying and prioritizing goals leads to a more thorough evaluation of alternatives and better choices.

D.

1. Chapter 1 explicitly defines biases as preconceived notions that are adopted without careful thought. The chapter discussed several problems that are caused by biases. At Nortel, biases might have prevented managers from recognizing that their software and equipment is based on technology that has become outdated and which is not a global standard. The Colorado Boulders example pointed out that biases interfere with the appropriate identification of relevant information. At Bausch & Lomb, extreme pressure to achieve targeted sales growth encouraged the contact lens managers to adopt biased assumptions and act in an unethical manner. Exhibit 1.10 indicates that higher quality decision-making processes are less biased. In the Steps for Better Thinking (Exhibit 1.11), the ability to recognize and control for one's own biases is an important decision making skill. Self-study Problem 1-2 discusses an example of decision bias when Todd ignores his friend's suggestions that Todd's sisters cooking was not good. He decided their opinions were not a fair assessment of the situation.

2. There are many possible answers to this question. The goal is for students to identify a situation where they were not objective and to think about how their bias reduced the quality of their decision. They may wish to use the list of items under "Biases Inhibit" in the chapter summary for learning objective Q3 (textbook p. 24) to help them identify specific ways in which their biases interfered with a higher-quality decision.

E.

1. Chapter 1 introduces steps for ethical decision making (Exhibit 1.12). Exhibit 1.10 discusses the Path to Higher Quality Management Decisions which will lead to more ethical decisions being made if the information is of a higher quality and a more thorough, focused and unbiased approach is used in making the decisions. The chapter also introduced and analyzed the ethics of the decision making process for the Bausch & Lomb case. The Enron article discusses the lack of public confidence and trust in accountants due to an unethical

situation. Exhibit 1.11 discusses the steps for better thinking which would give a clearer picture of the situation at hand and allow one to bake a better, more educated decision. Appendix 1A briefly examines CGA Canada's *Code of Ethical Principles* to give students a glimpse at the professional expectations.

2. There are many reasons why ethical dilemmas are sometimes difficult to recognize. Sometimes people fail to identify all of the stakeholders for a problem or all of the conflicts of interest among stakeholders. Some people may also be confused or have differences of opinion about what constitutes an ethical dilemma. For example, someone might argue that a "small" violation of another's interests is unimportant and, therefore, cannot be an ethical dilemma. Others may argue that the magnitude of violation is unimportant. Cultural pressure within organizations or societies can lead to biased thinking, which in turn discourages investigation of potential ethical issues. Sometimes self interest causes people to be blind to the effects of their actions on others or makes them unwilling to reconsider the values they use in their decisions. People may perceive that if 'no one will be harmed' there is no ethical dilemma.

3. Ethical dilemmas arise because of conflicts of interests. A failure to adequately analyze the impact on various stakeholders provides insufficient information about the potential effects of alternative courses of action. What may be beneficial to one stakeholder (increased profits and a greater bottom line for the shareholders) may be harmful to another stakeholder (higher prices or production shortcuts, leading to injurious products, for the customer). All of the stakeholders must be considered in any decision.

4. There are many possible answers to this question below are examples.

   (a) Examples of values that are often considered ethical:

   - Honesty, courage, faithfulness, trustworthiness, integrity
   - Greatest good for the largest number of people
   - Protect fundamental rights and dignity
   - Best values and goals for the community

   (b) Examples of values that are often considered unethical:

   - "It's just part of the job"
   - "I was just doing it for you"
   - "I'm just fighting fire with fire"
   - "It doesn't hurt anyone"
   - "Everyone's doing it"
   - "It's OK if I don't gain personally"
   - "I've got it coming"

1.34 Integrating Across the Curriculum: Auditing

Note to Instructor: This problem will be very difficult for most students. It requires them to think complexly about the quality of evidence.

