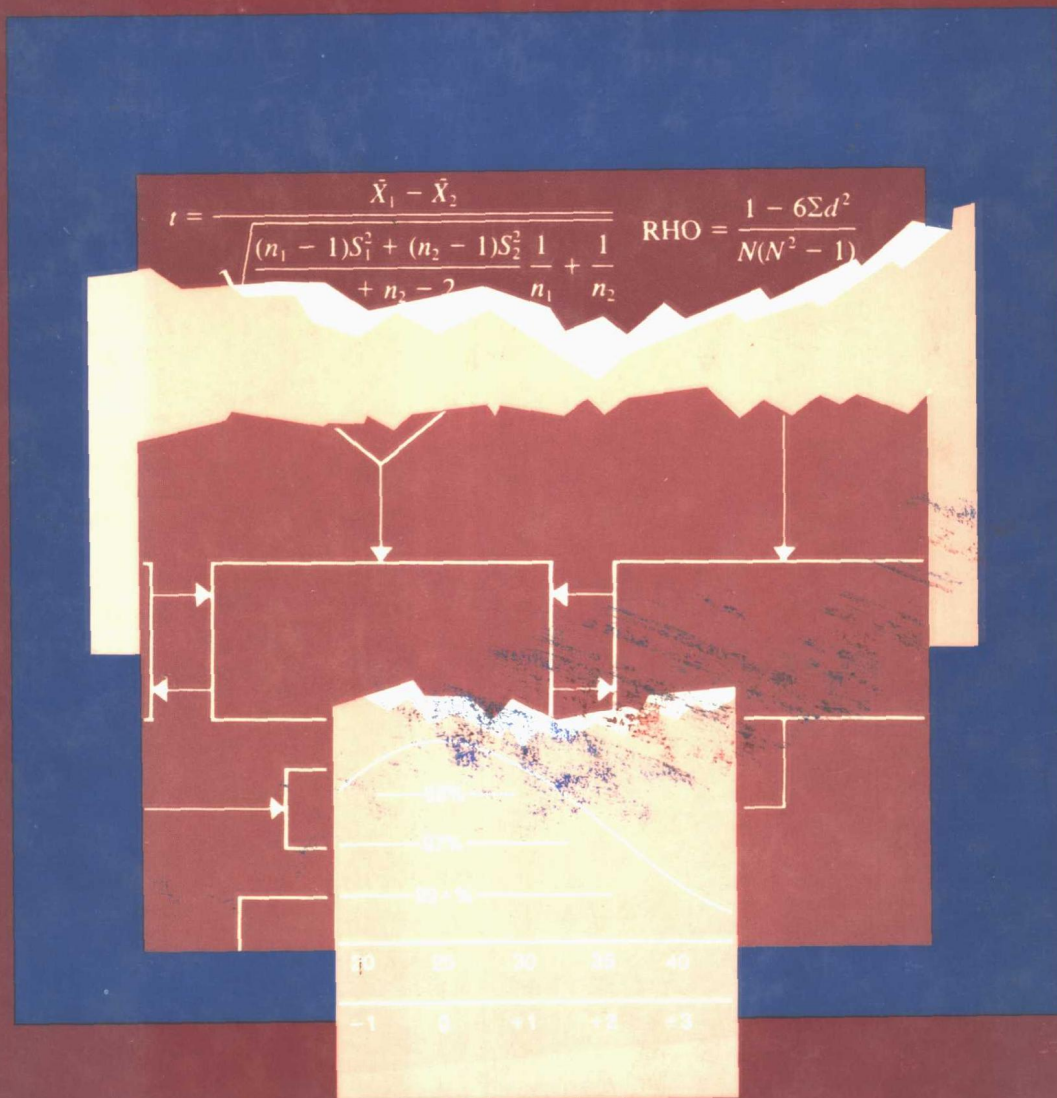


Business Research for Decision Making

Davis • Cosenza



**BUSINESS RESEARCH
FOR DECISION MAKING**

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PREFACE

This text is specifically designed with the user of business research in mind. As a result, the book is relevant to present and future managers who must use information obtained from the research process for decision-making purposes. In view of this focus, the fundamentals and techniques of research are presented in a highly readable fashion and are illustrated with many practical examples.

