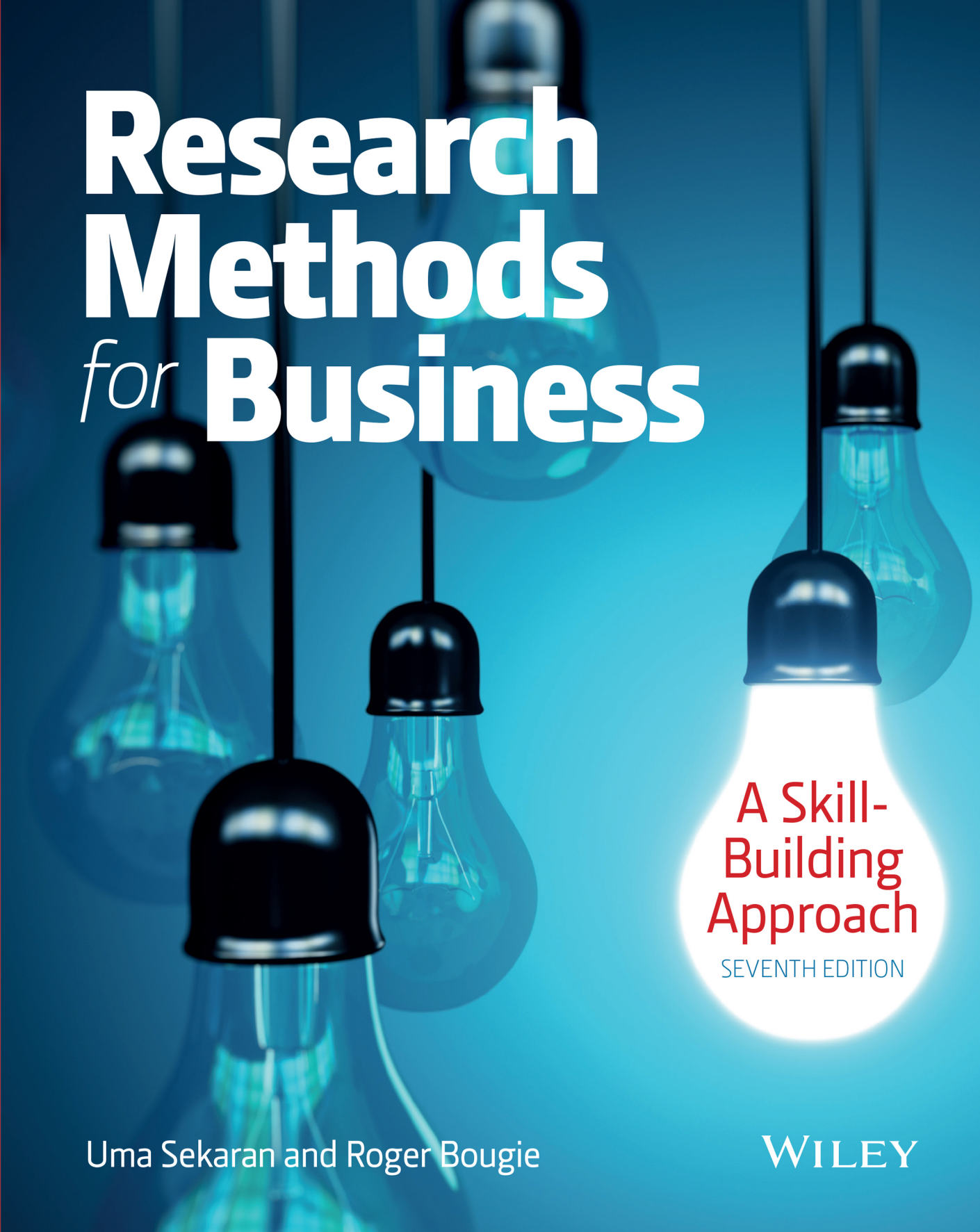

Research Methods for Business
A Skill-Building Approach
SEVENTH EDITION
Uma Sekaran and Roger Bougie
WILEY

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CHAPTER 3

Defining and refining the problem

LEARNING OBJECTIVES

After completing Chapter 3 you should be able to:

1. Identify problem areas that are likely to be studied in organizations.
2. Narrow down a broad problem into a feasible topic for research using preliminary research.
3. Develop a good problem statement.
4. Develop a research proposal.
5. Be aware of the role of the manager in the early stages of the research process.
6. Be aware of the role of ethics in the early stages of the research process.

INTRODUCTION

Earlier in this book we have described business research as a systematic and organized effort to investigate a specific problem encountered in the work setting. Indeed, managers have to be alert and responsive to what is going on, both within their organization and in its environment in order to take effective decisions and develop effective courses of action. The origin of most research stems from the desire to get a grip on issues, concerns, and conflicts within the company or in its environment. In other words, research typically begins with a problem.

THE BROAD PROBLEM AREA

A "problem" does not necessarily mean that something is seriously wrong with a current situation that needs to be rectified immediately. A problem could also indicate an interest in an issue where finding the right answers might help to improve an existing situation. Thus, it is fruitful to define a problem as *any situation where a gap exists between an actual and a desired ideal state*. Box 3.1 provides examples of problems that the manager may encounter in the work setting.

