



ESSENTIALS OF

BUSINESS RESEARCH METHODS

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To my loving and supportive wife Dale, and to my son Joe III, and his wife Kerrie.

Joseph F. Hair, Jr.

For my family (living and deceased), especially Amie and James, for providing support, inspiration, and motivation.

Barry Babin

To my wife Gillian, my children John, Kevin, and Arthur, and to Karen, my mother; and in memory of my father and brother Stanford.

Arthur H. Money

To my wife Maria, my children Paul, Clare, James, and Irene, and to my mother and the memory of my late father.

Phillip Samouel

Preface

Business research in the new millennium presents many challenges for managers. Businesses are challenged to be more decisive and offer higher quality products and services, and they must do so with fewer people at lower costs. This means modern business managers must make more decisions in a shorter period of time, and those decisions must be better. Fortunately, the tools and technologies available to business professionals have expanded dramatically. Computing power, accessibility, and expertise no longer represent significant barriers to processing information. The speed and memory of PC's has been doubling every eighteen months while prices drop. Windows-based and other user-friendly interfaces have brought sophisticated statistical software packages into the "click-and-point" era, greatly reducing the need for specialized computer skills to access electronic data processing capability. Now, even "unsophisticated" users can analyze large quantities of complex data with relative ease. The intelligence that emerges from application of these new tools and technologies contributes to better decision making.

Better business intelligence is essential to better decision making. This book is about making better decisions by using a type of intelligence that only research can create. Research turns mere information into intelligence. This book places minimal emphasis on statistical theory and maximum effort in providing basic skills that cover a wide range of potential business research applications. By doing so, we believe the reader will be better able to cope with the fast-paced decision-making environment that is business today and tomorrow.

Managers Need Business Research Skills

Fortunately, the amount of information available to the decision makers has exploded in recent years, and will continue to do so in the future. Until recently, much information just disappeared. It either was not collected or was discarded, often because there was no cost-effective way of keeping it. Today this detailed information is collected and stored in data warehouses, and it is available to be "mined" for improved decision-making. Sometimes the information can be analyzed and understood with simple statistics. Other times turning it into business intelligence requires more complex tools. In this book, we cover both the simple and the more complex tools in an easy to understand manner. Managers and entrepreneurs who lack business research knowledge and resources simply cannot benefit from the intelligence emerging from this expanded database of information.

Most business research texts are quite long and take an encyclopedic approach. This book covers all important topics in a concise manner and focuses on the essentials of business research for managers. It includes coverage of the increasing role of knowledge

management, as well as how to conduct information-gathering activities more effectively in a rapidly changing business environment. The fundamentals of business research, such as research design, sampling, and measurement and scaling, are presented in a highly readable format. Illustrations are used in conjunction with many practical examples to highlight significant points.

A "Research in Action" feature provides applied examples of real research problems and current issues throughout all chapters. Some Research in Action examples summarize actual research studies, such as focus group results for Chrysler's PT Cruiser and the Gallup Organization's survey covering the twelve dimensions of a great workplace. Others describe Web sites that help you to design better survey questionnaires or provide an overview of secondary data sources. Case studies involving applications of research approaches also are included, as well as instructions on how to use statistical software to analyze data. With more than seventy "Research in Action" boxes, the text material is truly brought to life!

The book is entirely based on the need for managers to make better decisions. Thus, research is couched within the greater decision-making context. Because managers increasingly must make decisions based on almost unlimited information in data warehouses, we provide more coverage of data analysis techniques in this book than do other texts. We recognize that most business students will not be data analysts. But an understanding of data analysis techniques will help them to better utilize the increasing amounts of information they will be expected to apply in decision-making. Our straightforward, hands-on approach will make the book particularly successful with advanced undergraduates in all business disciplines and graduate business students, both in traditional and executive programs. The book also will serve as an effective reference guide for advanced users, including basic researchers and beginning doctoral students.

Changes in the business environment have created opportunities as well as uncertainty, and they make the role of business research even more important in improving decision-making. For example, information technology has made more accurate financial forecasting possible, has improved employee productivity, and enables more information to be collected and stored at a reasonable price. Knowledge is power, but managers must convert the increasing amount of information into knowledge before they can use this power. Businesses that are best able to harness this power will be the ones who are successful in the long run. Hence, a main focus of the text is the collection, evaluation, understanding, and use of information from the manager's perspective.

EXCELLENT PEDAGOGY

Our pedagogy has been developed from many years of conducting and teaching business research. To bring the concepts to life and make the text more interesting, we focus on a single case throughout the book. Phil Samouel is a restaurant entrepreneur in New York. His Greek restaurant competes with Gino's Italian Ristorante. Phil hires a business research consultant to help him and the case study is used to illustrate the principles of business research throughout the text. The consultant has recommended two surveys—one of customers and the other of Phil's employees. Both questionnaires are included in the text and two databases from the results of the surveys are used to demonstrate the data analysis techniques. A sample report of the surveys' initial findings is included as an appendix to the

reporting chapter. Exercises at the end of the chapters provide an opportunity for students to further examine the findings of the two surveys and to use them in preparing a more comprehensive report on the restaurant case study. Electronic copies of the questionnaires and databases are available on our Web site.

The Samouel's restaurant case provides a running example, which saves the reader time in gaining familiarity with different cases from chapter to chapter. We refer to the case when we discuss research design alternatives, as well as when we evaluate different sampling approaches. The thinking behind the employee questionnaire is provided in the measurement and scaling chapter and the rationale for the customer survey questionnaire is reviewed in the questionnaire design chapter. In all of the data analysis chapters we use the case study data to illustrate SPSS and the various statistical techniques. A copy of the research proposal given to Phil Samouel is provided in Appendix 1-A, and a summary of the research report is included in the appendix to Chapter 12. The focus on a single case study throughout the text enables the reader to more easily understand the benefits and pitfalls of using research to improve business decision making.

