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BUSINESS RESEARCH METHODS

Fourth Edition

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Boris F. Blumberg, Donald R. Cooper and Pamela S. Schindler
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Dedicated

To my academic teachers

Brief table of contents

Detailed table of contents
Preface
Acknowledgements
About the author
Online resources
Create
Study skills
Guided tour

PART 1
Essentials of research

1 The nature of business and management research
2 The research process and proposal
3 Literature review
4 Ethics in business research

PART 2
Research methods

5 Quantitative and qualitative research
6 Sampling strategies
7 Primary data collection with surveys
8 Primary data collection: qualitative data
9 Secondary data and archival sources
10 Content analysis and other qualitative approaches
11 Case studies
12 Experimentation

PART 3
Research instruments

13 Fieldwork: questionnaires and responses
14 Measurement and scales
15 Writing up and presenting research outcomes

Glossary

Online LearningCentre

(Available online)

PART 4
Statistical background

16 Data preparation and description
17 Exploring, displaying and examining data
18 Hypothesis testing
19 Measures of association
20 Multivariate analysis: an overview
21 Qualitative data analysis: an overview

Appendices
Cases
Index

Detailed table of contents

Preface
Acknowledgements
About the author
Online resources
Create
Study skills
Guided tour

PART 1
Essentials of research

1 The nature of business and management research
1.1 Why study research?
1.2 What is research?
1.3 Is research always problem-solving based?
1.4 What makes good research?
1.5 Research philosophies
1.6 Scientific reasoning
1.7 Understanding theory: components and connections
1.8 Propositions and hypotheses
1.9 Theory
Running Case Study 1
Summary
Discussion questions
Recommended further reading

2 The research process and proposal
2.1 The research process
2.2 Management research and measurement questions
2.3 Research process
2.4 The research proposal
Running Case Study 2
Summary
Discussion questions
Recommended further reading

3 Literature review
3.1 Aims and objectives of a review
3.2 Assessment of a ‘good’ literature review
3.3 Critical review
3.4 Process and organization
3.5 Literature review as independent scientific contribution
Running Case Study 3

Summary
Discussion questions
Recommended further reading

4 Ethics in business research
4.1 What are research ethics?
4.2 Ethical treatment of participants
4.3 Data collection in cyberspace
4.4 Ethics and the sponsor
4.5 Researchers and team members
4.6 Ethical obligations to the research community
4.7 Ethical approval procedures
Running Case Study 4
Summary
Discussion questions
Recommended further reading

PART 2
Research methods

5 Quantitative and qualitative research
5.1 Qualitative and quantitative studies
5.2 Research design classifications
5.3 Exploratory, descriptive and causal studies
Running Case Study 5
Summary
Discussion questions
Recommended further reading

6 Sampling strategies
6.1 Unit of analysis
6.2 The nature of sampling
6.3 Sample versus census
6.4 Types of sample design
6.5 Steps in sampling design
6.6 Complex probability sampling
6.7 non-probability sampling
6.8 Sampling on the Internet
Running Case Study 6
Summary
Discussion questions
Recommended further reading

7 Primary data collection with surveys
7.1 Characteristics of data collection
7.2 Characteristics of the communication approach
7.3 Choosing a communication method
7.4 Communication methods compared

7.5 Personal interviews
7.6 Telephone interviews
7.7 self-administered surveys
7.8 web-based surveys
7.9 Structured observations
Running Case Study 7
Summary
Discussion questions
Recommended further reading

8 Primary data collection: qualitative data
8.1 Qualitative interviews
8.2 Focus groups
8.3 Participant observation
Running Case Study 8
Summary
Discussion questions
Recommended further reading

9 Secondary data and archival sources
9.1 Secondary data
9.2 Sources of secondary data
9.3 How to use secondary data efficiently
9.4 Secondary data in qualitative research
9.5 data-mining
Running Case Study 9
Summary
Discussion questions
Recommended further reading

10 Content analysis and other qualitative approaches
10.1 Content analysis
10.2 Narrative analysis
10.3 Ethnographic studies
10.4 Action research
10.5 Grounded theory
Running Case Study 10
Summary
Discussion questions
Recommended further reading

11 Case studies
11.1 Case study objectives
11.2 The richness of multiple evidence sources
11.3 How to conduct good case study research
Running Case Study 11
Summary
Discussion questions
Recommended further reading

12 Experimentation
12.1 What is experimentation?
12.2 An evaluation of experiments
12.3 Conducting an experiment
12.4 Validity in experimentation
12.5 Experimental research designs
Running Case Study 12
Summary
Discussion questions
Recommended further reading

PART 3
Research instruments

13 Fieldwork: questionnaires and responses
13.1 Developing the instrument design strategy
13.2 The management research question hierarchy revisited: phase 1
13.3 Constructing and refining the measurement questions: phase 2
13.4 Question content
13.5 Response strategy
13.6 Sources of existing questions
13.7 Drafting and refining the instrument: phase 3
Running Case Study 13
Summary
Discussion questions
Recommended further reading

14 Measurement and scales
14.1 The nature of measurement
14.2 Data types
14.3 Sources of measurement differences
14.4 Characteristics of sound measurement
14.5 The nature of measurement scales
14.6 Response methods
14.7 Measurement scale construction
Running Case Study 14
Summary
Discussion questions
Recommended further reading

15 Writing up and presenting research outcomes
15.1 The written research report
15.2 Research report components
15.3 Writing the report
15.4 Presentation considerations
15.5 Oral presentations
Running Case Study 15
Summary

Discussion questions
Recommended further reading

Glossary

PART 4
Statistical background

(Available online)

16 Data preparation and description
16.1 Introduction
16.2 Editing
16.3 Useful rules for editing
16.4 Data entry
16.5 Descriptive statistical summaries
Summary
Discussion questions
Recommended further reading