BOX 3.1

EXAMPLES OF PROBLEMS

1. Long and frequent delays lead to much frustration among airline passengers. These feelings may eventually lead to switching behavior, negative word-of-mouth communication, and customer complaints.
2. Staff turnover is higher than anticipated.
3. The current instrument for the assessment of potential employees for management positions is imperfect.
4. Minority group members in organizations are not advancing in their careers.
5. The newly installed information system is not being used by the managers for whom it was primarily designed.
6. The introduction of flexible work hours has created more problems than it has solved.
7. Young workers in the organization show low levels of commitment to the organization.

The foregoing problems provide us with enough information to embark on our research journey. However, what these problems also have in common is that they still have to be transformed into a *researchable topic* for investigation. Indeed, once we have identified the management problem, it needs to be narrowed down to a researchable topic for study. Very often much work is needed to translate the broad problem into a feasible research topic.

EXAMPLE

Problems versus symptoms of problems

It is very important that symptoms of problems are not defined as the real problem. For instance, a manager might have tried to decrease employee turnover (the best people are leaving the organization) by increasing wages, but with little success. Here the real problem may be something else such as the low motivation of employees who feel they do not have enough control over their work. The high turnover rate may merely be a symptom of the deep-rooted motivational problem. Under these conditions, in the long run, a higher salary will not affect employees' intentions to leave. Thus, finding the "right" answer to the "wrong" problem definition will not help. Hence, it should be recognized that correct problem identification is extremely critical for finding solutions to vexing issues.

Frequently, managers tend to describe the problem in terms of symptoms. Rather than accepting it as such, the researcher needs to identify the problem more accurately. One way of determining that the problem, rather than the symptom, is being addressed is a technique called "5 Whys" or "5 Times Why". 5 Whys is a fairly straightforward approach that will help you

to get to the root cause (the most basic cause) of a problem (via preliminary research). Developed by the Japanese industrialist Sakichi Toyada, the idea is to keep asking "Why?" until the most basic cause is arrived at.

Let's go back to our example to illustrate this approach.

My best employees are leaving the organization.

Why? Because they are not satisfied with their jobs.

Why? Because they do not find a challenge in their jobs.

Why? Because they do not have control over their work.

Why? Because they do not have a lot of influence over planning, executing, and evaluating the work they do.

Why? Because we have been reluctant to delegate.

Note that the number five is a general guideline for the number of whys needed to get to the root cause level, but asking "Why?" five times versus three, four, or six times is not a strict requirement. What matters is that we investigate recurring problems by addressing true causes and not symptoms of these causes.

"*The introduction of flexible work hours has created more problems than it has solved*" provides a nice starting point for a research project, but it lacks the specificity and focus needed to investigate it. We need to transform the broad problem into a feasible topic for research by a) making it more specific and precise and by b) setting clear boundaries. Finally, we need to select a c) perspective from which we investigate the subject (Machi and McEvoy, 2012).

EXAMPLE

Bringing clarity and focus to the problem

The "secret" to bringing *clarity* and *focus* to your problem is to isolate the key ideas in the first version of the problem statement. A broad, first statement of the problem often includes several words and/or phrases that need definition. Check out the following problem statement:

> ***"Minority group members in organizations are not advancing in their careers."***

To identify the key terms in your problem statement, look for the subjects (careers), verbs (advancing), and objects (minority group members) in your statement. Definitions of key terms must be precise in order to identify the subject of the research and to gain access to relevant academic literature. Precise definitions will allow you to explore the literature. The literature review will help you to refine your research objective(s) and research questions and thus to develop a feasible topic for research.

The selection of a particular (academic) perspective on the problem will allow us to draw upon a rich body of literature to help us to formulate a feasible problem statement, as exemplified by the following example.

EXAMPLE

How the selection of an academic perspective will help us to narrow down our research

Consider the following problem: "*Long and frequent delays lead to much frustration among airline passengers. These feelings may eventually lead to switching behavior, negative word-of-mouth communication, and customer complaints*." Preliminary research on this issue suggests that service waiting times are typically controlled by two techniques: operations management, to decrease actual, objective waiting times (perspective 1) and management of perceptions, that will help service providers to manage the customers' subjective waiting experience (perspective 2). The selection of a particular academic perspective on the problem (for instance, *management of perceptions* in the foregoing example of long and frequent delays) provides us with a vast body of knowledge that will help us to shape our own thinking and spark valuable insights on the problem under study.

We have just explained that we need to transform (read: narrow down) a broad management problem into a feasible topic for research. *Preliminary information gathering* (or preliminary research) will help us to make the necessary transformations. Figure 3.1 shows the three initial stages of the research process and illustrates how we get from a broad management problem to a feasible topic for research. Note that this process is not linear; in the beginning of our project we will have to move back and forth between preliminary research and (re)defining the problem (see Box 3.2).

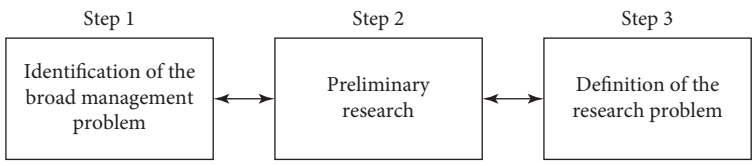


FIGURE 3.1

Three important first steps in the research process

BOX 3.2

DEFINING THE PROBLEM

In the early stages of the research process you will have to spend time *alternating* between preliminary research (e.g., a first review of the literature) and (re)defining the problem statement. Until you have developed a first tentative problem statement you cannot decide what information is useful. However, the awareness and understanding of current work and viewpoints in the subject area may change your perspective on what the problem is and encourage you to refine the problem statement; a more refined problem statement may trigger the need to collect further information which may inspire you to reframe the problem statement . . . and so on.

