

Solutions for Marketing Research An Applied Orientation 7th Edition by Malhotra

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Solutions

Chapter 2

DEFINING THE MARKETING RESEARCH PROBLEM AND DEVELOPING AN APPROACH

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CHAPTER OBJECTIVES

- 2.1. Understand the importance of and process used for defining the marketing research problem.
- 2.2. Describe the tasks involved in problem definition, including discussion with decision maker(s), interview with industry experts, secondary data analysis, and qualitative research.
- 2.3. Discuss the environmental factors affecting the definition of the research problem: past information and forecasts; resources and constraints; objectives of the decision maker; buyer behavior; legal environment; economic environment; and marketing and technological skills of the firm.

- 2.4. Clarify the distinction between the management decision problem and the marketing research problem.
- 2.5. Explain the structure of a well-defined marketing research problem including the broad statement and the specific components.
- 2.6. Discuss in detail the various components of the approach: objective/theoretical framework, analytical models, research questions, hypotheses, and specification of information needed.
- 2.7. Acquire an appreciation of the complexity involved, and gain an understanding of the procedures for defining the problem and developing an approach in international marketing research.
- 2.8. Describe how social media can be used to identify and define the marketing research problem and aid in developing an approach.
- 2.9. Discuss the use of mobile marketing research in problem definition and approach development.
- 2.10. Understand the ethical issues and conflicts that arise in defining the problem and developing the approach.

AUTHOR'S NOTES: CHAPTER FOCUS

This chapter provides an appreciation of the importance and complexities involved in defining the marketing research problem, and provides an overview of the process and components of an approach to a marketing research problem. The problem definition process is described. The tasks involved in problem definition are discussed. The factors affecting the environmental context of the problem are identified. The distinction and the relationship between the management decision problem and the marketing research problem is emphasized. The appropriate formulation of the marketing research problem is explained. Furthermore, the process of developing an approach is described. The components of an approach—theoretical foundations, analytical models, research questions, hypotheses, and specification of information needed—are identified and explained.

This chapter is different from ones in competing texts in that an entire chapter is devoted to the problems of defining the marketing research problem and the development of an approach to the problem. Half of the chapter is devoted to defining the marketing research problem.

The discussion in other texts is relatively brief. The material on the errors involved in problem definition and the appropriate way of defining the problem is unique. The discussion of the development of an approach to the problem in other texts is relatively brief or nonexistent in many. Much of the material presented in this chapter is unique.

This chapter could be taught by focusing on the chapter objectives sequentially. Greater emphasis could be placed on discussion with decision makers and industry experts (Chapter Objective 2) and the environmental context of the problem (Chapter Objective 3). The distinction between the management decision problem and the marketing research problem, as well as the definition of the marketing research problem (Chapter Objective 4), should be stressed. One could also emphasize theoretical foundations, analytical models, and hypotheses (Chapter Objective 6). Discussions of the international difficulties, use of social media, mobile marketing research and ethical concerns of defining the marketing research problem and developing an approach can also be interesting and beneficial to both graduate and undergraduate students (Chapter Objectives 7 through 10). Graduate students should be encouraged to try the Internet and software, such as the programs described in the book, or any similar programs, in the computer lab during non-class hours.

CHAPTER OUTLINE

1. Objectives
2. Overview
3. Importance of Defining the Problem
4. The Process of Defining the Problem and Developing an Approach
5. Tasks Involved
 - (i) Discussions with Decision Makers
 - (ii) Interviews with Industry Experts
 - (iii) Secondary Data Analysis
 - (iv) Qualitative Research

6. Environmental Context of the Problem
 - (i) Past Information and Forecasts
 - (ii) Resources and Constraints
 - (iii) Objectives
 - (iv) Buyer Behavior
 - (v) Legal Environment
 - (vi) Economic Environment
 - (vii) Marketing and Technological Skills
7. Management Decision Problem and Marketing Research Problem
8. Defining the Marketing Research Problem
9. Components of the Approach
 - (i) Objective/Theoretical Framework
 - (ii) Analytical Model
 - (iii) Research Questions
 - (iv) Hypotheses
 - (v) Specification of Information Needed
10. International Marketing Research
11. Marketing Research and Social Media
12. Mobile Marketing Research
13. Ethics in Marketing Research
14. Summary
15. Key Terms and Concepts
16. Suggested Cases, Video Cases, and HBS Cases
17. Live Research: Conducting a Marketing Research Project
18. Acronyms
19. Exercises
20. Internet and Computer Exercises
21. Activities