17 Exploring, displaying and examining data
17.1 Introduction
17.2 Exploratory data analysis
Summary
Discussion questions
Recommended further reading

18 Hypothesis testing
18.1 Introduction
18.2 Hypothesis testing
18.3 Statistical testing procedures
18.4 Tests of significance
Summary
Discussion questions
Recommended further reading

19 Measures of association
19.1 Introduction
19.2 Bivariate correlation analysis
19.3 non-parametric measures of association
Summary
Discussion questions
Recommended further reading

20 Multivariate analysis: an overview
20.1 Introduction
20.2 Selecting a multivariate technique
20.3 Dependency techniques
20.4 Interdependency techniques

Summary
Discussion questions
Recommended further reading

21 Qualitative data analysis: an overview
21.1 Qualitative data analysis
21.2 Coding
21.3 Analysis tools
21.4 computer-aided quantitative data analysis software
Summary
Discussion questions
Recommended further reading

Appendices
(Available online)
A Core business reference sources, printed and electronic
B Decision theory problem
C Sample student term project
D non-parametric significance tests
E Selected statistical tables

Cases
(Available online)
1 A GEM of a study
2 Can this study be saved?
3 Inquiring minds want to know – NOW!
4 Highland Bank: teeing–up a new strategic direction
5 Ramada demonstrates its personal best
6 Women getting equal in public services
Index

Preface

The previous three European editions of this book have been well received by both lecturers and students alike; this new edition takes the successes of the preceding editions and continues to build on them. The new edition has focused on developing the book further in a number of core areas:

Balanced Approach – One of the strengths of the text has been its aim to provide a balanced approach to both qualitative and quantitative methods. This has been advanced further in the fourth edition by expanding the qualitative coverage: case study research has its own chapter; and the coverage of qualitative methods, such as content analysis, action research, ethnographic research, narrative analysis and grounded theory has been expanded. The fourth edition also contains a chapter on the primary collection of qualitative data, which covers qualitative interviews, focus groups and participant observation. Finally, a new chapter on qualitative analysis methods has been added to Part IV covering the statistical background, which is available on the Online Learning Centre for the book.

Theory vs Practice – The text has always offered students an insight into all aspects of research methods, providing them with the theoretical understanding they need, as well as the practical guidance required to effectively apply this. This continues in the new edition, through a combination of core textual content and pedagogic features.

Streamlined Pedagogy – The new edition offers a revised plethora of pedagogy for students and to aid teaching. Practical boxes focusing on real life research methods help students to understand the application of research within a day to day context. *Deeper Insights* boxes provide in-depth information on more challenging topics, for those students who want it. *Student Research* boxes help students to understand their own research and how they can get the most out of it. *Research Methods in Real Life* boxes help students to see how research methods can be applied to real life situations. Finally, the *Running Case Study* boxes at the end of each chapter show how two student projects developed – one using qualitative methods, and one using quantitative methods – helping students to understand how to apply the content of each individual chapter to a real life project.

The new edition is more wholly focused on helping the student with whatever their task may be: learning business research methods; or completing an independent research project. Simultaneously the content provides a sound and balanced introduction to business research methods to teach from.

Covering Recent Trends in Methodology – Developments in information technology and the World Wide Web offer many new opportunities. The new edition picks up those recent developments and discusses software to analyse qualitative data as well as the opportunities and problems regarding collecting data on the web.

As a lecturer I understand the increasing importance of additional supplementary material to help aid teaching and learning. In conjunction with re-developing the book content, the supplements package has also undergone further development to ensure that it is tailored to lecturer and student needs. The Online Learning Centre (OLC) for this fourth edition retains the core content from the previous edition, including all the fundamental resources like PowerPoints and an EZTest question bank. In addition to this, the new edition also includes:

- An expanded *Research Skills Centre* for students which includes links to study skills material from our successful Open University Press list, examples of good and bad proposals, template documents for research, and primers for Excel and SPSS. This should help students get the most out of research.
- The statistical chapters available on the website now have explicit linkages to the *SPSS Survival Manual* by Pallant and questions where students need to run SPSS to answer them have been added.

The reviews of the previous edition have enabled this new edition to be updated in a way that benefits both students and lecturers. The continued feedback received from users is invaluable. Thank you to all who have provided it.

Boris F. Blumberg

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Author's acknowledgements

Although what was right in research methods ten years ago is still right, the developments in research methodology are tremendous. Advances in information technology and the ubiquity of the web are the main stimuli for these developments. Software packages support researchers in all phases of the research process and have become very accessible. The web has also created many new opportunities to collect data. In the new edition I have accommodated these developments and discussed the opportunities and problems they create.

In the last years I have taught research methods courses for Master's and PhD students at Maastricht University School of Business and Economics, the Maastricht School of Governance and the Maastricht School of Management. Discussions in these courses are a continuous source of inspiration to change and improve the book. I learn so much from my students.

Moreover, for sharing their thoughts on research and teaching with me, I want to thank:

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Boris F. Blumberg

Wuppertal, August 2013

About the author

Boris F. Blumberg is Asssistant Professor and Academic Director of MBA programmes in the Department of Organization and Strategy at Maastricht University, the Netherlands. He obtained an MSc in business administration from Mannheim University and a PhD in sociology from Utrecht University. Boris has a broad teaching experience. In the last few years he has taught courses on research methods for Masters as well as PhD students. Furthermore, he teaches courses in strategic management, entrepreneurship and innovation.

His research focuses mainly on entrepreneurship, networks and methodology. Boris has published in refereed international journals such as *Small Business Economics*, *Organization Studies* and *Entrepreneurship & Regional Development*. He has served on the editorial boards of *International Sociology* (2004–2009), *Journal of Small Business Management* (2010–present) and *Organizational Research Methods* (2014–present).