PRELIMINARY RESEARCH

Once we have identified the broad problem area preliminary research should help the researcher to gain a better understanding of the problem and to narrow the problem down to a researchable topic for study. Preliminary research should help the researcher to find answers to questions such as: "What is the problem?"; "Why does the problem exist?"; "Is the problem important?"; and "What are the benefits of solving the problem?" Although the exact nature of the information needed for this purpose depends on the type of problem one is addressing, it may be broadly classified under two headings:

1. Information on the organization and its environment – that is, the **contextual factors**.
2. Information on the topic of interest.

Nature of information to be gathered

Background information on the organization

Information gathered on relevant contextual factors will be useful in talking knowledgeably with managers and other employees in the company and raising the appropriate issues related to the problem. Along these lines, an understanding of these factors might be helpful in arriving at a precise problem formulation. Background information might include, among other things, the contextual factors listed below, which may be obtained from various sources.

1. The origin and history of the company – when it came into being, business it is in, rate of growth, ownership and control, and so on.
2. Size in terms of employees, assets, or both.
3. Charter – purpose and ideology.
4. Location – regional, national, or other.
5. Resources – human and others.
6. Interdependent relationships with other institutions and the external environment.
7. Financial position during the previous five to ten years, and relevant financial data.
8. Information on structural factors (for instance, roles and positions in the organization and number of employees at each job level, communication channels, control systems, workflow systems).
9. Information on the management philosophy.

Depending on the situation, the type of problem investigated, and the nature of some initial responses received, certain aspects may have to be explored in greater depth than others.

The contextual information mentioned may be obtained through various primary and/or secondary data collection methods, such as interviews and a review of company records and archives. Data gathered through existing sources are called secondary data. **Secondary data** are data that have been collected by others for another purpose than the purpose of the current study. Some secondary sources of data are statistical bulletins, government publications, published or unpublished information available from either within or outside the organization, company websites, and the Internet. The nature and the value of secondary data should be carefully evaluated before it is used. Box 3.3 provides an overview of the key criteria for evaluating secondary data.

BOX 3.3

CRITERIA FOR EVALUATING SECONDARY DATA

Timeliness of the data. *When were the data collected?* It is important that the data are up-to-date. Check the dates on all of your secondary data to make sure that you have the newest information available.

Accuracy of the data. *What was the purpose of (presenting) the data?* Web pages are created with a specific purpose in mind. Commercial organizations often post information online that might favor them in some way or represent their own interests. *Who collected the data? How were the data collected? What are the author's credentials on this subject?* The accuracy of data can be impacted by who collected it and how the data were collected. *Are the data consistent with data from other sources?* If specific information varies from source to source, you need to find out which information is more accurate.

Relevance of the data. Not all of the secondary data you find will be relevant to your particular needs. Data may be accurate and up-to-date but not applicable to your research objective(s) and research questions.

Costs of the data. How much do the data cost? Do the benefits outweigh the costs? Are you better off collecting other data? Are you better off using other (primary?) methods of data collection?

The collection of secondary data is very often quite helpful in the early stages of the research process, but in some cases information is best obtained by other methods such as interviewing people, observation, or by administering questionnaires to individuals. Such data that the researcher gathers first hand for the specific purpose of the study are called **primary data**. Four principal methods of primary data collection (interviews, observation, administering questionnaires, and experiments) are discussed in Chapters 7 to 10.

Note that it is often beneficial to simultaneously gather primary and secondary data in the early stages of the research process. On the one hand, secondary data can help you to focus (further) interviews more meaningfully on relevant aspects pertaining to the problem; on the other hand, interviews may help you to search for relevant information in secondary sources.

Information on the topic or subject area

The literature – the body of knowledge available to you as a researcher – may also help you to think about and/or better understand the problem. A careful review of textbooks, journal articles, conference proceedings, and other published and unpublished materials (see Chapter 4 for a detailed discussion on how to review the literature) ensures that you have a thorough awareness and understanding of current work and viewpoints on the subject area. This helps you to structure your research on work already done and to develop the problem statement with precision and clarity.

A first review of the literature also helps you to make an informed decision about your research approach, as exemplified in Box 3.4. In this example (of *fundamental* research) an *exploratory research* approach is used in order to provide insight into events that typically instigate customer anger in service settings.

BOX 3.4

INSPECTION OF THE LITERATURE ON THE ANTECEDENTS OF CUSTOMER ANGER

Customer anger has been found to lead to negative word-of-mouth communication and switching, above and beyond customer dissatisfaction (Bougie, Pieters & Zeelenberg, 2003; Dubé & Maute, 1996; Nyer, 1997; Taylor, 1994). Since it is also a common emotional response to failed services, it may have strong implications for the performance and profitability of service firms. For these reasons it is critical that service firms try to avoid customer anger.