TEACHING SUGGESTIONS

Chapter Objective 1

- Explain the rationale behind the problem definition process.
Begin by noting that a clearly defined problem serves as a guideline to the researcher in designing and conducting research properly. Thus, it helps the researcher in answering the question: what is to be done? In absence of a well-defined problem, the data collected may be worthless to the decision maker. Stress that a clearly laid down research problem leads to goal-directed research, which will meet the objectives of the decision maker instead of haphazard research, which often provides incomplete information. The following example may prove instructive here.

Example: Starship, Inc. was a large department store situated in a medium-sized metropolitan area. Almost 50% of its sales were accounted for by the sale of women's clothes. It carried a line of good quality clothes at a reasonable price. However, lately the store had been facing a profit squeeze. The management decided to upgrade its line of women's apparel. To assess the market size an outside research agency was hired. The agency found that a significant demand existed for higher priced brand name and designer clothes. Acting on the results obtained by the research firm, the management thoroughly refurbished the women's section by upgrading. Immediately afterwards the sales declined sharply. Apparently, neither the management nor the researchers had taken into consideration the fact that Starship's clientele was largely made up of middle-income families. Thus, the entire research effort was wasted by the poor formulation of the problem.

- Discuss the process of formulating the problem.

Emphasize that formulating the problem is a sequential process. The first step involves discussion with the decision maker. Stress to the students that the researcher needs to understand the nature of both the problem and the decision which management faces in order to determine the underlying information needs. Sometimes discussions with

industry experts, analysis of secondary data, and preliminary research are required to identify the factors that must be considered for the proper identification of the decision problem. The final step is to translate the decision problem into a research problem.

Figure 2.1 can be used as a guideline to the problem definition process.

- See Questions 1 and 2.

Chapter Objective 2

- Describe the importance of the decision maker to the researcher.

Explain that the researcher must communicate with the DM in order to understand the nature of the problem the DM faces and what he hopes to learn from the research. Such an understanding will help the researcher in gathering information relevant to the problem faced by the decision maker. Note that a candid and open discussion between the researcher and DM may help in identifying:

1. The events that led to the need for making a decision.
2. The alternative courses of action available to DM.
3. The criteria to be used in evaluating various courses of action.
4. The information that is needed by the DM in making the decision.

A systematic approach to working with the DM is the problem audit. It enables the researcher to get beyond the mere symptoms to understand the causes of the problem.

- Explain the difficulties of dealing with the DM.

It is worthwhile to inform the class that access to the DM may be difficult. The DMs may not have enough time to have a fruitful discussion with the researcher. This is especially true in the case of multiple DMs, where there may be conflicts of interest and time. Finally, alert the students that sometimes the DMs decide the action in advance and simply want data that will support their plans. This is not a sound application of marketing research and the researcher should remain unbiased while conducting and presenting a study.

- Describe the role of industry experts and secondary data in identifying problem(s).

Note that industry experts can provide useful information about the prevailing market conditions. They can be especially useful in the case of industrial marketing research where technical knowledge is required. Regarding secondary data, it is important to provide economical and quick information that can be useful in understanding the problem clearly. Sometimes focus groups are used to provide information that is then used in refining the problem. Figure 2.1 provides a framework that graphically shows the role of industry experts and secondary data in identifying the problem.

- See Questions 4, 5, and 6.

- Describe the role of qualitative research in the process of developing an approach.

Emphasize that the purpose of qualitative research is to get a feel for the situation rather than a conclusive result. Such research can and should play a useful role in helping the researcher to understand the problem more clearly. Techniques such as focus group interviews, pilot surveys, and in-depth interviews are often used to find the opinion of the consumers. This helps the researcher in refining the problem and guiding the research in the right direction.

- See Question 9.

Chapter Objective 3

- Highlight factors affecting the problem definition process.
 1. Past information and forecasts: Past information and forecasts provide industry data that put the current problem into context.
 2. Resources and constraints: Resources and constraints force the problem to be defined in an appropriate scope.
 3. Objectives: An understanding of the objectives of the organization and decision maker allows the researcher to pinpoint the exact desires for the study.