This perspective makes this text ideal for the research course for advanced undergraduate business majors and for MBA students who will have to specify and evaluate research endeavors in their future management positions. The book is not designed to teach managers *how to do* research; rather it is designed to familiarize them with the basic concepts and techniques so that they can adequately *specify and evaluate* information obtained from business research.

Overall, the major features of this text are that it

- positions research as a means to more effective decision making, not as an end in itself;
- follows an applied, user-oriented perspective;
- deals with the major problems of integrating research into the decision-making process;
- provides an operational framework for the manager to evaluate research;
- provides coverage of major contemporary issues, such as online searching and ethical issues in the conduct of research;
- provides an actual example of research evaluation for the decision maker.

These features all contribute to making this book required reading for any present or future manager who must use the output of business research in decision making.

The text is organized in six parts around the business research process. This organization scheme allows the reader to progress logically through the various activities that are undertaken in business research. Part 1 clearly po-

sitions and organizes the book by examining the role of business research and scientific inquiry in management's decision-making process. Part 2 thoroughly examines the business research process and the research proposal in the context of management's need to obtain information. Part 3 examines the notion and purpose of research design. Here, the specific topics of design configuration, measurement, scaling, and sampling are all treated in a straightforward fashion. Part 4 deals with the all important topic of data collection. Primary and secondary data collection methods are outlined and discussed. Part 5 reviews the basic analytic procedures that are used to prepare and analyze data by the researcher. Finally, Part 6 examines the nature of research reporting and evaluation. The final chapter in this section is integrative in nature because it goes through the complete evaluation of a real research endeavor.

The number of people who have influenced the content and scope of this book are many. The authors' doctoral training at the University of Kentucky was extremely influential in determining the overall perspective of this text. Special thanks go to Roger Calantone and Martha Hollis, both of the University of Central Florida, for their unique and significant contributions. Other colleagues such as Gordon Paul, Mary Joyce, and Jerry Wilson all provided helpful advice, encouragement, and guidance.

We wish to thank the following individuals who completed a questionnaire sent by the publisher. Their responses helped us to define more carefully the purpose of our book and its topical coverage. These individuals are Robert Alexander, Marshall University; Steven H. Achtenhagen, San Jose State; Thomas Begley, Northeastern University; Thomas L. Case, Georgia Southern College; Howard Garland, University of Texas at Arlington; Bob Leone, University of Texas at Austin; Richard T. Mowday, University of Oregon; and Richard Pinkerton, Capital University. We particularly wish to thank Sam Gould, University of Texas at San Antonio; E. J. Manton, East Texas State University; and Louis Stone, Clemson University. These three individuals read and criticized the entire manuscript. We found their many comments to be most useful when we prepared the final revision. Finally, many friends bore much of the frustration and mental anguish in writing this text. To these people go a special thanks!

DUANE DAVIS
ROBERT M. COSENZA

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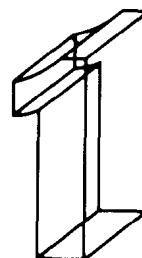
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PART



SCIENTIFIC INQUIRY'S ROLE IN DECISION MAKING

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OVERVIEW

The very essence of managerial action in any modern organization is decision making.¹ Business decision making is commonly referred to as the formulation, evaluation, and selection of alternatives to solve managerial problems. Indeed, the quality of these decisions is usually intricately tied to the availability of usable information at the time the decision is made. Business research is a primary means to obtain usable information for decision making. As a result, this text is concerned with aiding managers and potential managers in making better decisions by providing them with a framework for the evaluation of business research.

