

***Marketing Research Essentials 9th edition McDaniel  
Solutions Manual***

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## CHAPTER 2

### Problem Definition, Exploratory Research, and the Research Process

#### LEARNING OBJECTIVES

1. Analyze the problem definition process.
2. Learn the steps involved in the marketing research process.
3. Understand the components of the research request.
4. Appreciate the importance of the marketing research proposal.
5. Examine what motivates decision makers to use marketing research information.

#### KEY TERMS

|                             |                              |
|-----------------------------|------------------------------|
| Opportunity identification  | Situation analysis           |
| Exploratory research        | Pilot studies                |
| Experience surveys          | Case analysis                |
| Marketing research problem  | Marketing research objective |
| Management decision problem | Hypothesis                   |
| Research design             | Descriptive studies          |
| Variable                    | Causal studies               |
| Dependent variable          | Independent variable         |
| Temporal sequence           | Concomitant variation        |
| Spurious association        | Survey research              |
| Observation research        | Experiments                  |
| Probability sample          | Nonprobability sample        |
| Research request            | Request for Proposal (RFP)   |
| Research proposal           |                              |

#### CHAPTER OUTLINE

##### 1. Critical Importance of Correctly Defining the Problem

- I. A large consumer packaged goods company conducting a study of heavy users of one of its

products.

II. Recognize the Problem or Opportunity

- A. Opportunity Identification
- B. Solving problems and/or threats

III. Find Out Why the Information is Being Sought

- A. Helpful Activities

IV. Understand the Decision-Making Environment with Exploratory Research

- A. Situation Analysis
- B. Exploratory research
- C. Pilot Studies
- D. Experience Surveys Analysis
- E. Secondary Data Analysis
- F. Case Analysis
- G. Focus Groups
- H. Using Intranets for Exploratory Research
- I. Completing Exploratory Research

V. Use the Symptoms to Help Clarify the Problem

- A. Symptom
- B. Ice burg Principle
- C. "What caused this to occur?"

VI. Translate the Management Problem into a Marketing Research Problem

- A. Marketing Research Problem
- B. Marketing Research Objective
- C. Management Decision Problem

VII. Determine Whether the Information Already Exists

- A. New vs Old Data
- B. Research Objectives
- C. Avoiding the Nice-to-Know Syndrome
- D. Actionable Findings

VIII. Determine Whether the Question Can Be Answered

A. How to Find Likelihood of Success

B. Failure to Determine

IX. State the Research Objectives

A. Research Objectives

## **2. Research Objectives as Hypotheses**

A. Hypotheses

## **3. Marketing Research Process**

I. Creating the Research Design

A. Research Design

B. Descriptive Studies

C. Causal Studies

II. Choosing a Basic Method of Research

A. Surveys

B. Observations

C. Experiments

III. Selecting the Sampling Procedure

A. Probability Sample

B. Nonprobability Sample

IV. Collecting the Data

V. Analyzing the Data

VI. Writing and Presenting the Report

A. Judging the Quality of a Report

B. Using the Internet to Disseminate Reports

VII. Following Up

## **4. Managing the Research Process**

I. The Research Request

A. Research Request

B. Components

II. The Request for Proposal (RFP)

**5. The Marketing Research Proposal**

I. Research Proposal

II. What to Look for in a Marketing Research Supplier

A. Desirable Qualities in Marketing Researcher

B. Two Important Qualities

C. Good Communications

**6. What Motivates Decision Makers to Use Research Information?**

A. Political Factors and Preconceptions

**7. Summary**

**CHAPTER SUMMARY**

Conducting marketing research involves a series of logical steps beginning with problem definition and research objectives. These steps are the focus of this chapter.

**1. CRITICAL IMPORTANCE OF CORRECTLY DEFINING THE PROBLEM**

**Exhibit 2.1 Problem Definition Process** (This is an excellent tool to show the students that the ultimate goal is to develop clear, concise, and meaningful marketing research objectives.)

**I. A Large consumer package goods company wanted to conduct a study of heavy users of one of its product to gauge brand equity**

**II. Recognize the Problem or Opportunity:** It is critical to accurately define the problem or opportunity otherwise the investigator risks researching the wrong thing.