4. Buyer behavior: An understanding of the ultimate consumer's behavior is critical to understanding their response to specific marketing actions.
5. Legal behavior: The legal environment may regulate certain aspects of the marketing mix and the research effort, thus affecting the problem definition.
6. Economic environment: The economic environment can affect the decisions of consumers and influence the marketing mix.
7. Marketing and technological skills: The abilities of the organization to develop and market products may affect the scope of the research to be done. In addition, technological advances offer new methods of conducting marketing research.

Figure 2.2 may be helpful here by listing the environmental factors marketers should consider.

Chapter Objective 4

- Distinguish between the marketing research problem and management decision problem.

The management decision problem asks what the DM needs to do, whereas the marketing research problem entails determining what information is needed and how it can be obtained in the most feasible way. To show the difference between the two types of problems, you can list some management problems on the blackboard and then ask students to formulate the relevant research problem.

For example:

	Management Decision Problem	Research Problem
1.	Should the price be cut in response to a price-cut by a competitor?	Determine the buyer- behavior at various price levels.
2.	Should the product 'X' be introduced in the market?	Assess the probable market size and share for product 'X'
3.	What should be done to increase the relative market share of product 'Y'?	Determine the strengths and weaknesses of 'Y' vis-à-vis those of the competitors.

- See Question 7.

Chapter Objective 5

- Explain the components of a well-defined marketing research problem.

A well-defined marketing research problem consists of both a broad statement and a list of specific components of the problem. The broad statement provides perspective on the problem and acts as a safeguard against overlooking important aspects of the marketing research and management decision problems. The specific components focus on the key aspects of the problem and provide clear guidelines on how to proceed further.

- Explain the pitfalls of defining a research problem in either a too broad or a too narrow perspective.

A broad definition does not provide guidelines for subsequent steps in research. A narrow definition, on the other hand, may preclude the consideration of some courses of action. In either case, the solution reached will not be directly related to the problem and may be of little use to the manager. See Figure 2.3 for a guide for defining the research problem.

- See Question 8.

Chapter Objective 6

- Explain the rationale for basing research on objective/theoretical foundations.

Begin by referring to Figure 2.1, Developing an Approach to the Problem. This overhead provides a framework for the process of developing an approach to the problem.

Within this framework, emphasize that the foundation of research should be objective and based on a theoretic foundation. A theory is based on principles, which have either been proven or accepted as true. Thus, a theory provides a researcher with general principles on which to base his/her research work. Moreover, note that a theory serves as a framework that can be used by the researcher in interpretation of the data collected.

- Explain the nature of an analytical model and how such a model can be utilized in developing an approach to the problem.

Again, refer to Figure 2.1 and explain that an analytical model is a verbal, graphical, or mathematical representation based on some theoretical foundations. Thus, note that the analytical model is developed from the theoretic base of the research. Once formed, the model describes the relationship among the variables of interest in the present situation. By manipulating these variables, a researcher can isolate the relevant variables (i.e., the ones that have an important bearing on the present problem).

- Write down some research questions on the blackboard and ask students to suggest an appropriate hypothesis. For example:

	Research Question	Hypothesis
1.	What is the mean income of heavy-drinkers of beer?	The lower income people consume more beer.
2.	What age group of purchasers of product 'X' buys 'X' the most?	The age group 35–44 is the heaviest user.
3.	What will be the result on sales of a 20% increase in price?	A 20% increase in price will not lead to a decrease in dollar sales.

Figure 2.4 may be helpful here as a guideline to show the flow of development from research questions to hypotheses.

- Explain why each of several different approaches may be suitable for a research problem.

No one approach to a problem will be perfect. There is no one best approach. Rather, each approach will have its own strengths and weaknesses. Thus, many approaches may be capable of answering the research questions within the constraints embodied in any particular approach.

- See Questions 9, 10, 11, 12, and 13.

Chapter Objective 7

- **Describe how culture influences the environmental context of the problem.**

The following steps help researchers account for environmental and cultural differences when defining the problem in an international marketing context:

Step 1. Define the marketing research problem in terms of domestic environmental and cultural factors. This involves an identification of relevant American (or Western) traits, economics, values, needs, or habits.

Step 2. Define the marketing research problem in terms of foreign environmental and cultural factors, without judgment. This involves an identification of the related traits, economics, values, needs, or habits in the proposed market culture. This task requires input from researchers familiar with the foreign environment.