Online resources

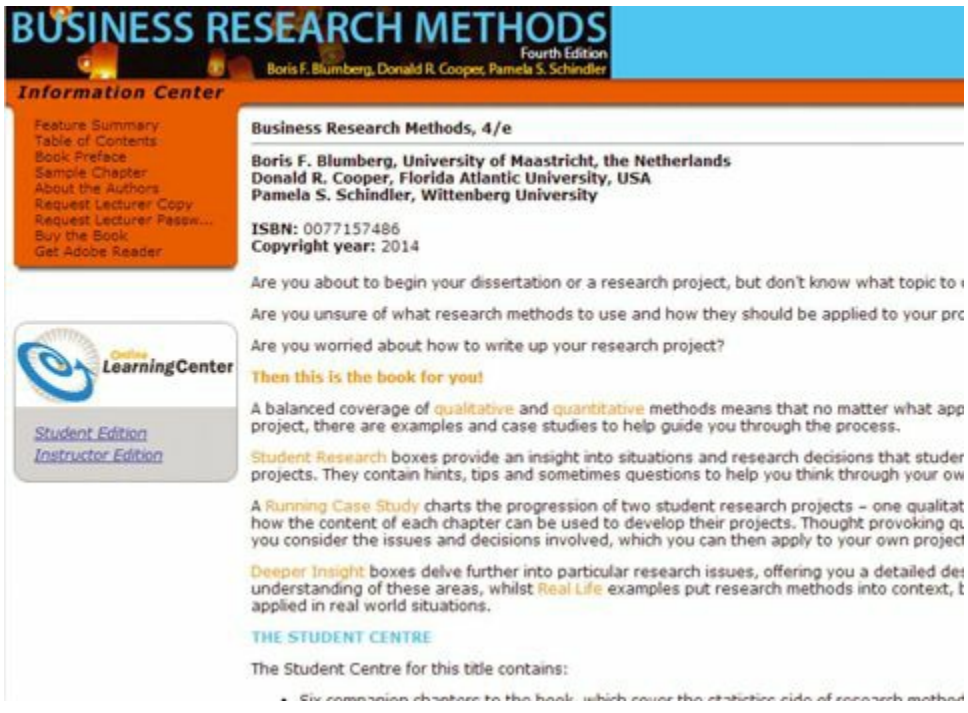
Visit **www.mcgraw-hill.co.uk/textbooks/blumberg** today.

Online Learning Centre (OLC)

After completing each chapter, log on to the supporting Online Learning Centre website. Take advantage of the study tools offered to reinforce the material you have read in the text, and to develop your knowledge of business research methods in a fun and effective way.

Resources for students include:

- *Statistics chapters*
- *Research Skills Centre, including chapters on study skills, examples on good and bad proposals, templates, primers and other useful content to aid studying*
- *Video Tutorials*
- *multiple-choice questions*
- *Weblinks*
- *Glossary*
- *Case studies*
- *Dataset examples*
- *PowerPoint tutorial*
- *Appendices to the main text*



Also available for lecturers:

- *Extra tests and questions*
- *PowerPoint presentations*
- *Lecture outlines and case study teaching notes*
- *Artwork*

Test Bank available in mcgraw-hill EZ Test Online

A test bank of over 1,000 questions is available to lecturers adopting this book for their module. A

range of questions is provided for each chapter, including multiple-choice, true or false, and short-answer or essay questions. The questions are identified by type, difficulty and topic to help you to select questions that best suit your needs and are accessible through an easy–to–use online testing tool, mcgraw-hill EZ Test Online.

mcgraw-hill EZ Test Online is accessible to busy academics virtually anywhere – in their office, at home or while travelling – and eliminates the need for software installation. Lecturers can choose from question banks associated with their adopted textbook or easily create their own questions. They also have access to hundreds of banks and thousands of questions created for other mcgraw-hill titles. Multiple versions of tests can be saved for delivery on paper or online through WebCT, Blackboard and other course management systems. When created and delivered though EZ Test Online, students' tests can be immediately marked, saving lecturers time and providing prompt results to students.