Specifically, managers must wade through a plethora of data, information sources, and studies that, more often than not, are confusing and outright conflicting. This state of affairs, coupled with the increased complexity of the decision making environment, suggests the need for management in all functional areas to better understand the process of obtaining information for their decision making responsibilities. The continued growth in both the size and complexity of Management Information Systems (MIS) and their associated Decision Support Systems (DSS) in today's organizations necessitates that managers monitor the input to such systems to ensure that the data for decision making are of a sufficient quality and type to help solve the problems of the organization. It is only through the development of an understanding of the role and nature of business research that managers can effectively accomplish this task.

This introductory chapter provides the framework for examining research's role in decision making. First, the structure of decision making is examined. Here, the levels of decision making in an organization are identified and a generalized model of the decision making process is presented. Business research is defined and its role in the process is examined. With these topics outlined, the manager/researcher relationship is examined for potential conflicts. Management's role in the relationship is highlighted. The chapter ends by diagrammatically outlining the major components in the manager's and researcher's two respective spheres of action. This diagram provides both the framework and the rationale for the plan of the book.

STRUCTURE OF DECISION MAKING

The general structure of decision making in organizations is well discussed in the literature.² One fact that soon becomes apparent is that the diversity of decision making activities in business organizations is boundless. The decisions to be made range from the mundanely routine to the totally unprogrammed decision for which there are few, if any, precedents. This diversity of decision making results in a variety of informational needs within an organization. The types of informational needs are related to levels of decision making.³

Levels of Decision Making

One particularly clear exposition of decision making structure in the organization is that which delineates between strategic, tactical, and technical levels.⁴ Table 1.1 outlines the three major decision levels and their associated characteristic attributes. Strategic decisions are those that are largely unstructured. They are characterized by a great amount of uncertainty and are nonroutine in nature. The information needs for strategic decisions are primarily external to the organization and are future oriented. Strategic decisions are those which affect the general direction of the organization. Examples of strategic decisions at the corporate level include those dealing with such issues as diversification, product or market development, and divestiture decisions.

Tactical decisions are those concerned with the implementation of the broad strategic decisions outlined above. These decisions are operationally oriented in that they deal more with issues of a considerably shorter time frame. Planning and control activities are both important at this level. The informational needs are descriptive/historical in nature and are more often of an internal

TABLE 1.1
Levels of Decision Making and Characteristic Attributes

Level of Decision Making	Exemplary Types of Information Needed	Relative Programmability	Planning-Control Organization
Strategic	1. External information <ul style="list-style-type: none"> a. competitive actions b. customer actions c. availability of process d. demographic studies 2. Predictive information (long-term trends) 3. Simulated what-if information	Low	Planning—heavy reliance on external information
Tactical	1. Descriptive-historical information 2. Performance-current information 3. Predictive information (short-term) 4. Simulated what-if information	Limited programmability	Mixture of planning/control orientation
Technical	1. Descriptive-historical information 2. Performance-current information	High	Control—heavy reliance on internal information

SOURCE: Adapted from John E. Burch, Jr., Felix R. Strater, and Gary Grudnitski, *Information Systems: Theory and Practice* (New York: John Wiley and Sons, 1979).

nature. Examples of tactical decision making include budget allocations, personnel assignments, minor resource commitments, promotional mix decisions, and other short-term internal assignments. Tactical decisions also have limited programmability because they lack consistent structure in the problem situation.

The final decisions of interest are technical decisions. Technical decisions are of a routine nature and deal with the control of specific tasks. The information needed to perform this function is primarily descriptive/historical in nature and is usually supplemented with current performance information. Little, if any, external information is needed to make decisions at this level. The decisions are highly programmable and are the ones most amenable to mathematical modeling and standardization. Examples of this type of decision making are those in quality control, payroll, scheduling, transportation, and credit acceptance or rejection.

While the distinctions between these levels are by no means clear-cut, the classification does serve to highlight important differences in the types of informational needs in the modern business organization. It is necessary to understand differences in the needs of managers in a given organization because the quality of the decisions managers make are directly tied to the information they receive. More specifically, while good information of the appropriate type and quality cannot ensure that the correct decision will be made, its availability increases the probability that a better decision is ultimately made.