Step 3. Isolate the self-reference criterion (SRC) influence on the problem and examine it carefully to see how it complicates the problem. Examine the differences between Steps 1 and 2. The SRC can be seen to account for these differences.

Step 4. Redefine the problem without the SRC influence and address it for the foreign market situation. If the differences in Step 3 are significant, the impact of the SRC should be carefully considered.

Note, while developing theoretical frameworks, models, research questions, and hypotheses, differences in the environmental factors, especially the sociocultural environment, may lead to differences in the formation of perceptions, attitudes, preferences, and choice behavior.

Chapter Objective 8

- Describe how social media can be used to aid in all the tasks that need to be performed in order to define the problem.

If the decision maker maintains a blog or has a Facebook page, these sources provide additional information in understanding the DM and her/his objectives. It is also possible to identify industry experts and an analysis of their social media sites can provide insights into their thinking as it relates to problem at hand. Social media are a natural source of qualitative secondary data and qualitative research. Social media can also help in gaining an understanding of the environmental context of the problem.

- Describe how social media can be used in developing an approach to the problem.

With the use of relevant media such as blogs, Facebook or Twitter, researchers can update consumers on the research that has been ongoing and the actions that have been taken. As such, the use of these media can then further be extended to incorporate feedback from consumers as to whether the researchers are on the right track because the analytical models developed and the research questions as posed by the firm were consistent with and based upon consumer thinking and insights. Researchers can then assess the appropriateness of their models or whether they are asking the right research questions. Furthermore, market researchers can choose to discuss openly their derived hypothesis for feedback among closed social media consumer panels.

Chapter Objective 9

- Describe the role of mobile marketing research in defining the problem and developing an approach to the problem.

Mobile marketing research (MMR) can be useful in defining the problem as well as in developing an approach to the problem. The mobile phone has become a significant means of communication, particularly in a business setting, in most countries of the world. Thus, the researcher can use mobile communication to interact with the decision maker(s) and with the industry experts. The use of MMR to analyze secondary data is discussed in Chapter 4 and to conduct qualitative research in Chapter 5. Thus, MMR can be useful in performing all the four tasks needed to define the management decision problem and the marketing research problem as well as to develop an approach to the problem.

Chapter Objective 10

- Discuss the ethical responsibilities of the researcher and the client.

The process of problem definition should not be compromised by the personal agendas of the researcher (e.g., enhance profits) or the client (e.g., undertake research to justify a decision already made).

Such ethical situations would be satisfactorily resolved if the client/researcher relationship developed with both the client and the researcher adhering to the seven Cs: communication, cooperation, confidence, candor, closeness, continuity, and creativity, as discussed earlier. This would provide a relationship of mutual trust that would check any unethical tendencies.

Ethical situations affecting the researcher and the client may also arise in developing an approach to the problem. When researchers conduct studies for different clients in related industries (i.e., banking and financial services) or in similar research areas (i.e., customer satisfaction), the research firm is honor bound not to reuse client-specific models or findings for other projects.

The client also has an ethical responsibility not to solicit proposals merely to gain the expertise of the research firms without pay. It is unethical for a client to solicit proposals from a few research firms and then adopt one or a combination of the approaches suggested in them and conduct the project in-house.

The Internet and Marketing Research

- Describe the advantages of the Internet and computers in developing an approach to the problem.

The Internet can help the researcher gain access to the DMs and industry experts through e-mail and chat rooms. To locate an expert, search the lists of Usenet FAQs to see if one covers your topic. If there is no FAQ, search the list of Usenet newsgroups or forums

(groups.google.com) to find an appropriate forum. Then search for listservers related to the industry or type of organization that client belongs in. Search engines, mentioned in Chapter 1, can be used to collect secondary data quickly and economically.

Many of the factors to be considered in the environmental context of the problem can be researched via the Internet. For client specific information the user can go to the company homepage. Have the students visit the homepage for Coca-Cola Enterprises, Inc. (www.cokecce.com). Further, the user can also search for competitor information on the Internet. The students should also be encouraged to visit and obtain information from the following sites: Dunn's Market identifiers from Dunn and Bradstreet (www.dnb.com), and StreetLink, which provide corporate information on many companies, www.streetlink.com.

In addition to the Internet, computers can be used in other ways to define the problem and develop an approach. The literature review could be conveniently conducted by examining, among other sources, online information about catalogs, books, and articles. Spreadsheet software packages such as Lotus 1-2-3 and Excel are effective managerial tools in developing and testing simple mathematical models.

