AGUIDE TO BUSINESS RESEARCH

Developing, Conducting, and Writing Research Projects

SECOND EDITION ARLES B. SMIT

A GUIDE TO BUSINESS RESEARCH

Developing, Conducting, and Writing Research Projects

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SECOND EDITION



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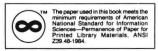
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Preface

As it was for the first edition of *A Guide to Business Research*, the purpose of this revised edition is to help business students with their research projects, theses, or dissertations. The intent is to provide a simple, straightforward *guide* for handling those elements in research that students say are the most perplexing or troublesome to them.

In response to users' comments and suggestions about the first edition, a chapter on scholarly writing practices and a list of 258 potential research projects have been added. Plus, additions to the original chapters have been made. As before, however, this revised edition is intended for undergraduate and graduate research and report writing.

This book differs from the conventional research methods text in the proportion of the type of material presented. That is, about half of the material in this book relates to the

written presentation and half to research methods. Typically, one sees a research methods text with only one chapter or a portion of a chapter devoted to the written presentation. Yet, if researchers cannot present in a logical, orderly fashion what they did and what they found, they will have failed. The reader should not have to contend with an awkward or illogical presentation.

No pretense is made here for a full-fledged textbook on research methods and design. Many specialized texts in this area are available; therefore, the intent here is to provide an informal and practical approach to research as a *process*.

Materials and ideas in this book came from twenty-nine years of teaching, reading, and discussing ideas about research and writing. For the helpful comments and searching questions from hundreds of graduate students over the years, I owe a debt of appreciation. If I have taught them and helped them in their careers, I am grateful; they can be sure they have helped me to understand their needs in facilitating completion of a research project.

I have found the students want to know how to structure a research project—from scratch—and then how to present it in an acceptable manner. And they have found the bachelor's degree provides no magical transfer of training in report-writing ability to the graduate student. Therefore, if the students who use this book learn to appreciate a creditable research project and to not fear tackling such a project, then I shall have achieved my purpose.

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Characterizing Research

Research is characterized by a wide range of meanings and activities. Some people may think of research in terms of a well-equipped laboratory, bustling scientists, and a formula-laden chalkboard. Others may think of research in terms of their own activities—that of casually reviewing newspapers, magazines, and journals, or asking a few questions when convenient, or using some trial-and-error methods. These are the people who are likely to comment, "I've done a little research on that."

Students may think of research in terms of reviewing indexes and copying information from various sources on note cards. When they assemble the data from these note cards, replete with footnotes containing a liberal sprinkling of ibid.'s and op. cit.'s, they say they have completed a "research" project.

Students working on an advanced degree, however, usually are required to show proficiency in scientific research procedures and presentation of the results. They probably view research as a graduate-student ritual. Slight wonder, since research probably appears to be the major hurdle to a graduate student's achieving an advanced degree. Too, beginning graduate students find the baccalaureate degree has conferred on them no magical transfer of training in research methods.

One has only to observe a typical student embarking on a research project, thesis, or dissertation. Very likely, the budding researcher ends up in the library reviewing completed theses and dissertations to imitate their organization and style. The trouble is, all these authors, too, have imitated their predecessors, and so on. The result is a perpetuation of a sterile, stereotyped, and sometimes illogical presentation; ignorance is compounded. The old saying is: "if you steal from one author, it's plagiarism. If you steal from many authors, it's research."

The spectrum of meanings of research, then, ranges from that of guesses or hunches based on a smattering of information collected haphazardly to that of conclusions reached by using scientific or systematic research methods. Thus, the purpose of this chapter is to examine the characteristics of the research process by:

- 1. Defining research
- 2. Determining the nature of creditable research
- 3. Reviewing the scientific method
- 4. Classifying research methods
- 5. Identifying the goals of research
- 6. Relating research to scholarship

Defining Research

You would probably find as many definitions of research as you would the number of authors writing about it. A review of these definitions shows most have the following elements or terms in common:

Activity	What Kind	Why
inquiry investigation experimentation examination creation	systematic studious critical diligent exhaustive orderly objective logical	to discover facts to revise accepted princi- ples or conclusions to find new truths to avoid status quo

Research is an activity, a process, or a method; and two of the preceding lists are "what" and "why" qualifiers of the activity. You can see, then, that combinations of these words will serve to define research as is evident from definitions of research in other published works. For example, a selection of words from the foregoing lists can result in combinations such as these:

Research is:

- a systematic, studious inquiry to discover facts, to find new truths, and to avoid the status quo. (or)
- an orderly, exhaustive investigation to revise accepted principles or conclusions. (or)
- a diligent, objective examination to find new truths and revise accepted principles or conclusions.

The point is that you really can take your choice of definitions, provided you use the generally accepted terms as listed here.

But can't we have a better definition? Perhaps. Really, one important element in research is that of curiosity. Research requires of a person an attutide of inquisitiveness, that of "I wonder how . . ." or "I wonder why . . ." or "I wonder what. . . ." The researcher seeks to know reasons and causes behind events and behavior. So, now we can say: Research is an activity characterized by intellectual curiosity, using systematic planning to collect facts, performing objective analysis through logical thinking, and ending with a new truth or verification of an existing one.

Yet, with all the definitions of research available, apparently something more is needed. The wide ranges in quality evident in completed research projects, theses, and dissertations suggest criteria need to be established for creditable research.

Determining the Nature of Creditable Research

Creditable research means praiseworthy research; it measures up to today's accepted standards. One could ask these questions to determine creditability. When is research really research? Does the typical college term paper qualify as research? Does the market survey qualify as research? Does simulation or model building qualify as research? Does a history qualify as research? How do these types of projects compare with typical theses or dissertations? Are all of these types creditable research? More than likely, we would find that the depth of meaning of the word *research* varies with the person or group, even though the activity or process completed actually meets the broad definition of research given here.