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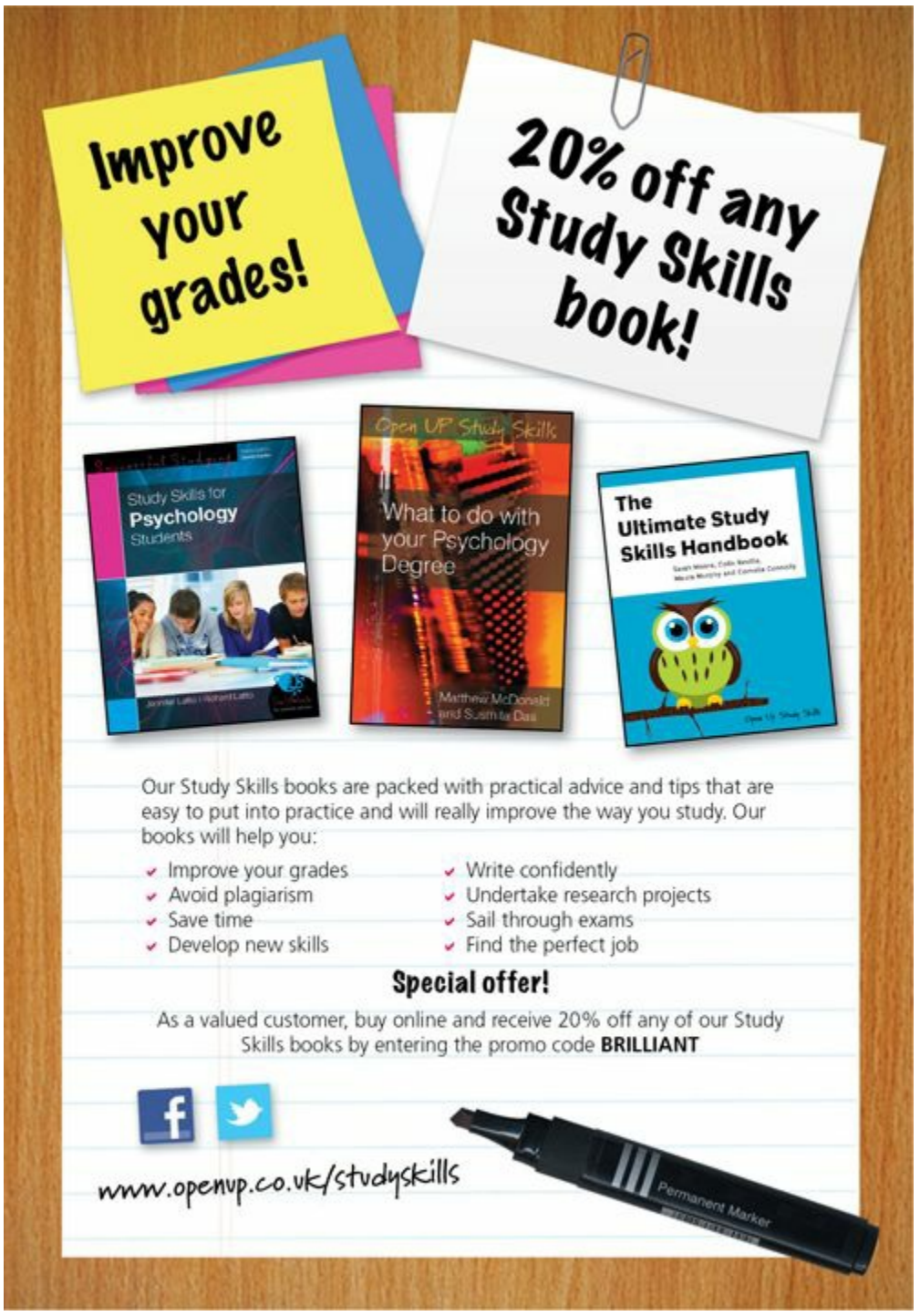
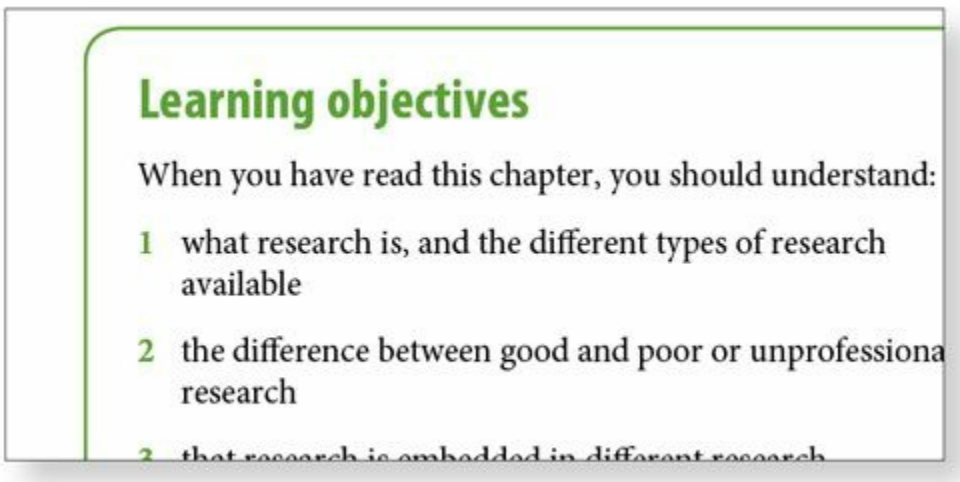
Study skills