- See Internet and Computer Exercises.

ACTIVE RESEARCH

It should be noted that a variety of answers are appropriate. The ones given here are merely illustrative. DM denotes decision maker and MR denotes marketing researcher.

DM: Sprite

Indicators for poor performance of Sprite: Symptoms

- Decreasing market share.
- Lower growth rate with respect to competition.
- Missing sales forecasts.
- Existing customers leaving the brand.
- Sales force pushing for price cuts or sales promotions.

MR: Sprite

The marketing program for Sprite:

- Sprite is aiming at the teens and sports fans with its “Thirst” Campaign.
- Sprite runs online marketing promotions with the likes of online merchants like RocketCash specifically aimed at teens.
- The Sprite Web site offers interesting games to capture attention of teens and gain brand loyalty.
- It aggressively sponsors sports and games and advertises during related TV programs.

Reasons for lack of performance include:

- Sprite might not be appealing to target market.
- Company might be targeting the wrong segments.
- Excessive competition in the segment.
- They might not have picked the right advertising theme.
- Weakness in the distribution system.
- Ineffective promotions.

MR: Wal-Mart

- Growth in U.S. nearing saturation
- Suppliers might rebel against the pressure by Wal-Mart
- Company not doing a good job with international expansion. If rightly done this is a huge opportunity.
- Internet and other emerging channels pose challenge as well as opportunity

Students should locate and interview an expert.

DM: Wal-Mart

As CEO of Wal-Mart the marketing strategies I would formulate are:

- Launching brands for different product segments (differentiation)
- Specialty stores for category of items like electronics.
- Develop long-term relationships with key suppliers.
- Have overseas partners and joint ventures in foreign business development.
- Online retailing (use partners with right know-how if necessary)

Note that strategies have been suggested for each challenge or opportunity.

MR: Houston's

Sales of Restaurants:

- Most of the specific data is available from paid sources. Openly available data is mostly regional.

Source: <http://www.restaurant.org/research/>

DM: Houston's

Houston's Marketing Manager;

- Problems include potential loss of lunch traffic
- Opportunities are there for introducing new services for the lunch-on-the-go crowd.
- Hotel needs to change its service model.
- Drive in counters
- Fast food counters.
- There should be pickup counters where orders could be placed by phone and picked up later.
- Waiting times and delays have to be reduced

EXPERIENTIAL LEARNING

This experiential exercise is designed to enable the students to interact with a local business in a real-life setting. The answers will vary with the business selected but should follow the format given in Chapter 2.

The Marketing Management Decision

1. He should introduce new cereals targeted at adults, decrease prices, increase the advertising budget, and launch a new campaign.
2. The research reveals that the products are not suited for the taste of adults and are costly. Also, the substitute products seem to be gaining momentum and eating into the market share for cereals. Introduction of new products for adults will make the Kellogg's products popular among adults. Lowering the price or a new, cheaper line of products will cater to price-conscious customers who currently choose generic products. The ad budget has to be increased. Finally, a campaign has to be launched for two reasons. First, for the changed image to be communicated to public and to prevent losing out in the battle against substitute products.

PROJECT ACTIVITIES

1. The marketing research problem is appropriately defined because it follows the format in the book and avoids both types of errors.
2. Several alternative models may be formulated.
3. Several answers are possible. Here are some possibilities.

Component 1

RQ1: How important is competitive pricing?

H₁: Competitive pricing is more important to the lower-income shoppers.

RQ2: How important is in-store service?

H₂: Mere presence of salespeople is not enough; salespeople should be friendly.

Component 2

RQ1: How do shoppers evaluate the quality of Wal-Mart's brands of merchandise?

H₁: The quality of Wal-Mart's brands is much higher for hardware than for apparel.

RQ2: Are Wal-Mart stores conveniently located?

H₂: Wal-Mart stores are conveniently located for shoppers living in the suburbs.

Component 3

RQ1: Is Wal-Mart preferred for hardware?

H₁: Wal-Mart is preferred over competitors for the purchase of hardware.

RQ2: Is Wal-Mart preferred for the purchase of women's clothing?

H₂: Shoppers prefer to purchase women's clothing at upscale department stores.

Component 4

RQ1: What is Wal-Mart's market share for hardware?

H₁: Wal-Mart's market share is higher in hardware than it is in men's clothing.