To be able to avoid customer anger, service providers need to understand what events typically instigate this emotion in customers. Surprisingly, to date, we do not know much about instigations of customer anger. Although we know that core service failures (Dubé and Maute, 1996) and waiting for service (Folkes, Koletsky & Graham, 1987; Taylor, 1994) give rise to anger, systematic research on the precipitating events of this emotion in service settings is absent. Therefore, this exploratory study investigates and categorizes events that typically instigate customer anger to fill this void. Thus it provides a conceptual model of anger instigation in services and guidelines for service firms on how to avoid customer anger.

DEFINING THE PROBLEM STATEMENT

After gathering preliminary information, the researcher is in a position to narrow down the problem from its original broad base and define the issues of concern more clearly. As we have explained earlier, it is critical that the **problem statement** is unambiguous, specific, and focused, and that the problem is addressed from a specific academic perspective. No amount of good research can find solutions to the situation if the critical issue or the problem to be studied is not clearly pinpointed.

What makes a good problem statement?

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A good problem statement includes both a statement of the **research objective(s)** and the **research question(s)**. In chapter 2 we have explained that good research has a purposive focus. Whereas the purpose of fundamental (or basic) research in business is related to expanding knowledge (of processes) of business and management in general, the ultimate aim of applied research is often to *change* something in order to solve a specific problem encountered in the work setting. For instance, a manager might be interested in *determining the factors that increase employee commitment to the organization*, since an increase in employee commitment may translate into lower staff turnover, less absenteeism, and increased performance levels, all of which will benefit the organization. The purpose or objective of the study thus explains *why* the study is being done. The statement of the research objective(s) should be brief, but nonetheless communicate clearly the focus of the project.

EXAMPLE

Examples of research objectives

- To find out what motivates consumers to buy a product online.
- To study the effect of leadership style on employees' job satisfaction.
- To investigate the relationship between capital structure and profitability of the firm.
- To establish success factors regarding the adoption and use of information systems.
- To determine the optimal price for a product.
- To investigate the influence of the in-store shopping environment on impulse buying.
- To establish the determinants of employee involvement.
- To understand the causes of employee absence.

Once the purpose of the study has been identified, one is able to formulate the research question(s) of the study. The inclusion of one or more research questions in the problem statement further clarifies the issue to be resolved. The research question(s) specify *what* you want to learn about the topic. They guide and structure the process of collecting and analyzing information to help you to attain the purpose of your study. In other words, research questions are the translation of the problem of the organization into a specific need for information. Box 3.5 provides an example of a problem statement. Note that both the research objective and the research questions of the study are detailed in this example.

BOX 3.5

EXAMPLE OF A PROBLEM STATEMENT

CAA Airlines carries out charter and regular flights to medium-haul destinations – such as the Mediterranean, North Africa and the Red Sea – and to long-haul destinations such as the Caribbean. Today, CAA's fleet consists of three (new) Boeing 737-800s and four (outdated) Boeing 767-300s. Because the Boeing 767s are rather outdated they need more maintenance than the average airplane. Despite an intensive maintenance program, these planes have a lot of technical problems. Consequently, the long-haul fleet of CAA has needed to deal with a lot of delays recently. New long-haul planes have been ordered, but these planes will not be delivered before 2016. This means that more delays will inevitably occur. This may translate into much frustration among airline passengers, to switching behavior, and to negative word-of-mouth communication. These feelings and behaviors of consumers may eventually have negative effects on the performance and the profitability of the firm.

Prior research has claimed that service waits can be controlled by two techniques: operations management and management of perceptions. For CAA Airlines it is very difficult to obtain "zero defects" (no delays). Hence, this project will focus on managing the perceptions of the wait experience: because CAA Airlines cannot control the actual amount of delays and the duration, the company must focus

on managing the customers' perception of the waiting experience. The purpose of this study is twofold: (1) to identify the factors that influence the passengers' waiting experience and (2) to investigate the possible impact of waiting on customer satisfaction and service evaluations.

Therefore, this project focuses on the following research questions:

1. What are the factors that affect the perceived waiting experience of airline passengers and to what extent do these factors affect the perception of waiting times?
2. What are the affective consequences of waiting and how does affect mediate the relationship between waiting and service evaluations?
3. How do situational variables (such as filled time) influence customer reactions to the waiting experience?

Drawing from prior research in the areas of waiting, service evaluations, and mood theory, hypotheses are generated regarding the relationships among a delay, the waiting experience, affect, and service evaluations. The hypothesized relationships are tested in a field setting involving delayed CAA airline passengers.

The foregoing problem statement addresses both the research objectives and the research questions of the study. The research objective and the research questions are strongly related; it would have been impossible to adequately detail the research questions if the research objective had been unclear, unspecified, or ambiguous. What's more, the research questions have been clarified to the extent that it is possible to relate them to existing literature in the areas of waiting, service evaluations, and mood theory. Hence, the broad problem area has been transformed into a researchable topic for study.

Box 3.6 summarizes the problem and the problem statement of the foregoing research project.

BOX 3.6

BUSINESS PROBLEM TRANSLATED INTO PROBLEM STATEMENT

	Problem statement	
Problem	**Research objective**	**Research questions**
Frequent and long delays may translate into much frustration among airline passengers, to switching behavior, and to negative word-of-mouth communication. These feelings and behaviors eventually have negative effects on the performance and the profitability of the firm.	The purpose of this study is twofold: (1) to identify the factors that influence the passengers' waiting experience and (2) to investigate the possible impact of waiting on customer satisfaction and service evaluations.	1. What are the factors that affect the perceived waiting experience of airline passengers and to what extent do these factors affect the perception of waiting times? 2. What are the affective consequences of waiting and how does affect mediate the relationship between waiting and service evaluations? 3. How do situational variables (such as filled time) influence customer reactions to the waiting experience?