Organization of the Book

The text and all major supplements are organized around the learning objectives shown at the beginning of the chapters. Instead of a single summary of the chapter, there are summaries by each learning objective. This organizational approach makes the book very readable for students and easy to teach for instructors. In short, it delivers value for both students and teachers.

The organization of the book follows the logic of the business research process. It is organized into five parts. Part 1, the introduction, provides an overview of the scope of business research and the research process. It also includes an appendix on preparing research proposals, as well as others on the Samouel's and Gino's case study, how to use SPSS, and how to use Excel. Part 2 provides an overview of research design, creative decision-making, and ethics. Part 3 covers data collection, measurement and scaling, questionnaire design, and sampling. In Part 4 we examine data analysis and presentation, including correlation and regression and writing and presenting research reports. In Part 5 we discuss advanced topics in business research, such as multivariate data analysis and perceptual mapping that are increasingly being used for data mining tasks.

COMPREHENSIVE INSTRUCTOR AND STUDENT RESOURCES

The text has an extensive set of resources for instructors and students. For instructors, there is a test bank providing a wide variety of questions on all the major concepts in the book. The instructor's manual includes lecture outlines, answers to end-of-chapter questions, and teaching notes for the Internet exercises. Each chapter has thirty to forty PowerPoint slides to summarize and illustrate the key concepts. Two datasets for the restaurant case in both SPSS and Excel format are provided for instructors to use in teaching, and students to use in learning. Additional end-of-chapter assignments give the user an opportunity to experience a wide range of analytical applications using the datasets. This eliminates the

The text's Web site (www.wiley.com/college/hair) includes a wide array of supplementary materials for instructors to use to facilitate their teaching. In addition to electronic copies of all instructors' teaching support materials, the book has copies of sample questionnaires used in research projects, answers to frequently asked questions on business research provided by the text's authors, and copies of the datasets. In short, we believe it is one of the most comprehensive Web sites of any business research text.

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Finally, we owe a debt of gratitude to our past students who inspired us to write this book. Their questions and comments helped us to know what and how to cover the many important topics. We also thank those special teachers who inspired us to a life-long mission of learning and sharing knowledge. Moreover, we hope that future students, by using this book, will enjoy a much easier pathway to learning business research and statistics than was typical for us.

Joe Hair, Louisiana State University, USA Barry Babin, University of Southern Mississippi, USA Arthur Money, Henley Management College, UK Phillip Samouel, Kingston Business School, UK

About the Authors

Joe F. Hair, Jr. is Alvin C. Copeland Endowed Professor of Entrepreneurship, Ourso College of Business Administration, Louisiana State University. He was a United States Steel Foundation Fellow at the University of Florida,—Gainesville, where he earned his Ph.D. in Economics and Business Administration. He is the author of twenty-six books and more than seventy articles on a variety of topics. He has been retained as a consultant for firms in the food, lodging, healthcare, transportation, banking, utilities, and electronics industries, as well as by the U.S. Department of Agriculture and the U.S. Department of Interior. He has presented executive development and management training programs for numerous companies in a wide variety of industries, and served as an expert witness in several litigation matters.

Barry Babin holds a Ph.D. in Business Administration. He is author of over fifty research articles covering a wide range of topics and appearing in marketing, retailing, psychological, and management oriented journals. Currently, he is Associate Editor of the *Journal of Business Research* and Professor of Marketing and Consumer Research at the University of Southern Mississippi. Prior experience includes engineering, managerial, and marketing related experience in numerous industries including defense, specialty retailing, and consumer products. He is former President of the Society for Marketing Advances and his research has been recognized with several national and international awards. He performs consulting and executive education in the areas of creative decision making and business research.

Arthur H. Money is Professor of Management and Chairman of the faculty of Information Systems, Project and Operations Management at Henley Management College, Henley on Thames, England. Prior to joining Henley Management College he was Professor of Business Administration in the Graduate School of Business of the University of Cape Town. Professor Money received his Ph.D. degree (1972) in Mathematical Statistics from the University of Cape Town. Currently he is a member of the Executive of the European Doctoral Programs Association of Management and Business Administration (EDAMBA) and on the Steering Committee of the European Doctoral School of Knowledge and Management (EUDOKMA). He has authored more than one hundred journal articles, working papers, and book chapters, and is the co-author of five books and co-editor of two books. Professor Money focuses his research on statistics, management science, and applications in the areas of information systems, finance, and marketing.

Phillip Samouel was educated in the UK gaining a BA First Class Honors in Social Science and two masters, one in Economics and the other in Management Science, from the London School of Economics and Imperial College, respectively. He earned his Doctorate in Business Administration from Henley Management College/Brunel University in 1995 and most recently received an Honorary Ph.D. from the Academy for the National Economy, Moscow. His career has included successful endeavors both in academia and the commercial world. Between 1974 and 1984 he built Sammy George Fashion Ltd, a garment manufacturer in London with its own label—London Lady. Since 1984 he has been running a successful Farming Enterprise. Ladyland Farm—The Living Classroom, which also is an Education Centre delivering aspects of the UK Science National Curriculum to over thirty-five thousand children a year. He is currently on the faculty of Kingston University, UK, where he has been Head of Department—Business Strategy and Operations, Director of the Business School, and most recently Dean of Faculty and a member of the University's Executive until 2002.

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