RQ2: How does Wal-Mart's market share compare to Macy's in home furnishings?

H₂: Macy's has a larger market share than Wal-Mart's in home furnishings.

Component 5

RQ1: How is store patronage related to store evaluations?

H₁: Store patronage is a linear function of store evaluations.

RQ2: Which demographic characteristic is the most important in influencing store patronage?

H₂: Income is the most important demographic characteristic in influencing store patronage.

EXERCISES

Questions

1. The first step in conducting a marketing research project is defining the marketing research problem.
2. It is important to define the marketing research problem appropriately because it serves as a guideline to the researcher for conducting the rest of the marketing research project.
3. One reason why management is often not clear about the real problem is the tendency of the DM to focus on the symptoms rather than causes. Moreover, DMs have various time constraints and therefore are not in a position to gather relevant information to analyze the situation. Finally, the problem, as they perceive it, may be colored by their subjective opinions and biases.
4. The researcher plays a major role in the problem definition process. The process starts with a discussion between the researcher and the decision maker about the decision the DM faces. This discussion should include the alternative courses of action available to the DM and the information that is needed by the DM. The researcher may also hold interviews with industry experts, analyze secondary data, and conduct preliminary research to identify properly the management decision problem. Once the management decision problem has been formulated, the last step in the process is to translate it into a marketing research problem.
5. A problem audit is a comprehensive examination of a marketing problem situation with the purpose of understanding its origin and nature. The problem audit involves discussions with the DM on the following issues:
 - (a) The events that led to the decision that action is needed, or the history of the problem.
 - (b) The alternative courses of action available to the DM. The set of alternatives may be incomplete at this stage, and qualitative research may be needed to identify the more innovative courses of action.
 - (c) The criteria that will be used to evaluate the alternative courses of action. For example, new product offerings might be evaluated based on sales, market share, profitability, return on investment, and so forth.

- (d) The potential actions that are likely to be suggested based on the research findings.
 - (e) The information that is needed to answer the DM's questions.
 - (f) The manner in which the DM will use each item of information in making the decision.
 - (g) The corporate culture as it relates to decision making. In some firms, the decision making process is dominant; in others, the personality of the DM is more important.
6. A symptom occurs as a result of a problem. It is often a complicated process to distinguish a symptom from a problem, but the problem audit offers a structured means of analysis.
7. A management decision problem asks what the DM needs to do. A marketing research problem, on the other hand, is stated in terms that enable the researcher to gather information required by the DM in deciding what to do. The management decision problem is action oriented and focuses on the symptoms. The marketing research problem is information oriented and focuses on the underlying causes.
8. Two types of errors are usually encountered in defining a marketing research problem:
- (a) Defining the research problem in terms that are too broad, vague, or general.
 - (b) Defining the research problem in terms that are too narrow.

The incidence of such errors can be reduced by first stating the problem in broad terms and then identifying the specific components of the problem.

9. After the research problem has been defined, it is necessary to break it down into components that can be addressed separately. To find the answers to each component of the problem, it is essential that a set of specific questions be formulated that capture the essence of the part or component. These specific questions are called research questions.
10. A research question is formulated to find an answer to a specific issue. A hypothesis is a possible answer to the research question that can be empirically tested. For example, a research question may be framed as: "How does the age of a consumer affect the purchase of a car?" A possible hypothesis is, "People in the age group 45–55 tend to buy upscale cars."

11. It is not necessary that every research project have a set of hypotheses, because sometimes sufficient information is not available to develop hypotheses. Other times, the most reasonable statement of a hypothesis may be simply a trivial restatement of the research question.
12. The most common forms of analytical models are verbal, graphical, and mathematical structures. Verbal models state the variables and their relationships in prose form. Graphical models are used to isolate variables and suggest directions of relationships but are not generally designed to provide numerical results. Mathematical models specify the relationships among variables, usually in equation form.
13. One example would be a threshold model for consumer purchasing behavior. Verbally, this model can be explained as increasing motivation in the consumer, disposing him/her towards a purchase. The purchase will occur when his motivation reaches some threshold level.

This model can be represented graphically or expressed mathematically using calculus, as shown in the text.

14. If the decision maker maintains a blog or has a Facebook page, these sources provide additional information in understanding the DM and her\his objectives. It is also possible to identify industry experts and an analysis of their social media sites can provide insights into their thinking as it relates to problem at hand. Social media are a natural source of qualitative secondary data and qualitative research. Social media can also help in gaining an understanding of the environmental context of the problem.