By now, it should be clear that a problem statement addresses both the "why" (the specific aim or purpose of the study) and the "what" (the central research question or a set of research questions) of the research. There are three key criteria to assess the quality of a problem statement: it should be relevant, feasible, and interesting.

A problem statement is relevant if it is meaningful from a managerial perspective, an academic perspective, or both. From a *managerial* perspective, research is *relevant* if it relates to (1) a problem that currently exists in an organizational setting or (2) an area that a manager believes needs to be improved in the organization. From an *academic* perspective, research is *relevant* if: (1) nothing is known about a topic, (2) much is known about the topic, but the knowledge is scattered and not integrated, (3) much research on the topic is available, but the results are (partly) contradictory, or (4) established relationships do not hold in certain situations. If you base your research report on the "nothing is known" argument, you will have to prove that your claim is right. The observation that much is known about a topic, but that the knowledge is scattered and not integrated also provides a good basis for a research report. Your task is, however, a difficult one, since it is expected that you will present an integrated overview of the topic. A research project that aims to reconcile contradictory findings or to establish boundary conditions is also a real challenge.

A good problem statement is relevant but also *feasible*. A problem statement is feasible if you are able to answer the research questions within the restrictions of the research project. These restrictions are possibly related to time and money, but also to the availability of respondents, the expertise of the researcher (a problem statement may be too difficult to answer), and the like. A frequent problem in terms of feasibility is that the problem statement is too broad in scope. Indeed, it is important that you develop a narrowly defined research question that can be investigated within a reasonable amount of time, and with a reasonable amount of money and effort. For instance, the problem statement "How do consumers behave?" is far too general to investigate.

A third characteristic of a good problem statement is that it is *interesting* to you. Research is a time-consuming process and you will go through many ups and downs before you present the final version of your research report. It is therefore vital that you are genuinely interested in the problem statement you are trying to answer, so that you can stay motivated throughout the entire research process.

EXAMPLE

Well-defined research questions

1. To what extent do the structure of the organization and type of information systems installed account for the variance in the perceived effectiveness of managerial decision making?
2. To what extent has the new advertising campaign been successful in creating the high-quality, customer-centered corporate image that it was intended to produce?
3. How has the new packaging affected the sales of the product?
4. Has the new advertising message resulted in enhanced recall?
5. How do price and quality rate on consumers' evaluation of products?
6. Is the effect of participative budgeting on performance moderated by control systems?
7. Does better automation lead to greater asset investment per dollar of output?
8. Does expansion of international operations result in an enhancement of the firm's image and value?
9. What are the effects of downsizing on the long-range growth patterns of companies?
10. What are the specific factors to be considered in creating a data warehouse for a manufacturing company?

Basic types of questions: exploratory and descriptive

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Earlier in this chapter, we explained that a problem statement includes both a statement of the research objective(s) and the research questions. There are three *basic types of questions* that research projects can address: exploratory and descriptive questions. We will now look at each of these in some detail.

Exploratory research questions

Exploratory research questions are typically developed when: a) not much is known about a particular phenomenon; b) existing research results are unclear or suffer from serious limitations; c) the topic is highly complex; or d) there is not enough theory available to guide the development of a *theoretical framework* (discussed in Chapter 5). **Exploratory research** often relies on qualitative approaches to data gathering such as informal discussions (with consumers, employees, managers), interviews, focus groups, and/or case studies (discussed in Chapter 6 and 7). As a rule, exploratory research is flexible in nature. Indeed, the activities of the researcher in exploratory research are quite similar to the activities of Inspector Lewis, Inspector Wallander, Sergeant Hunter, Detective Dee, or the South Florida team of forensic investigators from "CSI Miami", who use old-fashioned police work, cutting-edge scientific methods, or both to solve murder crimes. Whereas the focus of the research is broad at first, it becomes increasingly narrower as the research proceeds. The results of exploratory studies are typically not generalizable to the population.

The following is an example where exploratory research would be necessary.

EXAMPLE

The manager of a multinational corporation is curious to know if the work ethic values of employees working in its subsidiary in Pennathur City are different from those of Americans. There is very little information about Pennathur (except that it is a small city in southern India), and since there is considerable controversy about what work ethic values mean to people in other cultures, the manager's curiosity can be satisfied only by an exploratory study, interviewing the employees in organizations in Pennathur. Religion, political, economic, and social conditions, upbringing, cultural values, and so on play a major role in how people view their work in different parts of the world. Here, since very little is known about work ethic values in India, an exploratory study will have to be undertaken.

Descriptive research questions

The objective of a **descriptive study** is to obtain data that describes the topic of interest. For instance, if we want to know what percent of the population likes Coca-Cola better than pepsi in a double-blind test, we are interested in describing consumers' taste preferences. Descriptive studies are often designed to collect data that describe characteristics of objects (such as persons, organizations, products, or brands), events, or situations. Descriptive research is either quantitative or qualitative in nature. It may involve the collection of quantitative data such as satisfaction ratings, production figures, sales figures, or demographic data, but it may also entail the collection of qualitative information. For instance, qualitative data might be gathered to describe how consumers go through a decision-making process or to examine how managers resolve conflicts in organizations.