**A. Opportunity Identification**

1. External environment
2. Marketing mix
3. New opportunities

4. Solving problems
5. Identifying threats

### III. Find Out Why the Information Is Being Sought

#### A. Helpful Activities

1. Discuss what the information will be used for and what decisions might be made as a result of the research.
2. Try to get the client or manager to prioritize their questions
3. Rephrase the questions in several slightly different forms, and discuss the differences
4. Create sample data, and ask if such data would help answer the questions.
5. Remember that the more clear-cut you think the questions are and the more quickly you come to feel that the questions are straightforward, the more you should doubt that you have understood the real need

**IV. Understand the Decision-Making Environment with Exploratory Research:** Once researchers understand the motivation for conducting the research, they often need additional background information to fully comprehend the problem.

**A. Situation Analysis**—studying the decision-making environment within which the marketing research will take place

**B. Exploratory Research**—preliminary research conducted to obtain greater understanding of a concept or to help crystallize the definition of a problem

1. Used to identify important variables to be studied
2. Used as preliminary research, not the definitive research
3. Takes several forms: pilot studies, experience surveys, secondary data analysis, case analysis, focus groups, using the Intranets

**C. Pilot studies**—use a limited number of respondents and less rigorous sampling techniques

**D. Experience surveys**—interviewing knowledgeable individuals, both inside and outside of the organization

**E. Secondary data**—data that has been gathered for some other purpose than the problem at hand

**F. Case analysis**—reviewing information from situations that are similar to the current one

**G. Focus groups**—in-depth discussions, usually consisting of 8 to 12 participants, led by a moderator and generally limited to one particular concept, idea, or them

**H. Using Intranets for Exploratory Research**—organizations' intranet allows researchers an determine whether needed or relevant information is available somewhere inside the organization—they provide easy access to internal data

1. Internet—research can use online search engines to find information needed—faster than going to the library plus allows access to information that cannot be found in a library

**I. Completing Exploratory Research**—when the researcher is convinced that he or she has found the major dimensions of the problem—he/she has defined a set of questions that can be used as specific guides to a detailed research design. The researcher may end exploration because further research is not presently possible due to time, money, or other constraints

## **V. Use the Symptoms to Clarify the Problem**

**A. Symptom**—phenomenon that occurs because of the existence of something else

1. **Iceberg principle**—focusing on the symptoms and not the true problem; recognizing that often the symptoms reveal just a small part of what the problem really is; don't become preoccupied with symptoms only .

**B. “What caused this to occur?”**—when this question can no longer be answered, the true problem has been found

## **VI. Translate the Management Problem Into a Marketing Research Problem**

**A. Marketing Research Problem**—specifies information needed to solve the problem and how that information can be obtained efficiently and effectively

**B. Marketing Research Objective**—goal statement—defines the specific information needed to solve the problem

**C. Management Decision Problem**—specifies the type of managerial action required to solve the problem

## **VII. Determine Whether the Information Already Exists**

**A. New vs. Old Data**

1. Developing new information rather than delving through old reports and data files is more interesting
2. New data allows researchers more control over the format and greater comprehensiveness of the data
3. However, using existing data can save managers time and money if such data can answer the research question

**B. Research Objectives**—specific and unambiguous as possible

1. After the development of the research objectives—check with the committee or individual in charge and determine if this is really the information needed to solve the problem or reach their objectives

**C. Avoiding the Nice-to-Know Syndrome**—findings must be actionable—determine how the research results will be implemented

**VIII. Determine Whether the Question Can Be Answered**

**A. Failure to Determine**—if the research question cannot be answered the credibility of the project is jeopardized. To discern in advance the likelihood of success, identify the following:

1. Instances in which you know for certain that information of the type required exists or can be readily obtained
2. Situations in which you are fairly sure, based on similar prior experiences, that the information can be gathered
3. Cases in which you know that you are trying something quite new and there is a real risk of drawing a complete blank

**IX. State the Research Objectives**

**A. Research Objectives**—should be stated in terms of precise information necessary to address the marketing research problem/opportunity.

