LEARNING OUTCOMES

1. Define decision making and understand the role research plays in making decisions
2. Classify business research as either exploratory research, descriptive research, or causal research
3. List the major phases of the research process and the steps within each
4. Understand different perspectives on framing the research process
5. Explain the difference between a research project and a research program

Introduction

• Key ways in which researchers contribute to decision making:
  1. Helping to better define the current situation
  2. Defining the firm—determining how consumers, competitors, and employees view the firm
  3. Providing ideas for enhancing current business practices
  4. Identifying new strategic directions
  5. Testing ideas that will assist in implementing business strategies for the firm
  6. Examining how correct a certain business theory is in a given situation
Decision Making Terms

- **Business opportunity**
  - A situation that makes some potential competitive advantage possible.

- **Business problem**
  - A situation that makes some significant negative consequence more likely.

- **Symptoms**
  - Observable cues that serve as a signal of a problem because they are caused by that problem.

Decision Making

- **Decision making defined**
  - The process of developing and deciding among alternative ways of resolving a problem or choosing from among alternative opportunities.

- **Research’s role in the decision making process**
  - Recognizing the nature of the problem or opportunity.
  - Identifying how much information is currently available and how reliable it is.
  - Determining what information is needed to better deal with the situation.

Conditions Affecting Decision Making

- **Certainty**
  - The decision maker has all information needed to make an optimal decision.

- **Uncertainty**
  - The manager grasps the general nature of desired objectives, but the information about alternatives is incomplete.

- **Ambiguity**
  - The nature of the problem itself is unclear such that objectives are vague and decision alternatives are difficult to define.
EXHIBIT 4.1  Decision-Making Situations

Types of Business Research

• Exploratory
• Descriptive
• Causal

Exploratory Research

• Conducted to clarify ambiguous situations or discover ideas that may be potential business opportunities.
• Initial research conducted to clarify and define the nature of a problem.
  ▪ Does not provide conclusive evidence
  ▪ Subsequent research expected
**Descriptive Research**

- Describes characteristics of objects, people, groups, organizations, or environments.
  - Addresses who, what, when, where, why, and how questions.
  - Considerable understanding of the nature of the problem exists.
  - Does not provide direct evidence of causality.
- Diagnostic analysis
  - Seeks to diagnose reasons for market outcomes and focuses specifically on the beliefs and feelings consumers have about and toward competing products.

**Taking a Swing at Business Success**

- Pro golfer Greg Norman is also a successful winemaker.
- Descriptive research details what wine consumers like to drink in terms of where the wine is from and where the consumers are located.
- This research gives the vintner a better understanding of the international wine market.

**Causal Research**

- Research conducted to identify cause and effect relationships (inferences).
- Evidence of causality:
  - Temporal sequence—**the appropriate causal order of events**.
  - Concomitant variation—**two phenomena vary together**.
  - Nonspurious association—**an absence of alternative plausible explanations**.
### Degrees of Causality

- **Absolute Causality**
  - *The cause is necessary and sufficient to bring about the effect.*

- **Conditional Causality**
  - *A cause is necessary but not sufficient to bring about an effect.*

- **Contributory Causality**
  - *A cause need be neither necessary nor sufficient to bring about an effect.*
  - *Weakest form of causality.*

### Experiments

- **Experiment**
  - *A carefully controlled study in which the researcher manipulates a proposed cause and observes any corresponding change in the proposed effect.*

- **Experimental variable**
  - *Represents the proposed cause and is controlled by the researcher by manipulating it.*

- **Manipulation**
  - *The researcher alters the level of the variable in specific increments.*

- **Test-market**
  - *An experiment that is conducted within actual market conditions.*

### The research process - Quinlan

**Four frameworks approach**

1. **The conceptual framework**
2. **The theoretical framework**
3. **The methodological framework**
4. **The analytical framework**
Stages in the Research Process

- Process stages:
  1. **Defining the research objectives**
  2. **Planning a research design**
  3. **Planning a sample**
  4. **Collecting the data**
  5. **Analyzing the data**
  6. **Formulating the conclusions and preparing the report**

- **Forward linkage**—earlier stages influence later stages.
- **Backward linkage**—later stages influence earlier stages.
1. Defining the Research Objectives

- Research objectives
  - The goals to be achieved by conducting research.

- Deliverables
  - The consulting term used to describe research objectives to a research client.

Exploratory Research Techniques

- Previous Research
  - Literature review
    - A directed search of published works, including periodicals and books, that discusses theory and presents empirical results that are relevant to the topic at hand.
  - Pilot Studies
    - A small-scale research project that collects data from respondents similar to those to be used in the full study.
  - Pretest
    - A small-scale study in which the results are only preliminary and intended only to assist in design of a subsequent study.
  - Focus Group
    - A small group discussion about some research topic led by a moderator who guides discussion among the participants.

2. Planning the Research Design

- Research Design
  - A master plan that specifies the methods and procedures for collecting and analyzing the needed information.
  - Basic design techniques for descriptive and causal research:
    - Surveys
    - Experiments
    - Secondary data
    - Observation
Selection of the Basic Research Method

• Survey
  • A research technique in which a sample is interviewed in some form or the behavior of respondents is observed and described.
    ◗ Telephone
    ◗ Mail
    ◗ Internet
    ◗ In person

3. Sampling

• Sampling
  • Involves any procedure that draws conclusions based on measurements of a portion of the population.

• Sampling decisions
  • Who to sample?—target population
  • What size should the sample be?
  • How to select the sampling units?

4. Gathering Data

• Many research techniques for gathering data

• Unobtrusive Methods
  • Methods in which research respondents do not have to be disturbed for data to be gathered.
5. Processing and Analyzing Data

- **Editing**
  - Involves checking the data collection forms for omissions, legibility, and consistency in classification.

- **Codes**
  - Rules for interpreting, categorizing, recording, and transferring the data to the data storage media.

- **Data analysis**
  - The application of reasoning to understand the data that have been gathered.

6. Drawing Conclusions and Preparing a Report

- **Steps in communicating the research findings:**
  - Interpreting the research results
  - Describing the implications
  - Drawing the appropriate conclusions for managerial decisions

- **Reporting requirements**
  - Conclusions fulfill the deliverables promised in the research proposal
  - Consider the varying abilities of people to understand the research results
  - A clearly-written, understandable summary of the research findings

The Research Program Strategy

- **Research project**
  - A single study that addresses one or a small number of research objectives.
    - Uses specific techniques for solving one-dimensional problems, such as identifying customer segments, selecting the most desirable employee insurance plan, or determining an IPO stock price.

- **Research program**
  - Numerous related studies that come together to address multiple, related research objectives.
  - Because research is a continuous process, management should view business research at a strategic planning level.
References

- Quinlan, C. 2011, Business Research Methods, Cengage Learning - Chapter 1