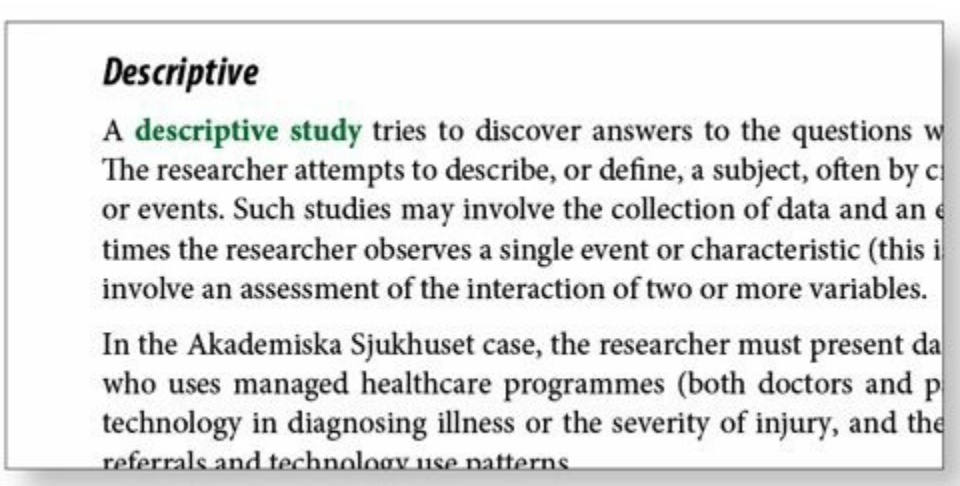


Guided tour



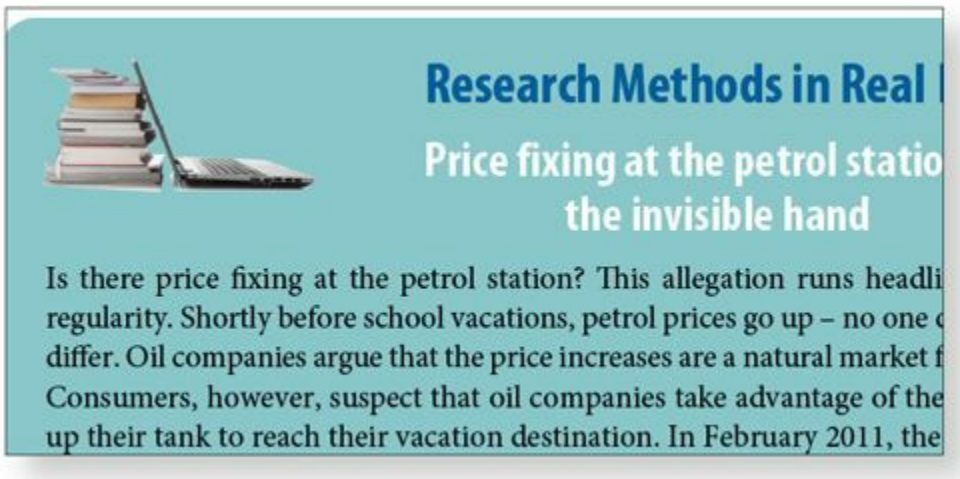
Learning objectives

Each chapter opens with a set of learning objectives, introducing you to the topics you should come to understand after having worked through the chapter.



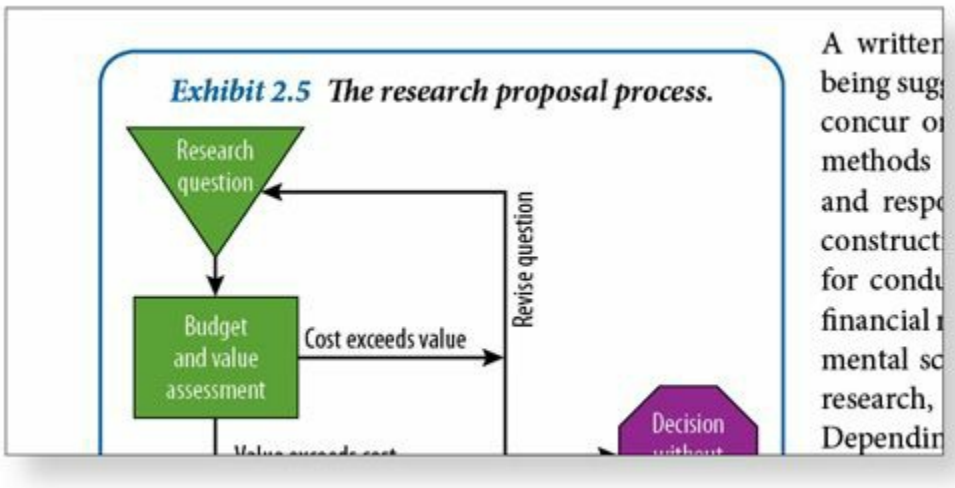
Key terms

These are in green and bold throughout each chapter and defined in a glossary at the end of the book for your reference.



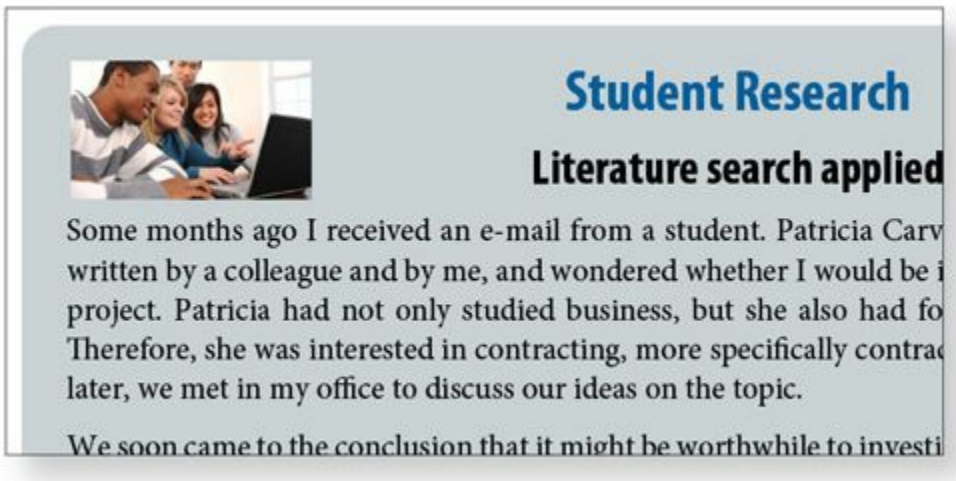
Research Methods in Real Life

These boxes provide succinct, real-life illustrations through varied and pertinent snapshots of research methods.



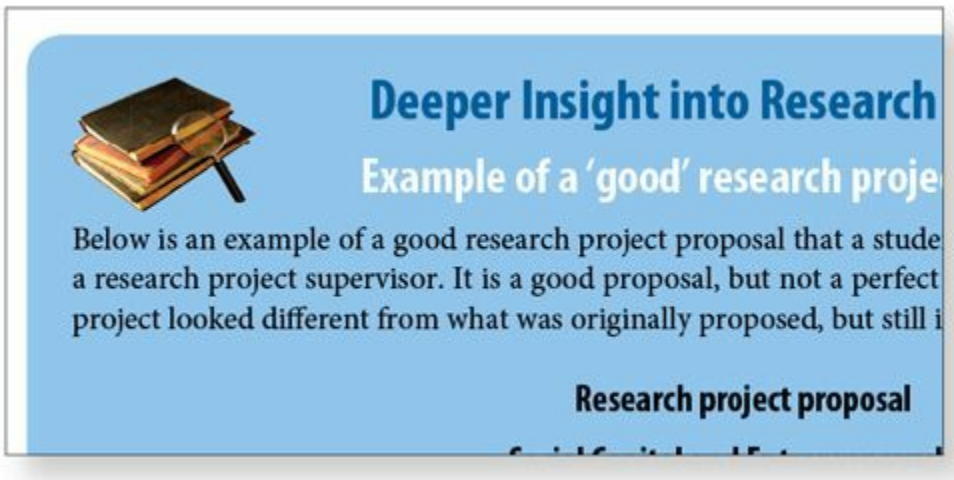
Exhibits

A number of exhibits are provided in each chapter to help you visualize the various research models, and to illustrate and summarize important concepts.