1. **Road Map**—well-formulated objectives provide the direction in pursuing the research project
2. Serve as a standard that later will enable managers to evaluate the quality and value of the work

## 2. RESEARCH OBJECTIVES AS HYPOTHESES

1. **Hypothesis**—an assumption or theory (guess) that a researcher or manager makes about some characteristic of the population being investigated
2. Should contain clear implications for testing stated relationships
3. Development of the research hypothesis sets the stage for creating the research design
4. Hypotheses are predictive in nature. They can be stated in a null format, or stated in such a way as to predict what the outcome of the research will be. Outside of academia research objectives are rarely stated in the form of a hypothesis, however, they are inferred through statistical testing.

## 3. MARKETING RESEARCH PROCESS

### Exhibit 2.2 Marketing Research Process

#### I. Creating the Research Design

A. **Research Design**—the plan to be followed to answer the research objectives or hypothesis

1. Research design can lead to an array of choices with advantages and disadvantages. There are trade-offs involved such as:
  - a. between research cost and the quality of the decision-making information provided. The more precise and error-free the information obtained the higher the cost
  - b. between time constraints and the type of research design selected

B. **Descriptive Studies**—answers the questions who, what, when, where, and how.

1. **Variable**—a symbol or concept that can assume any one of a set of values
2. Descriptive research can shed light on associations or relationships; it helps the research select variables for a causal study

C. **Causal Studies**—investigate whether one variable causes or determines the value of another

1. **Dependent variable**—to be predicted or explained

2. **Independent variable**—the variable that affects or causes the dependent variable—can be manipulated, changed, or altered
3. **Temporal sequence**—effect follows closely the hypothesized cause—an appropriate causal order of events. It is the criterion for causality.
4. **Concomitant variation**—the degree to which a presumed cause and a presumed effect occur together or vary together. However, even if concomitant variation is perfect, it does not prove cause and effect, but only that the association makes cause and effect more likely.
5. **Spurious association**—other variables, possibly outside of those being studied, are actually causing changes in the dependent variable, and hence, the association between the hypothesized variables is “spurious.”

## II. Choosing a Basic Method of Research

- A. **Surveys**—this involves an interviewer using a questionnaire to interact with respondents, except in mail, internet or mobile surveys, to obtain facts, opinions, and attitudes.
- B. **Observations**—research that monitors respondents' actions without direct interaction. Using video cameras to monitor how consumers use a product are a good example of this. Scanning bar code information is a means of observation research that is widely used today.
- C. **Experiments**—Changes one or more variables while observing the effects of those changes on another variable
  1. The objective of experiments is to measure causality
  2. To control factors that might influence the dependent variable is to use a laboratory experiment

## III. Selecting the Sampling Procedure

- A. **Probability sample**—subset of a population that can be assumed to be a representative cross-section because every element in the population has a known nonzero chance of being selected
- B. **Nonprobability sample**—subset of a population in which the chances of selection for the various elements in the population are unknown. Researchers cannot statistically calculate the reliability of a nonprobability sample.

**IV. Collecting the Data**—most survey-based data are now collected on the internet or mobile devices. Interviewer-based data collection is usually done by marketing research field services

**V. Analyzing the Data**—the purpose of this analysis is to interpret and draw conclusions from the mass of collected data.

**VI. Writing and Presenting the Report**—the researcher must prepare the report and communicate the conclusions and recommendations to management in a convincing manner. The report should begin with a clear statement of the research objectives and end with presentation of conclusions and recommendations for management. In today's fast-paced world, the elaborate report is a thing of the past. Decision makers today typically want only a copy of the PowerPoint presentation and/or an executive summary.

**A. Judging the Quality of a Report**—basis for measuring a report's quality lines in the research proposal.

1. Does the report meet the objectives established in the proposal?
2. Has the methodology outlined in the proposal been followed?
3. Are the conclusions based on logical deductions from the data analysis?
4. Do the recommendations seem prudent, given the conclusions?