Sometimes the researcher is interested in associations among variables to describe populations, events, or situations. For instance, a researcher might be interested in the relationship between job involvement and job satisfaction, arousal-seeking tendency and risk-taking behavior, self-confidence and the adoption of innovative products, or goal clarity and job performance. Such studies are correlational in nature. **Correlational studies** describe relationships between variables. While correlational studies can suggest that there is a relationship between two variables, finding a correlation does not mean that one variable *causes* a change in another variable.

Descriptive studies may help the researcher to:

1. Understand the characteristics of a group in a given situation (for instance the profile of a specific segment in a market).
2. Think systematically about aspects in a given situation (for instance, factors related to job satisfaction).
3. Offer ideas for further probing and research.
4. Help make certain (simple) decisions (such as decisions related to the use of specific communication channels depending on the customer profile, opening hours, cost reductions, staff employment, and the like).

Below are examples of situations warranting a descriptive study.

EXAMPLE

A bank manager wants to have a profile of the individuals who have loan payments outstanding for six months and more. The profile will include details of their average age, earnings, nature of occupation, full-time/part-time employment status, and the like. This might help him to elicit further information or decide right away on the types of individuals who should be made ineligible for loans in the future.

A CEO may be interested in having a description of how companies in her industry have incorporated corporate social responsibility into the business strategy of the organization. Such information might allow comparison later of the performance levels of specific types of companies.

Causal research questions

Causal studies test whether or not one variable causes another variable to change. In a **causal study**, the researcher is interested in delineating one or more factors that are causing a problem. Typical examples of causal research questions are: "What is the effect of a reward system on productivity?" and "How does perceived value affect consumer purchase intentions?" The intention of the researcher conducting a causal study is to be able to state that variable X causes variable Y. So, when variable X is removed or altered in some way, problem Y is solved (note that quite often, however, it is not just one variable that causes a problem in organizations). In Chapter 5, we will explain that in order to establish a causal relationship, all four of the following conditions should be met:

1. The independent and the dependent variable should covary.
2. The independent variable (the presumed causal factor) should precede the dependent variable.
3. No other factor should be a possible cause of the change in the dependent variable.
4. A logical explanation (a theory) is needed and it must explain why the independent variable affects the dependent variable.

Because of the time sequence condition, experimental designs, discussed in Chapter 6 and in more detail in Chapter 10, are often used to establish causal relationships.

Examples of causal studies are given below.

EXAMPLE

A marketing manager wants to know if the sales of the company will increase if he increases the advertising budget. Here, the manager would like to know the nature of the relationship that may be established between advertising and sales by testing the hypothesis: "If advertising is increased, then sales will also go up."

A prevalent theory is that the diversity of the workforce increases organizational effectiveness. A manager wants to know if this relationship holds for her organization.

A manager wants to test the hypothesis that stress experienced in the job negatively affects the job satisfaction of employees.

A researcher is interested in testing the hypothesis that women are more motivated for their jobs than men.

Researchers often aim to answer different types of research questions in a single project. For this reason it is quite common to conduct exploratory research before moving to descriptive or causal studies in order to develop a thorough understanding of the phenomenon under study. Indeed, the three types of research (exploratory, descriptive, and causal) are often viewed as building blocks, where exploratory research lays the foundation for descriptive research and causal research builds on descriptive research.

BOX 3.6

THE POSITIVIST VIEW

Causal studies are at the heart of the scientific approach. For a positivist, the world operates by laws of cause and effect that can be discerned if a scientific method to research is used. Exploratory research is needed when there is not enough theory available to guide the development of a theoretical framework. In such cases, exploratory research needs to be done to understand what is going on. Based on this preliminary work, we will be able to set up more rigorous (read: causal) designs for further investigation.

After you have defined the problem statement you are ready to start your research. First, however, you need to communicate the problem statement and a number of other important aspects of the study – such as the scope of the study, the procedures to be followed, the time frame, and the budget – to all the parties involved.

THE RESEARCH PROPOSAL

Before any research study is undertaken, there should be an agreement between the person who authorizes the study and the researcher as to the problem to be investigated, the methodology to be used, the duration of the study, and its cost. This ensures that there are no misunderstandings or frustrations later for either party. This is usually accomplished through a research proposal, which the researcher submits and gets approved by the sponsor, who issues a letter of authorization to proceed with the study.

The **research proposal** drawn up by the investigator is the result of a planned, organized, and careful effort, and basically contains the following:

1. A working title.
2. Background of the study.

3. The problem statement:
   a. The purpose of the study
   b. Research questions.
4. The scope of the study.
5. The relevance of the study.
6. The research design, offering details on:
   a. Type of study – exploratory and descriptive
   b. Data collection methods
   c. The sampling design
   d. Data analysis.
7. Time frame of the study, including information on when the written report will be handed over to the sponsors.
8. The budget, detailing the costs with reference to specific items of expenditure.
9. Selected bibliography.

Such a proposal containing the above features is presented to the manager, who might seek clarification on some points, want the proposal to be modified in certain respects, or accept it in toto. A model of a simple research proposal to study the frequent turnover of newly recruited employees is presented below.