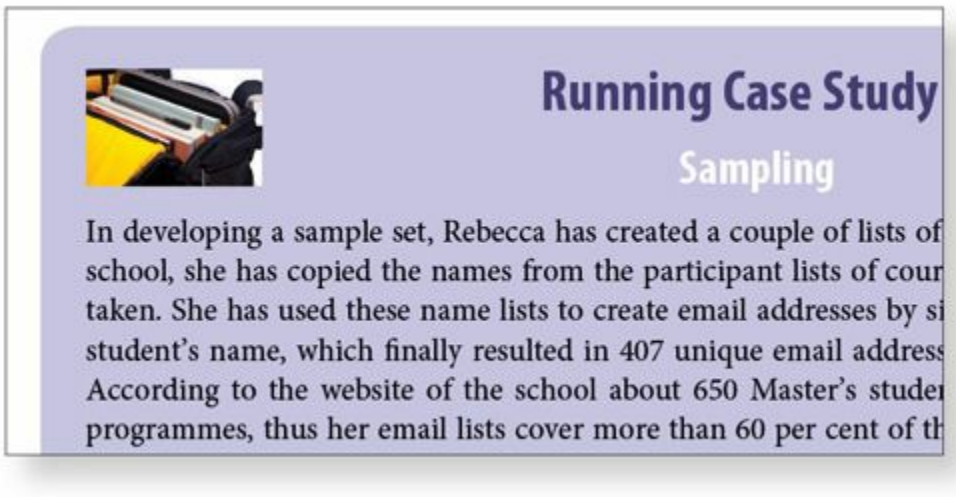
Student Research

These boxes offer direct insight into real student projects. They explain some of the situations and research decisions faced and offer hints and tips for your own projects.



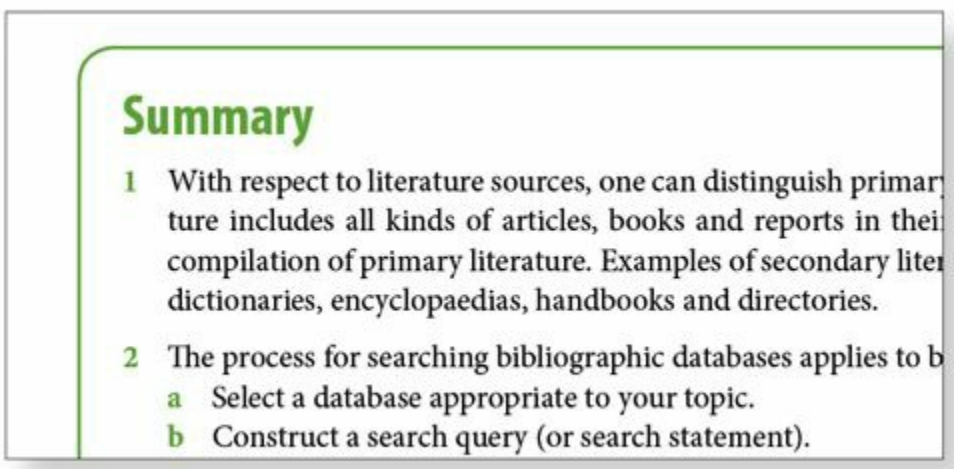
Deeper Insight into Research Methods

This feature offers you more in-depth insights into specialized topics of research designed to broaden your understanding.



Running Case Study

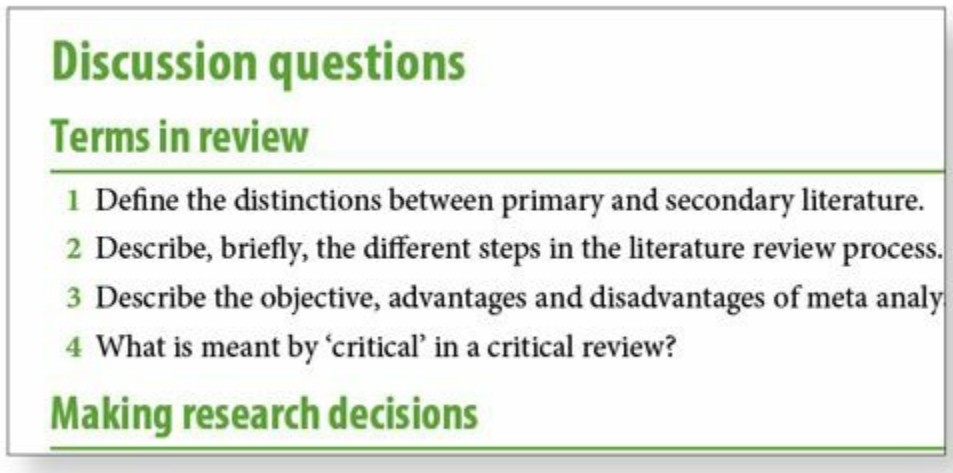
The running case study maps the progress of two real-life student research projects as they develop, helping you to put the relevant concepts into context. Questions are presented throughout to stimulate thought on your own project.