**B. Using the Internet to Disseminate Reports**

1. Publishing report on the Web has a number of advantages
  - a. The reports become immediately accessible to managers and other authorized and interested parties worldwide.
  - b. The reports can incorporate full multimedia presentation, including text, graphs, various types of animation, audio comments, and video clips.
  - c. The reports are fully searchable.

**VII. Following Up**—management should determine whether the recommendations were followed and, if not, why not.

## **4. MANAGING THE RESEARCH PROCESS**

### **I. The Research Request**

**A. Research Request**—An internal document used by large organizations that describes a potential research project, its benefits to the organization, and estimated costs; it must be

formally approved before a research project can begin. Used as the basis for determining which projects will be funded

**B. Components:**

1. **Action**—describes the action to be taken on the basis of the research
2. **Origin**—state the events that lead to a need for a decision
3. **Information**—list the questions that need to have been answered to take action
4. **Use**—explain how each piece of information will be used to help make the actual decision
5. **Target groups and subgroups**—describe those from whom information must be gathered to address the research problem
6. **Logistics**—approximations of the amount of money available and the amount of time left before results are needed must be included
7. **Comments**—other comments relevant to the research project must be stated

**II. Request for Proposal (RFP)**—solicitation sent to marketing research suppliers inviting them to submit a formal proposal, including a bid

**A. Information provided by a RFP:**

1. Background data on why a study is to be conducted
2. Outlines the research objectives
3. Describes a methodology
4. Suggest a time frame
5. Detailed cost breakdown
6. Supplier's experience in relevant areas
7. References

## **5. THE MARKETING RESEARCH PROPOSAL**

### **I. Research Proposal**

**A. Research Proposal**—document developed usually in response to an RFP, that presents the research objectives, research design, time line, and cost of a project—contains the following elements:

1. **Title Page**—includes the title of the project from the RFP, the names of the

prepares of the proposal, and contact information who the proposal is being prepared for and the date

2. **Statement of the Research Objectives**—usually stated in the RFP—if not they must be determined as described

3. **Study Design**—a statement of how the data will be gathered and who will be sampled and the sample size

4. **Areas of Questioning**—not found in all proposals—however, it may be helpful and is a tentative list of survey topics based on the research objectives

5. **Data Analysis**—which techniques will be used to analyze the data

6. **Personnel Involved**—provides a list of all people involved in the project and short vita of each

7. **Specifications and Assumptions**—to make sure that supplier and potential client are on the same page—good idea to list the specifications and assumptions that were made when creating the proposal (see Appendix 2 -A)

8. **Services**—spell out exactly what the research supplier will do

9. **Cost**—specify the cost and payment schedule

10. **Timing**—state when various phases of the project will be completed

## II. What to Look for in a Marketing Research Supplier

### A. Desirable Qualities in Marketing Researcher:

1. Maintains client confidentially
2. Is honest
3. Is punctual
4. Is flexible
5. Delivers against project specifications
6. Provides high-quality output
7. Is responsive to the client's needs
8. Has high quality-control standards
9. Is customer-oriented in interactions with client
10. Keeps the client informed throughout a project

### B. Two Important Qualities—confidentiality and honesty—these are ethical issues

**C. Good Communications**—successful marketing research organization requires good communications both within the research company and with clients

1. Managers spend at least 80 percent of every working day in direct communication with other (48 minutes of every hour)

## **6. WHAT MOTIVATES DECISION MAKERS TO USE MARKET RESEARCH?**

**A. Political Factors and Preconceptions**—influence the decision to use research information—determinants of whether or not a manager uses research data are

1. Conformity to prior expectations
2. Clarity of presentation
3. Research quality
4. Political acceptability within the firm
5. Lack of challenge to the status quo

**B.** Marketing managers in industrial firms tend to use research findings more than their counterparts in consumer goods organizations. This is attributed to greater exploratory objectivity in the information collection, a greater degree of formalization of organizational structure, and lesser degree of surprise in the information collected.

**Practicing Marketing Research:** Marketing research needs to be more strategic

Question 1: Explain what is meant by the last sentence in the story above.