MODEL 3.1

Research proposal to study retention of new employees

Purpose of the study

To find a solution to the recurring problem of 40% employee turnover within the first three years of their recruitment, and more specifically to:

1. Draw up a profile of the employees who quit;
2. Assess if there are any special needs of the new recruits that require to be met; and
3. Determine the reasons for employees leaving the organization in the first three years.

Research question

How can small to medium-sized firms increase the organizational commitment of their employees?

Scope of the study

This research analyzes the problem of high turnover of employees within *small to medium-sized firms*.

Relevance of the study

The cost of employee turnover to firms has been estimated to be up to 150% of the employees' remuneration package (Schlesinger & Heskett, 1991). There are both direct and indirect costs involved. Direct costs relate to leaving costs, replacement costs, and transition costs, while indirect costs relate to the loss of production, reduced performance levels, unnecessary overtime, and low morale. The results of this study provide managers with the means to decrease the costs of employee turnover.

The research design (i.e., details of the study)

Survey instruments. First, we will interview a small number of employees who have joined the company in the previous three years. Based on these exploratory findings, we will administer a questionnaire to all of the employees who have joined the company in the past three years.

Data collection. The interviews will be conducted during office hours in the conference hall of the organization at a prearranged time convenient to the interviewees. The questionnaire will be given to the employees to be completed by them in their homes and returned anonymously to the box set up for the purpose by the specified date. They will all be reminded two days before the due date to return their questionnaires, if not already done.

Time frame

The time frame necessary for completion of this research project is approximately five months. During these five months, periodic reports will be provided on the progress being made.

Budget

The budget for this project is in Appendix A.[1]

Selected bibliography

Bateman, T. S. & Strasser, S. (1984) A longitudinal analysis of the antecedents of organizational commitment. *The Academy of Management Journal*, 27(1), 95–112.

Lachman, L. & Aranya, N. (1986) Evaluation of alternative models of commitments and job attitudes of professionals. *Journal of Occupational Behavior*, 7, 227–243.

Meyer, J. & Allen, N. (1997) *Commitment in the Workplace: Theory, research and application*. Thousand Oaks: Sage.

Meyer, J., Stanley, D., Herscovitch, L. & Topolnytsky, L. (2002) Affective, continuance and normative commitment: a meta-analysis of antecedents, correlates and consequences. *Journal of Vocational Behavior*, 63, 20–52.

Schlesinger, L. & Heskett, J. (1991) The service-driven service company. *Harvard Business Review*, 69, 71–81.

Vandenberghe, C., Bentein, K. & Stinglhamber, F. (2002) Affective commitment to the organization, supervisor and work group: antecedents and outcomes. *Journal of Vocational Behavior*, 64, 47–71.

[1]Please note that Appendix A has not been included as Model 3.1 is an example only.

Once the proposal is accepted, the researcher conducts the research, going through the appropriate steps discussed in the research design process.

MANAGERIAL IMPLICATIONS

Managers sometimes look at the symptoms in problematic situations and treat them as if they are the real problems, getting frustrated when their remedies do not work. Understanding the *antecedents–problem–consequences* sequence and gathering the relevant information to get a real grasp of the problem go a long way towards pinpointing it.

Managers' inputs help researchers to define the broad problem area and to narrow down the broad problem into a feasible topic for research. Managers who realize that correct **problem definition** is critical to ultimate problem solution do not begrudge the time spent in working closely with researchers, particularly at this stage.

A well-developed research proposal allows managers to judge the relevance of the proposed study. However, to make sure that the objectives of the study are actually being achieved, managers must stay involved throughout the *entire* research process. Information exchange between the manager and the researcher during all the important stages of the research process will definitely enhance the managerial relevance and the quality of the research effort.

ETHICAL ISSUES IN THE PRELIMINARY STAGES OF INVESTIGATION

Preliminary information is gathered by the researcher to narrow the broad problem area and to define a specific problem statement. In many cases, the researcher interviews decision makers, managers, and other employees to gain knowledge of the situation so as to better understand the problem. Once a problem is specified and a problem statement is defined, the researcher needs to assess his or her research capabilities; if the researcher does not have the skills

or resources to carry out the project, he or she should decline the project. If the researcher decides to carry out the project, it is necessary to inform all the employees – particularly those who will be interviewed for preliminary data gathering through structured and unstructured interviews – of the proposed study (though it is not necessary to acquaint them with the actual reasons for the study, because this might bias responses). The element of unpleasant surprise will thus be eliminated for the employees. It is also necessary to assure employees that their responses will be kept confidential by the interviewer/s and that individual responses will not be divulged to anyone in the organization. These two steps make the employees comfortable with the research undertaken and ensure their cooperation. Employees should not be forced to participate in the study. When employees are willing to participate in the study, they have the right to be protected from physical or psychological harm. They also have a right to privacy and confidentiality. Attempts to obtain information through deceptive means should be avoided at all costs.

EXAMPLE

Checklist for dealing with ethical considerations and dilemmas during the first stages of the research process

- Why is this research project worth doing?
- How does the organization benefit from this project?
- What impact, if any, does your research have on the organization?
- Do you have the skills and resources to carry out this research project?
- Have you informed all the employees of the research project? Why not?
- Do you explain the purpose of your research to the participants? Why not?
- Are participants given the opportunity to decline participation?
- Are participants able to withdraw their consent at any point? How?
- Does the research cause you to have access to sensitive information? How will you ensure the confidentiality of this information?
- How will you ensure individual respondents cannot be identified from any research reports or papers that are produced?
- Are there any possible negative effects (long or short term) on your participants (including any physical or psychological harm)?
- How will you report back from the research to your participants?
- Where ethical dilemmas have arisen, what steps have you taken to resolve these?