Decision Making Process

The decision making process can be thought of as a series of interrelated activities that leads to a choice among alternatives.⁵ Figure 1.1 outlines five major activities that can be identified in most decision situations. These activities are defined and interrelated as follows:

Problem Recognition. The acknowledgment by management that some situation exists, or will exist, that needs to be acted upon in the near future.

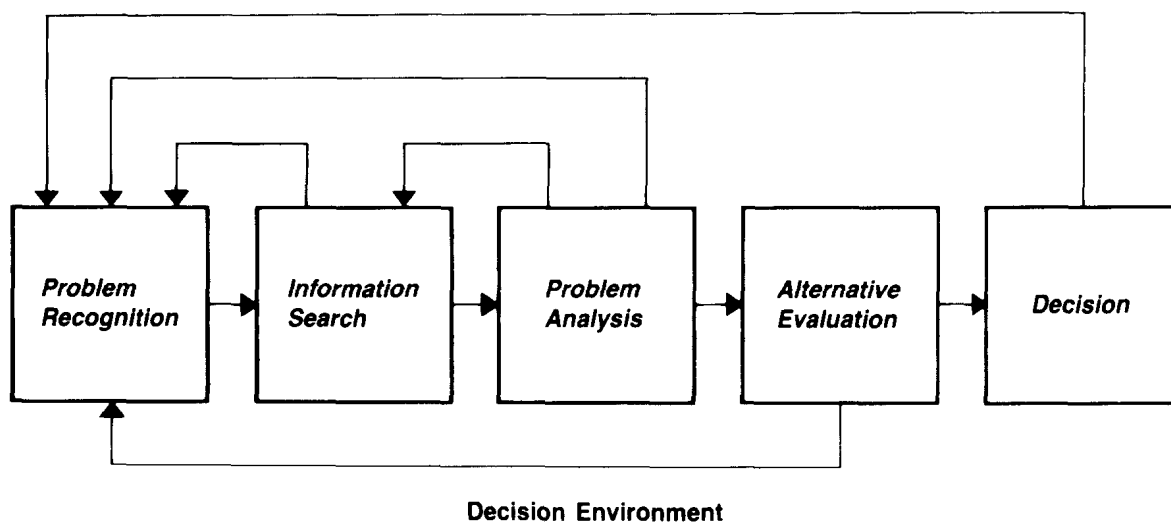
Information Search. Information pertaining to the problem situation identified above is collected and assimilated into a format that is conducive to analysis of the problem at hand. Assumptions and alternative scenarios are posed for subsequent problem analysis. The information generated at this stage may substantially redefine the problem initially formulated.

Problem Analysis. The problem situation is thoroughly reviewed given the information obtained. An analysis of the available information reveals the areas of concern to the manager and the major factors that affect the problem at hand. Problem analysis may also affect recognition and necessitate the gathering of more information to adequately define the perplexing situation at hand.

Alternative Evaluation. The possible courses of action are enumerated and evaluated in this stage of the process. Alternatives are formulated and

Major Activities in the Decision Making Process

FIGURE 1.1



evaluated according to the criteria set forward by the decision maker. The alternatives may be stated either implicitly or explicitly. For example, even though many managers do not consider “inaction” a decision alternative, it is indeed one.

Decision. The final stage in the process is the selection of the alternative to address the problem identified. The decision is presumably the alternative that the decision maker finds most appealing given all the information and intuition available to him or her. The decision, in turn, may create new problem situations which need to be addressed by the decision maker.

The stages in the process are by no means clearly delineated or static in nature. The various activities may be occurring simultaneously or may be so programmed that decisions are made almost instantaneously by computers or other automatons. Examples of these decisions are largely of a technical nature which rely on current performance and/or historical information such as quality control, customer billing, and other such routinized alternative selection procedures.

The major decisions that are of concern to us in this text are those of a strategic and tactical nature. As noted earlier, these decisions have relatively limited programmability and, as a result, are more complex than those of a technical nature. The problems are nonroutine and generate a variety of informational needs which are both predictive and external to the organization. The problem situations for strategic and tactical decisions are more complex to ana-