Answer: The Last Sentence: “The only relevant learning in a company is the learning done by those with the power to act.” Student answers will vary, but should include something about marketing research’s role in the firm; whether it gets to key people in the firm who have the power to utilize its results. A lot of good research is wasted because people with the power to act do not either have access to the results, or who have the results and do not do anything with them. Hence, no learning takes place from the accumulation of new information via marketing research.

Question 2: Why is “becoming strategic” so important to marketing researchers?

Answer: Marketing research is becoming more strategic in nature, instead of just tactical, as it has been in the past. Hence, the information provided by marketing researchers may have

implications that affect the firm either positively or negatively for years. Hence, the strategic decision making by top management is being affected by marketing research, when in the past, marketing research was utilized by only lower level managers, who needed tactical information.

## 7. SUMMARY

### QUESTIONS FOR REVIEW & CRITICAL THINKING

**1. The definition of the research problem is one of the most critical steps in the research process. Why? Who should be involved in this process?**

The definition of the research problem specifies the exact nature of the information that is needed for the client to make the marketing decision in question. If the problem is defined incorrectly, the wrong information could be obtained, which defeats the purpose of the process. The manager who must make the decision, those who must implement the decision and the marketing researcher should be involved in the problem definition process

**2. What role does exploratory research play in the market research process? How does exploratory research differ from other forms of marketing research?**

Exploratory research is used by the researcher to investigate the research problem in depth. This may lead to better definition of the problem, better understanding of the situation, and better communication between the manager and the researcher. Exploratory research is different from other research in that it is qualitative, not quantitative. The results of qualitative research cannot be used to generalize assumptions to other situations, but only to better understand the current situation. It also may take less time and be less expensive than more rigorous quantitative research.

**3. Give some examples of symptoms of problems and then suggest some underlying real problems.**

Declining sales revenue may be an outward symptom of 1) poor positioning strategy, 2) possible pricing problem, 3) a promotional strategy error, or 4) a product / service that is not competitive. Declining profits may be an outward symptom of a) reduced sales revenue, b) inadequate cost

control in operations, or c) too much debt (hence, debt service) in the capital structure.

**4. Give several examples of situations in which it would be better to take a census of the population rather than a sample.**

If your target market is small, it would be better to take a census. If your target market is new homeowners in a small city in any given month, a census would be better. If your target market is parents of babies born in December in a particular county, a census might be better.

**5. Critique the following methodologies and suggest more appropriate alternatives:**

**a. A supermarket is interested in determining its image. Cashiers drop a short questionnaire into the grocery bag of each customer prior to bagging the groceries.**

This method has the advantage of potentially reaching all customers. However, the customer might not find the questionnaire in the bottom of the grocery bag. The customer also might not know how or when to return it if (s)he did find it. A better alternative might be to hand each customer a questionnaire as he or she enters the store, provide a specific location to return it, and provide a coupon or other reward for completing the survey. The store might also want to consider whether it is interested only in what customers think, or whether a better method might be to determine the opinions of the general population surrounding the store.

**b. To assess the extent of its trade area, a shopping mall stations interviewers in the parking lot every Monday and Friday evening. After people park their cars, interviewers walk up to them and ask them for their zip codes.**

One of the first problems identified with this method is interviewing customers only on Monday and Friday evenings. How many different customers might be missed? Many people take shopping trips on weekends, particularly on Saturdays. Also, many customers would be frightened, and then offended by being approached in the parking lot, particularly in the evening. This might also put the interviewers in danger. A better solution might be to station interviewers at the major entrances to the mall at different days and times throughout the week.

**c. To assess the potential for new horror movies starring alien robots, a major studio invites people to call a 900 number and vote yes if they would like to see such movies**

**or no if they would not. Each caller was billed a \$2 charge.**

Your sample will probably not be representative of the target market. Only those with extreme feelings would call to answer this question. Many people would have an opinion, but will not be willing to pay \$2 to voice it.

A better alternative might be to film short sequences that would be typical of the films in question, and then invite a random sample of people to view the film clip in a theater or a private room in a shopping mall. Those viewers could then be interviewed regarding their opinions.