A. *Note*: According to Exhibit 1.10, higher quality evidence is more certain, complete, relevant, timely, and valuable.

1. The ratio of defective televisions returned to the number of televisions sold is relevant for measuring the proportion of defective products sold to customers. This measure can be calculated fairly accurately, assuming that sales and service department records are accurate. However, it might under-report total product defects because customers might not return all defective televisions, and some televisions may fail after the warranty period. It could also over-report total product defects if a single television is returned more than one time. Therefore this measure may not be as complete as Aden would like it to be. This measure is not very timely; defect problems will not be detected until some time after production problems have occurred since we are only measuring products returned (which means they have already been sold and the company has continued to produce defective products until they discover the large number of returns). Ideally, the company would like to avoid selling defective products to customers.

2. The monthly defective unit warranty costs recorded in the general ledger are relevant in monitoring product defects, and they should be measured accurately (assuming they are accurately recorded in the general ledger), but this measure does not provide timely information about production problems. The information is valuable to the company because it is inexpensive to gather the information and can indicate a production problem that needs to be addressed

3. The number of defects discovered during routine tests at the end of manufacturing is relevant in measuring defects that are discovered by testing procedures. The accuracy of this measure depends on the accuracy of the production records and on the accuracy of the tests. This measure is likely to under-report defect problems because it is difficult to design tests that will identify all possible defects. However, this measure is timely; it identifies defects at the end of production rather than after products are sold to customers. The value of this information allows the company to correct the production problem and avoid dissatisfied customers.

4. Customer survey responses are relevant in measuring customer perceptions about product quality. However, this survey is sent only to repeat customers, who are more likely than average customers to favour the company's products. Thus, the survey results are probably biased. In addition, managers may have difficulty interpreting the results unless findings are analyzed across time or compared to competitors. This measure is not as timely as measures that are captured during production. This measure would be more complete if it were mailed to all customers purchasing a television from the company. The measure will never be fully complete since not all customers will take the time to participate in the survey and mail their responses back to the company.

B. Aden's managers might want to learn many things from monitoring product defects. Below are several possibilities:

- Determine whether targeted defect rates or reductions in defect rates are achieved
- Determine whether targeted warranty costs or reductions in warranty costs are achieved
- Evaluate production employee performance
- Calculate bonuses or other awards that are tied to defect rate or warranty cost goals

C.

1. Aden's auditor must assess the reasonableness of the recorded warranty liability. The liability is estimated based on historical experience, updated for anticipated changes. Information about product defects would be relevant in assessing whether future warranty liabilities are likely to be higher or lower than in the past.

2. Aden's auditor must consider whether inventory should be written down. Product defects are relevant in making this assessment because they can cause the net realizable value of inventory to drop below cost.

3. Aden's auditor must consider whether the allowance for doubtful accounts receivable is reasonable. Product defects may be relevant to this assessment if major quality problems occur after products are sold and then customers refuse to pay.

1.35 Integrating Across the Curriculum: Technology and Information Systems

A. Information from RFID tags is internally generated. The information is about inventory levels and sales, and tracks loss of product through shop-lifting and employee theft.

B. Wal-Mart's in-store research on the RFID technology was most likely used to support organizational strategies. The company was probably testing the technology to evaluate its feasibility and usefulness. The company had not yet implemented the technology as part of its operating plans, which also means that the tests occurred before usual monitoring and motivating activities would be established.

C. Wal-Mart was probably testing the RFID technology to learn how well it would track inventory receipts and sales and reduce shop-lifting. Given this purpose, it was better for customers to be uninformed that a test was taking place. The test would provide more useful results if customers behaved in a normal manner. On the other hand, Wal-Mart received significant negative publicity after news was released that a test had taken place. Consumer advocate groups were concerned that Wal-Mart could use the technology to track where products go after they leave the store, invading customer privacy. The lack of disclosure was viewed as evidence of impropriety by Wal-Mart. When consumers find out that information was held back they automatically become suspicious of the reasons for the hold-back and suspect wrongdoing on the part of the company. As a result of all the large public scandals in the early part of the decade, consumers want to be appropriately informed of everything.