With the use of relevant media such as blogs, Facebook or Twitter, researchers can update consumers on the research that has been ongoing and the actions that have been taken. As such, the use of these media can then further be extended to incorporate feedback from consumers as to whether the researchers are on the right track because the analytical models developed and the research questions as posed by the firm were consistent with and based upon consumer thinking and insights. Researchers can then assess the appropriateness of their models or whether they are asking the right research questions. Furthermore, market researchers can choose to discuss openly their derived hypothesis for feedback among closed social media consumer panels.

15. Markstrat is a management training computer software program that can be customized to feature the competitive circumstances of a selected industry. The Markstrat model incorporates an extensive number of variables involved in the operation of most business enterprises. In this way, the environmental context of the problem can be analyzed. The Global Access Toolkit is another such software.
16. Mobile marketing research (MMR) can be useful in defining the problem as well as in developing an approach to the problem. The mobile phone has become a significant means of communication, particularly in a business setting, in most countries of the world. Thus, the researcher can use mobile communication to interact with the decision maker(s) and with the industry experts. The use of MMR to analyze secondary data is discussed in Chapter 4 and to conduct qualitative research in Chapter 5. Thus, MMR can be useful in performing all the four tasks needed to define the management decision problem and the marketing research problem as well as to develop an approach to the problem.

Problems

1.
 - (a) Assess the probable market size and acceptance for the product.
 - (b) How effective has the campaign been in boosting sales in the past three years?
 - (c) Determine how the various levels of in-store promotion affect the sales.
 - (d) Determine the relationship between price and demand for a new product.
 - (e) Determine the relation between alternative compensation packages and the respective sales performance.
2.
 - (a) Should a new store be opened in a certain metropolitan area?
 - (b) Should a new product be introduced? If so, what features should it have?
 - (c) Should the present TV commercial be changed?
 - (d) How many new sales people have to be hired?
 - (e) How should the various items in the product line be priced so as to maximize revenue?

3. A few examples are listed below, although others can be devised.

Symptoms	Causes
Declining market share	Outdated product New competition Shifting demographics Inappropriate pricing
Decline in profits	Ineffective promotions Escalating distribution costs Improper channel structure
Inability to gain channel participation	Lack of product differentiation Misdirected promotions Inferior product image
Heavy turnover in Sales force	Lack of proper sales incentives Improper allocation of territories Unrealistic sales quotas
Decline in company sales	Decline in industry sales Increased competition

4. Research Questions:

- (a) Is the proximity of the store to the consumer's residence a factor?
- (b) Are consumers concerned with the image of the store?
- (c) Do coupons/discounts induce more consumers to visit the store?

Hypotheses:

- (a) The store must be within five miles of the consumer's residence to motivate him/her to come.
- (b) An image stressing convenience and fashion is most suitable for store X.
- (c) Coupons and discounts favorably impact store patronage.

5. Some possible factors are:

safety	timeliness
convenience	price
frequent flyer benefits	departure times
routes	amenities

Internet and Computer Exercises

1. Online databases that can be used here include Management Contents, Economic Literature Index, Predicasts, and Dow Jones. Others are available. The purpose of this exercise is simply to get the students to explore the computer resources available to them and experience the value of information available on the Internet.

The report on the environmental context surrounding Diet Coke should follow the format given in the book.

2. The model may be either a graphical or analytical model. While conceivably one could develop a verbal model, this defeats the purpose of using the computer for analysis. It is desirable that the students do some statistical analysis and suggest a statistical model.
3. While this list of choice criteria factors for sneakers may not be comprehensive, it should be illustrative and include factors such as type of upper, type of sole, price, image, type of technology, etc.
4. Bank of America is among the major banking institutions in the country. The bank engages in general banking services offering checking accounts, savings accounts, money market accounts, time certificates of deposits, securities sold under agreements to repurchase, individual retirement accounts, and various types of loans, such as commercial loans, home equity loans and consumer loans. Other services include drive-in banking, VISA card, and an automated teller machine network. The students are free to select the competing banks. Information on the environmental context factors can be obtained from the 10-K reports.