**6. You have been charged with determining how to attract more business majors to your school. Outline the steps you would take, including the sampling procedures to accomplish this task.**

**A. Identify the problem and state the marketing research objectives.**

The problem is that there are not enough Business majors. The research objective is to find out why students are not enrolling and what can be done to encourage more students to enroll in the College of Business.

**B. Create the Research Design.**

What will be the planned method of obtaining answers to the research questions? Case studies, descriptive, studies, or causal studies might be used. In this case a descriptive study seems to be indicated.

**C. Choose the Basic Method of Research.**

Surveys, observation, or experiments. In this case a survey could give good results. If you ask the right people the correct questions, surveys can obtain specific answers to the research questions. Almost certainly the research will be done in the form of a survey of the target market to measure attitudes and perceptions concerning the College of Business.

**D. Selection of the Sampling Procedure.**

First define the population of interest, then decide whether to conduct a census or a representative sample. Will you use a probability or nonprobability sample? How large will the sample be? In the College of Business question, there are probably at least four relevant

segments in the population of interest; current students, students in high school whom we could be recruiting, transfer students, and non-traditional students.

**E. Collecting the Data.**

By now we have written and tested the survey instrument and selected the sample. We might hire a field service firm to administer the survey or train a research team composed of in-house resources.

**F. Analysis of the Data.**

This may also be done in-house or contracted to an outside agency. Cost, speed, and capability are considerations.

**G. Preparation and Writing the Report.**

This step will probably be done by the team originally designated to conduct the research. It is essential that the report convey to decision makers the answers to key research questions and the management action suggested to resolve the issue.

**7. What can researchers do to increase the chances that decision makers will use the marketing research information they generate?**

Be sure that the marketing manager is on-board with the research from the very beginning. The manager needs to agree that the information sought by the research will help make a decision. Be sure the research clearly answers the research questions and that these answers are in a form that the decision maker can use. Be sure that the decision maker understands the research methodology well enough to have confidence that the answers are correct. On the other hand, don't overwhelm the decision maker with mathematical and computer information that is neither understood nor appreciated. Follow-up after the research report has been presented to reinforce the main points established by the research and to answer any questions the decision maker may have.

**8. Explain the critical role of the research proposal.**

The research proposal is the contract or the charter that defines the scope of the research project.

It contains the specific statement of the research question that the project is to answer. It provides an inventory of resources required (money and support), the time line for delivery of results, and a brief statement covering the proposed research methodology. By defining the scope of the project, it is insurance against addition of unnecessary work after the initial agreement has been reached.

**9. (Team exercise) Divide the class into teams of four or five. Half of the teams should prepare short RFP's on the following topics:**

- 1. Food on campus**
- 2. Role of fraternities and sororities on campus**
- 3. Entertainment in your city**
- 4. Your university Web site**
- 5. Role of student internships in education**
- 6. Online purchasing of school supplies**
- 7. Purchasing music on the Internet**

**The RFP's should state clearly and precisely the research objectives and other pertinent information. The remaining teams should create proposals in response to the RFP's.**

Student responses will vary.

## **REAL-LIFE RESEARCH**

### **Case 2.1- Let's Go Out to Eat**

#### **Key Points**

- Creating positive customer experiences can make any customer more valuable to the business, sometimes increasing the average transaction amount up to 50 percent

#### **Questions**

**1. Would you say that this was an exploratory study? If not, what are the research questions?**

This is not an exploratory study. The research questions are how to up sell customers in a restaurant and how to provide exceptional service to increase sales.

**2. Is this research causal or descriptive? Why?**

This is a descriptive study. It describes the experiences of customers and contact personnel in a restaurant environment.

**3. Explain how the Olive Garden might use this information; McDonald's.**

Olive garden can have servers suggest higher priced menu items to customers as well as appetizers, desserts and mixed drinks. Mc Donald's can use this information to train their drive up window personnel to cross sell hamburgers and French fries.

**4. What might be included in an RFP to do further research?**

The RFP would include the benefits of future research, the timeline and the cost estimate.