Introduction

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Why another book about research methods? The answer is simple. Research is such an important subject for information professionals – those who work in the field of information management and information systems – that there will always be a need for effective guides to it. Research skills are a prerequisite for those who want to work successfully in information environments, an essential set of tools which enable information *workers* to become information *professionals*. *Research methods for students, academics and professionals: Information management and systems* provides such skills and encourages the information professional to acquire critical and evaluative attitudes. It also has the merit of being Australian-focused, unique among research texts for information professionals. Also notable is its multi-disciplinary focus (of which more later).

Research and professional practice

The work of information professionals is being transformed. The information services we offer, the information products we develop and sell, the information systems we design and implement, are undergoing rapid change. So, too, is the society in which we operate. We have a continual need to determine what is happening, how it is changing, how it will affect our places of work, how it will alter the services we offer. Change and its ramifications is the most important reason why research is necessary, and why it is here to stay. If you don't know something about the tools of research and about how to use these tools, then you cannot be an effective information professional.

Research and *professional* practice are inextricably linked. Research can and does play a vital role in professional practice in the fields of information management and information systems, in corporate, government, educational and community sectors. The most obvious uses of research in these information environments are for problem solving, for development, evaluation and improvement of services and systems, and to provide information before introducing new systems or services (perhaps through the assessment of user needs). As Williamson notes in Chapter 1, research in professional practice is undertaken for many reasons:

• to assist in understanding the problems and issues which arise in the workplace;

• to add to knowledge in the field and/or provide solutions to problems;

• to maintain dynamic and appropriate services;

- to meet requirements of accountability;

- to maintain and improve professional status; and

- to provide a body of research findings and theory to inform practitioners.

The inescapable conclusion is that information professionals need to be – at the very least – *intelligent* and *critical consumers of research*. A quote in Chapter 1 emphasises this point clearly and emphatically:

> Research enables professionals to add value to their work and work practices ... [Its use] distinguishes between professionals who maintain the status quo without question and those who strive to develop their work practices through continual evaluation and investigation (Lowe 1999, p. 1).

The bottom line is that all information professionals must be able to read research reports properly, to understand their contents, and to ascertain whether or not the contents are appropriate to apply to their own work. Many (but perhaps not all) information professionals will also require the critical facility and practical skills to be able to conduct their own research to address workplace problems and issues, to improve practice, and/or to offer better services and products.

Research methods for students, academics and professionals: Information management and systems focuses on producing critical consumers of research. It also goes some way towards producing researchers in the fields of information management and systems.

A multi-disciplinary approach

Who are the information professionals at whom this book is directed? It is multi-disciplinary in its approach, with its authors being drawn from information management (librarianship, archives and recordkeeping) and information systems. Examples are drawn from these multiple disciplines. This reflects the growing realisation that information management (or information studies) is redefining itself as a discipline. Formerly discrete areas (librarianship, archives, records management, information systems as a computing sub-discipline), they are now coalescing – the impetus being information and communications technology. The authors come from SIMS (the School of Information Management and Systems) at Monash University, Melbourne. In this School, the amalgamation of different disciplinary groups, initially made for pragmatic reasons, has been the impetus for identifying and developing productive synergies – hence this book.

One of the outcomes of the multi-disciplinary approach is that this book provides stimulus for those of us who come from a discrete research tradition. Here the various traditions of research are clearly explained and developed within a spectrum model, with positivist traditions at one end, and interpretivist at the other. The information management and systems discipline, this book makes clear, deals with all of them in varying mixes.

Another outcome is the variety of views provided by the book's many contributors based in different disciplines and research traditions. Although the variety of contributors also contributes to stylistic variation within the book, the reader will find that any unevenness of style is well and truly overridden by the strengths this variety contributes – a heady mix of the theoretical and the practical, and the stimulation provided by the multi-disciplinary approach.

How to use this book

The structure of this book differs from the usual research methods texts in information studies (Busha and Harter 1980; Glazier and Powell 1992; Gorman and Clayton 1997; Powell 1997; Slater 1990). It distinguishes between research *methods* and research *techniques,* on the basis that a research technique for data gathering (for example, focus groups) can be used with a number of different methods. Typically books about research treat technique and method together, thereby implicitly limiting the use of a particular technique to a certain method, for example, questionnaires with surveys. The approach offered in this book also helps the reader and beginning researcher to avoid the tendency to concentrate on a single method or technique to the exclusion of other viable approaches. The research problem, the research question, has to be the starting point of the research, with the choice of method(s) and technique(s) consequent on this. One of this book's strengths is that it presents the palette of methods and techniques from which the researcher can identify those which are most appropriate to the research problem.

Williamson acknowledges that it is not always easy to differentiate research method from research technique. Here *research method* denotes a design for undertaking research, including the theoretical background to this design. *Research techniques* are used to describe the means by which data are gathered and samples selected. Chapter 1 explains this further.

The book has four sections. The first, consisting of Chapters 1 to 4, introduces the subject, provides a framework for thinking about research, notes major issues and typologies of research, and describes what is required to get started on a research project. Chapter 4, a new chapter in this edition, addresses ethics, accommodating the realisation in recent decades that the ethical implications of our research have to be taken seriously. The second section (Chapters 5 to 12) examines research methods: survey, case study, experimental design, system development in information systems research, action research, ethnography, historical

research, and the Delphi method. The third section (Chapters 13 to 16) describes techniques used for data collection: questionnaire design, interviewing, focus groups, and ethnographic techniques, including observation. The final section (Chapters 17 and 18) deals with data analysis, and evaluation of published research. A Postscript poses questions which will encourage further thinking about the role and conduct of research in information management and systems.

What the book does not cover

Inevitably a book of this nature will have omissions. Not present are some of the techniques occasionally applied in research in information management and information systems. The most obvious of these are bibliometrics and its offspring citation analysis, and content analysis. *Bibliometrics* is a technique which counts and interprets data gathered from and about publications. (Currently a claim is being made to allow webometrics into the echelon of research techniques.) *Content analysis* is used to analyse a body of literature and deduce from this analysis some characteristics of the literature, such as identification of themes and how frequently they occur.

Warranty statement

Finally, a guarantee of quality. The contents of this book have been road-tested with students and academics from several disciplines at several universities. Their input has been helpful, gratefully received, and incorporated into the text of the book. In research terms, the contents have been refereed and found to be authoritative!

References for Introduction

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