SUMMARY

- **Learning objective 1: Identify problem areas that are likely to be studied in organizations.**
  Research typically begins with a problem. A problem is any situation where a gap exists between an actual and a desired ideal state. Examples of problems are provided in Box 3.1.

- **Learning objective 2: Narrow down a broad problem into a feasible topic for research using preliminary research.**
  A broad problem area provides researchers with enough information to embark on their research journey. However, a broad problem has to be transformed into a *researchable topic* for investigation by making it more a) specific and precise and by b) setting clear boundaries. Finally, the researcher needs to select a c) perspective

from which the subject is investigated. Preliminary research should help the researcher to arrive at a specific problem statement. Although the exact nature of the information needed for this purpose depends on the type of problem one is addressing, it may be broadly classified under two headings: (1) information on the organization and its environment – that is, the contextual factors, and (2) information on the topic of interest.

- **Learning objective 3: Develop a good problem statement.**
  There are three key criteria to assess the quality of a problem statement: it should be relevant, feasible, and interesting. A good problem statement includes both a statement of the research objective(s) and the research question(s). The research objectives and the research questions are strongly related. There are three *basic types of questions* that research projects can address: exploratory and descriptive questions.

- **Learning objective 4: Develop a research proposal.**
  Before any research study is undertaken, there should be an agreement between the sponsor of the study and the researcher as to the problem to be investigated, the methodology, the duration of the study, and its cost. This is usually accomplished through a research proposal, which the researcher submits and has approved by the sponsor, who issues a letter of authorization to proceed with the study.

- **Learning objective 5: Be aware of the role of the manager in the early stages of the research process.**
  Managers must stay involved in a research project throughout the entire research process. This will enhance the managerial relevance and the quality of the research effort.

- **Learning objective 6: Be aware of the role of ethics in the early stages of the research process.**
  The checklist provided in this chapter will help the researcher to deal with ethical considerations and dilemmas during the first stages of the research process.

In Chapter 4 we will examine the next step in the research process: the critical literature review.

Visit the companion website at **www.wiley.com/college/sekaran** for **Case Study: CAP Airlines**.

DISCUSSION QUESTIONS

1. Define "problem" and provide an example of a problem you have encountered in your daily life. Discuss how you have used research to solve this problem.
2. Why do we still have to transform the following problem statement into a researchable topic for investigation?

"*The introduction of flexible work hours has created more problems than it has solved.*"

3. Use the Internet to find more information about the "Five Times Why" approach. Discuss this approach using an example provided on the Internet.
4. Describe the functions of preliminary data gathering.

5. Why is it important to gather information on the background of the organization? Why is it important to review the literature on your topic?
6. Should a researcher *always* obtain information on the structural aspects and job characteristics from those interviewed? Give reasons for your answer with examples.
7. "The problem definition stage is perhaps more critical in the research process than the problem solution stage." Discuss this statement.
8. "The 'secret' to bringing *clarity* and *focus* to your problem is to isolate the key ideas in the first version of the problem statement." What are the subjects, verbs, and objects in the following statement?

"The newly installed information system is not being used by the managers for whom it was primarily designed."

9. Offer a clearly focused problem statement in the broad area of corporate culture, job satisfaction *or* risk-seeking behaviors of investors.
10. A typical example of a research questions is: "What is the effect of reward system on productivity?"

What is the problem here, according to the researcher?

And what is a possible solution to the problem, according to the same researcher?

11. Below is the gist of an article from *Businessweek.* After reading it:
    a. identify the broad problem area; and
    b. explain how you would proceed further.

Two years ago, Electronic Arts, the second-largest U.S. video game company, ran on promises. Developers pitching a feature for a big game had to produce a cool video to win approval from the bosses. They were then left alone for months, until it was too late to fix any problems, says Ian Milham, one of the company's creative directors. He describes the philosophy as "make a trailer that promises a lot and then don't show anyone until it's perfect."

Often it wasn't. Several of EA's biggest 2013 releases, including entries in its SimCity and Battlefield franchises, were so bug-ridden on release that they crashed game servers and were essentially unplayable for days or weeks before they were fixed. EA's sports games have become Internet punch lines, thanks to videos of glitches trapping digital athletes in anatomically impossible positions.
Burger, D. (2015, March 12) *EA Tries Selling Video Games That Work*. Retrieved from http://www.bloomberg.com/news/articles/2015-03-12/electronic-arts-delays-game-releases-to-fix-bugs-for-a-change

12. Define the problem statement (the *why* and the *what*) in the following situation:

Employee loyalty

Companies benefit through employee loyalty. Crude downsizing in organizations during the recession crushed the loyalty of millions. The economic benefits of loyalty embrace lower recruitment and training costs, higher productivity of workers, customer satisfaction, and the boost to morale of fresh recruits. In order that these benefits are not lost, some companies, while downsizing, try various gimmicks. Flex leave, for instance, is one. This helps employees receive 20% of their salary, plus employer-provided benefits, while they take a 6- to 12-month sabbatical, with a call option on their services. Others try alternatives like more communication, hand holding, and the like.