ACTIVITIES: QUESTIONS AND ANSWERS

Role Playing

Q1. Ask a fellow student to play the role of decision maker (DM) for a local soft drink firm contemplating the introduction of a lemon-lime soft drink. This product would be positioned as a “change of pace” soft drink to be consumed by all soft drink users, including heavy cola drinkers. You act the role of a researcher. Hold discussions with the DM and identify the management decision problem. Translate the management problem into a written statement of the research problem. Does the DM agree with your definition? Develop an approach to the research problem that you have identified.

A1. **Management Problem:** Should a lemon-lime drink be introduced in the market to increase sales?

Research Problem: Determine the market size for a lemon-lime drink and the strengths and weaknesses of similar products, if any, already in the market.

This problem can be broken down into the following specific components:

1. What is the market size of the lemon-lime segment of the market?
 2. What are the attributes of lemon-lime drinks in the market?
 3. Which attributes are positively evaluated? Which are negatively evaluated?
 4. Do the attributes of the new product match the desires of the market?
- Q2. You are Vice President of Marketing for American Airlines and would like to increase your share of the business market. Make a list of relevant objectives for American Airlines. As the DM, what are your personal objectives?

A2. Objectives of American Airlines:

- (a) Continued long-term growth
- (b) Increase in market share

- (c) Increase in profitability
- (d) Achieving better operating efficiency
- (e) Higher capacity utilization
- (f) Increase in customer satisfaction
- (g) Provide reliable service
- (h) Improve employee productivity

Objectives of DM:

- (a) Increase in financial rewards
- (b) Job security
- (c) Climbing the corporate ladder
- (d) Avoidance of blame for any wrong decisions

Fieldwork

- Q1. Set up an appointment and visit the campus bookstore, a restaurant, or any business located on or near the university campus. Hold discussions with the decision maker. Can you identify a marketing research problem that could be fruitfully addressed?
- A1. The purpose of this field trip is to have the students interact with a businessperson and gain first-hand experience in deciphering the marketing research problem from the management decision problem.
- Q2. Consider the field trip described in (1). For the problem you have defined, develop an analytical model, research question, and the appropriate hypotheses. Discuss these with the decision maker you visited earlier.
- A2. The purpose of this exercise is to have students continue to be exposed to an actual problem situation from which they must now apply the principles from this chapter. The model, the research questions, and hypotheses developed should flow from their original research problem statement and be based on theoretic foundations.

Group Discussion

- Q1. Form a small group of five or six people to discuss the following statement: “Correct identification and appropriate definition of the marketing research problem are more crucial to the success of a marketing research project than sophisticated research techniques.” Did your group arrive at a consensus?
- A1. Key issues that should be discussed include: the guidance the marketing research problem gives research; the assumptions that must be made when applying research techniques, since they are often based on the problem definition; and techniques properly applied to the wrong problem will lead to wrong answers.
- Q2. We are all aware that the Coca-Cola Company changed its flagship brand of 99 years to New Coke and subsequently returned to the old favorite, Coca-Cola Classic. Working in a group of four, read as much material as you can on this “marketing bungle.” Identify the decision problem the Coke management faced. As a team of researchers, define the marketing research problem and its specific components.
- A2. Coca-Cola was faced with a gradually declining market share as Pepsi gained and surpassed Coke in market share. The underlying reason for the slide of Coke was a change in consumer preferences toward a sweeter, less carbonated drink, like Pepsi. Thus, the decision problem for Coke management was how to combat Pepsi given this change in consumer tastes. Specifically, should Coke introduce a new brand more attuned to consumer tastes to combat Pepsi?

The marketing research problem can be conceived in alternative ways, but one general statement is “What mix of product attributes can Coca-Cola devise which will be more in favor with consumers given current tastes?” Components of this problem, of which only a few are listed here, include:

- What level of sweetness is desired by consumers?
 - What level of carbonation is desired by consumers?
 - What brand name should be devised for the drink?
 - What type of packaging provides the greatest consumer awareness of the brand?
- etc.

- Q3. Form a different group of five or six to discuss the following: “Theoretical research and applied research should not be mixed. Hence, it is wrong to insist that the approach to an applied marketing research problem be grounded in theory.”
- A3. Note that all applied research is actually based in theory, thus it cannot be conducted without referring to theory. It will often be necessary to tailor theory or to make assumptions in operationalizing variables to fit the theory when conducting a practical research project, but the theory will still guide the research.

Note: Answers to the Running Case on HP are provided in the case solutions