Summary, Discussion questions and Recommended further reading

Positioned at the end of each chapter, summaries and discussion questions review and

reinforce your understanding of the main topics and skills covered. Reading and class discussion sessions provide pathways for taking your study further.


Discussion questions

Terms in review

1 Define the distinctions between primary and secondary literature.
2 Describe, briefly, the different steps in the literature review process.
3 Describe the objective, advantages and disadvantages of meta analy
4 What is meant by 'critical' in a critical review?

Making research decisions

Discussion questions

Each chapter includes four categories of discussion questions, each of which encourages readers to review and apply the knowledge acquired from each chapter. The four categories cover the main types of learning used in the book: **Terms in review, Making research decisions, From concept to practice,** and **Class discussion.**

PART 1
Essentials of research

Part contents

1 The nature of business and management research
2 The research process and proposal
3 Literature review
4 Ethics in business research

CHAPTER 1

The nature of business and management research

Chapter contents

1.1 Why study research?

1.2 What is research?

1.3 Is research always problem-solving based?

1.4 What makes good research?

1.5 Research philosophies

1.6 Scientific reasoning

1.7 Understanding theory: components and connections

1.8 Propositions and hypotheses

1.9 Theory

Learning objectives

When you have read this chapter, you should understand:

1. what research is, and the different types of research available
2. the difference between good and poor or unprofessional research
3. that research is embedded in different research philosophies and their basic principles, assumptions and implications
4. how to formulate a solid research hypothesis.

1.1 Why study research?

Assume for the moment that you are the new head of the South European office of a Swedish machinery manufacturer. Your appointment makes you the fourth person to hold this post in just three years. Some of the sales and service staff, who have worked for the company for more than 10 years, have packed in their jobs, and complaints from customers regarding poor after-sales service are on the increase. What will you do? How do you begin to think about how to solve this problem?

Here is another decision-making scenario. You are talking with the head of the academic department of the subject you are studying. She chairs the committee that is responsible for selecting the textbook for the research methodology course. How should she begin to evaluate the committee's options?

Finally, the production of a research project marks the end of your business studies course. A research project requires more from you than just a comprehensive overview of the current literature related to your research topic. Research projects that offer at least a small new contribution to our understanding of the issues investigated usually receive a better assessment. However, how do you set up a research project – that is, how do you come to a problem statement? And once you have a research problem and research questions, how will you arrive at answers to these research questions? Research methods provide you with ideas, instruments and models that demonstrate how to conduct sound research.

The study of research methods will provide you with the knowledge and skills you need to solve the problems and meet the challenges of a fast-paced decision-making environment. **Business research** may be defined as a systematic inquiry whose objective is to provide the information that will allow managerial problems to be solved. Business research courses recognize that students preparing to manage business, not-for-profit and public organizations – in all functional areas – need training in a disciplined process that will enable them to investigate and solve a research or **management dilemma** (i.e. any problem or opportunity that requires a management decision). Three factors have stimulated an interest in this scientific approach to decision-making:

1 the need for more and better information as decisions become more complex
2 the availability of improved techniques and tools to meet this need
3 the resulting information overload if discipline is not employed in the process.

The past two decades have seen dramatic changes in the business environment. Emerging from what is, historically, an economic role, the business organization has evolved in response to the social and political mandates of national public policy, explosive technology growth and continuing innovations in global communications. These changes have created new knowledge needs for the manager and new publics that should be considered when evaluating any decision. Other knowledge demands have arisen as a result of problems with mergers, trade policies, protected markets, technology transfers and macroeconomic savings–investment issues.

The current trend towards complexity has increased the risks associated with making business decisions, meaning that it is more important than ever to have a sound information base. Likewise, the complexity of the phenomena that scientists are investigating impedes our understanding of what is really happening. Rather than concluding that 'all depends on almost everything', we must strive for meaningful explanations. Below is a list of factors that characterize the complex business decision-making environment; each demands that managers and scientists have more and better information on which to base their decisions:

- There are more variables to consider in every decision.
- More knowledge exists in every field of management.
- Global and domestic competition is more vigorous, with many businesses downsizing in order to refocus on primary competences, reduce costs and make competitive gains.
- The quality of theories and models available to explain tactical and strategic results is improving.
- Government is continuing to show concern for all aspects of society, becoming increasingly aggressive in protecting these various publics.
- The explosive growth of company websites on the World Wide Web, e-commerce, and the

availability of company publications via desktop and electronic publishing, have heralded the presence of extensive new arrays of information. Its quality, however, is not always impeccable.
- Workers, shareholders, customers and the general public are demanding to be included in company decision-making; they are better informed and more sensitive to their own interests than ever before.

To succeed in such an environment, we need to know how to identify high-quality information and how to recognize the solid, reliable research on which high-risk decisions can be based. Luckily, while the decision-making environment has become more complicated, business research tools have at the same time become more sophisticated and improvements in information technology have served to streamline the research process. Each of the factors listed below demonstrates how recent developments have affected the business research process:

- Organizations are increasingly practising data-mining – learning to extract meaningful knowledge from volumes of data contained within internal databases.
- Advances in computing technology have allowed businesses to create the architecture required for data warehousing – electronic storehouses where vast arrays of collected, integrated data are kept, ready for mining.
- The power and user-friendliness of today's computers means that data may easily be analysed and used to deal with complex managerial problems.
- Quantitative analysis techniques take advantage of increasingly powerful computing capabilities.
- The communication and measurement techniques used in research have been enhanced.

As a researcher, you will need to know how to conduct such research. If you are to develop the skills required in this area, you will need to understand the scientific method as it applies to the managerial decision-making environment. That is why this book addresses your needs as an information processor. Throughout the text we give a slight emphasis to the perspective of an academic researcher or student, as we believe that most users of the text currently belong to these two groups. However, business decisions and research are also often conducted, or at least requested, by managers. By and large, academic researchers, students and managers encounter the same methodological problems while conducting business or management research, although the former often emphasize aspects other than the latter. As many of our users are currently students who will become managers in the near future, we will also address issues that pertain to research in a commercial rather than an academic setting.

1.2 What is research?

Having seen *why* research is a vital part of the business decision-making process, it is time to look at just what research is. We will begin with a few examples of management problems that involve decision-making based on information-gathering. When you have read through each of these, you will be able to abstract the essence of research. How is it carried out? What can it do? What should it not be expected to do? As you read the four cases below, bear in mind the possible range of situations available for conducting business research, and think about how you might answer the following questions:

1 What is the decision-making dilemma facing the researcher or manager?
2 What must the researcher accomplish?

Cases

Air Swiss

You work for Air Swiss, an aviation company that is searching for new international partners. The senior vice-president for development asks you to head a task force to investigate six companies that are potential candidates. You assemble a team composed of representatives from the relevant functional areas. Pertinent data are collected from public sources because of the sensitive nature of the project. You examine all of the following: company annual reports; articles in business journals, trade magazines and newspapers; financial analysts' assessments; and company advertisements. Your team members then develop summary profiles of the candidate firms based on the characteristics gleaned from these sources. The final report highlights the opportunities and problems that acquisition of the target firm would bring to all areas of the business.

Akademiska Sjukhuset

You are the commercial manager of Akademiska Sjukhuset, a major academic hospital in Sweden. A prominent manufacturer of medical equipment has contacted you to ask whether you would be willing to purchase a new-generation MRI scanner, which uses magnetism, radio waves and a computer to produce images of body structure.

The doctors' committee at the hospital, to which you will need to make a recommendation, will have to decide on this question. If they choose to purchase the new scanner, they will also agree to test new applications for it and report back to the manufacturer on their experiences. In exchange for this they will get access to the latest technology at a significantly reduced price, and become a member of the manufacturer's network of preferred hospital partners.

You begin your investigation by mining data from patient files to learn how your current MRI scanner is used and what kind of diagnoses it can be used for. You then consult other Swedish hospitals to find out how well equipped they are with MRI technology, and how many patients might, potentially, be treated in your hospital if you invest in the technology. You attempt to confirm your data with information from professional and association journals.

Based on this information, you develop a profile that details the number of patients that could be treated and the overheads and potential revenue that would be realized as a result of purchasing the new scanner.

ColorSplash

ColorSplash, a paint manufacturer, is having trouble maintaining profits. The owner believes inventory management is a weak area of the company's operations. In this industry, the many paint colours, types of paint and container sizes make it easy for a firm to accumulate large inventories and still be unable to fulfil customer orders.

The owner asks you to make some recommendations. You look into the company's present warehousing and shipping operations, and find excessive sales losses and delivery delays because of out-of-stock conditions. An informal poll of customers confirms your impression. You suspect that the present inventory database and reporting system do not provide the prompt, usable information that is needed to allow appropriate production decisions to be made.

Based on this supposition, you familiarize yourself with the latest inventory management techniques in a local college library. You ask the warehouse manager to take an accurate inventory and you

review the incoming orders for the last year. In addition, the owner shows you the production runs for the last year and the method he uses to assess the need for a particular colour or paint type.

Modelling the last year of business using production, order and inventory management techniques, you select the method that, in theory, will provide the greatest profit. You run a pilot line using the new control methodology. After two months, the data show a much lower inventory and a higher order fulfilment rate. You recommend that the owner adopt the new method.

York College

You work for York College's alumni association. It is eager to develop closer ties with its ageing alumni in order to encourage increased donation levels and to persuade older, non-traditional students to return to education and thus supplement enrolment numbers. The president's office is considering the construction of a retirement community that is geared towards university alumni and asks your firm to assess the attractiveness of the proposal from an alumni viewpoint. Your director asks you to divide the study into four parts as follows.

Phase 1 First, you are to report on the number of alumni in the appropriate age bracket, the rate of new entries per year and the actuarial statistics for the group. This information will allow your director to assess whether the project is worth pursuing.

Phase 2 Your early results reveal that there are sufficient alumni to make the project feasible. The next step in the study is to describe the social and economic characteristics of the target alumni group. You review gift statistics, analyse job titles, and assess home locations and values. In addition, you review files from the last five years to see how alumni responded when they were asked about their income bracket. When you have finished, you are able to describe the alumni group for your director.

Phase 3 It is evident that the target alumni can easily afford to join a retirement community as proposed. The third phase of the study is to explain the characteristics of the alumni who would be interested in a university-related retirement community. For this phase, you engage the National Pensioners Convention (NPC) and a retirement community developer. In addition, you search for information on senior citizens from federal government sources.

From the developer you learn what characteristics of retirement community planning and construction are most attractive to retirees. From the NPC you learn about the main services and features that potential retirees look for in a retirement community. From government publications you become familiar with existing regulations and recommendations for operating retirement communities, and uncover a full range of descriptive information on the typical retirement community dweller.

You make an extensive report to both the alumni director and the university president. It covers the number of eligible alumni, their social and economic standing, and the characteristics of those who would be attracted by the retirement community.

Phase 4 The report excites the college president. She asks for one additional phase to be completed. She needs to predict the number of alumni who would be attracted to the project so that she can adequately plan the size of the community. At this point, you call on the college business school's research methods class for help in designing a questionnaire for the alumni. By providing telephones and funding, you arrange for the class to conduct a survey among a random sample of the eligible alumni population. In addition, you have the class devise a second questionnaire for alumni who will