Then, what characteristics make research creditable? Although the list of characteristics could be long, detailed, and subject to many people's whims, basically, five comprehensive characteristics are inherent in creditable research.

1. A meaningful, limited, clearly defined problem. Since the problem is the very basis of the research, it must have creditable characteristics of its own. (These characteristics are described in the next chapter.) The problem must be relatively significant, feasible, and clearly stated, preferably as a question requiring an answer. The problem must be limited or confined. You can hardly write about the world and all that is in it. The problem should be within your capabilities to handle. You should possess or have the ability to obtain the necessary background that will qualify you to undertake the research.

The commendable problem also opens the door for new problems and fields of investigation; it fosters curiosity that may, in the future, contribute to knowledge in general.

- 2. A need or a purpose. To satisfy an academic requirement is not enough of a purpose. Neither is an accidental finding made when you are not engaged in research a satisfactory need. A purpose or need should involve personal curiosity—a desire to solve a universal problem, to contribute to general knowledge, to change the *status quo*, to improve a situation. It should be in a field that offers promise for research and problems that need to be solved. A selfish purpose, the purpose confined to individual gain only, is excluded.
- 3. An appropriate research design. The research design must include consideration for all facets or aspects of the problem. The research cannot be classified as creditable if the methods used do not permit an appropriate, full, and detailed investigation. Creditable research usually employs the scientific method; that is, it follows a systematic plan, beginning with a problem statement and progressing through the stages of hypothesis statement (stated or implied), careful collection of facts, classification and analysis of facts, and generalizations from the facts. Although the problem may be worthy, inappropriate methods may render the research worthless.
- 4. Proper collection and treatment of the data. Creditable research must have a logical approach to the collecting and handling of research data. The techniques and procedures should relate only to answering the problem; extraneous data should be excluded. Authoritative, objective data should be preferred in place of biased, subjective data. Quantitative data, as well as qualitative data, should be gathered. Facts and conclusions accumulated by other investigators should be part of the raw material.

Facts are not worth much alone; they achieve value only through analysis and interpretation leading to properly supported, clear, decisive conclusions. Without such properly supported conclusions, the research will not be creditable no matter how extensive the investigation. It must end in new truths for any reader, not opinions slanted to satisfy a particular group or to prove a point.

5. A complete, logical, and orderly presentation. The mechanics of presentation should be appropriate to the problem

and conform to accepted research presentations. If a problem has been fully investigated and logical conclusions drawn, the proper presentation of the information will help to determine the research creditability. Regardless of how valid and acceptable the research may be, you can hide your efforts completely through an inept, inaccurate, illogical presentation. Unfortunately, the converse is not true. An exceptional presentation will not salvage a poor job in research. Creditable research leads a reader through the problem and its solution with ease, while satisfying any anticipated curiosity of the reader in the process. The material is properly organized, classified, and coordinated in the research presentation. Good format and writing style help put across the research to the reader.

Creditable research, then, must have a meaningful problem, be purposeful, employ appropriate procedures, have properly supported conclusions stemming from logical analyses, be presented in proper form, and be based upon the scientific method.

Reviewing the Scientific Method

The term *scientific method* is somewhat a misnomer—it's not really a method in the sense of a formal procedure. Rather, it is a rigorous, systematic approach to problem solving that has evolved from the work of pioneers in science. Research for problem solving in most disciplines has followed three previous approaches: trial and error; authority and tradition; and speculation and argumentation (philosophizing).

The scientific method is the offspring of a branch of philosophy called <code>epistemology</code> (from the Greek <code>episteme</code>—for knowledge, and <code>logos</code>—for theory). In the seventeenth century, Francis Bacon attempted to provide a blueprint for acquisition of "scientific knowledge." He offered a fourfold rule of work: observe, measure, explain, and then verify. By the nineteenth century, a more sophisticated version was offered:

- pose a question about nature
- collect pertinent evidence

- · form an explanatory hypothesis
- · derive its implications
- test them experimentally
- · accept, reject, or modify the hypothesis accordingly.

The scientific method is based upon the assumption that events in nature have a cause and a natural explanation and are repeatable. It involves following certain "rules" as evolved from the work of pioneers in science, so that the knowledge obtained in the investigation will be more reliable than that obtained by a "seat-of-the-pants" approach or a trial-and-error method. Thus, the scientific method relates to how reliable knowledge is obtained. In fact, the method can be viewed as an attitude or a philosophy that provides guidance for researchers. So, although not all research may have scientific results or conclusions, all creditable research does use scientific procedures—the scientific method.

The scientific method itself has been the subject of many books, some with diverse views about the method. These writings reflect variations in the number of steps in the scientific method, but these variations stem only from the method the various authors use to classify the steps. As viewed here, the following are the logical steps in the research process using the scientific method:

- 1. Select a field, topic, or subject, preferably related to your expertise and interest
- 2. Select a problem

through: your curiosity

your experience asking authorities updating research

evaluate by asking: Is it feasible?

Are data available? Are methods available?

Is it interesting?

Will it make a contribution?

limit by: dividing

asking questions

factoring reducing variables restricting scope

3. Construct a preliminary bibliography

by using: indexes

card catalogs bibliographies

4. Develop a research design

by: reviewing literature and research

constructing hypotheses

developing research procedures determining data analysis

approach

5. Make a research proposal

by stating: tentative title

problem background the research problem

the research objective and need the study scope and limitations

definitions of terms the research design tentative project outline the working bibliography

6. Collect data

through: secondary sources

primary sources (or both)

by experiment

by survey (interviews,

questionnaires, observation)

7. Organize data

by: classifying data

testing the outline

formulating preliminary tables

and graphics

8. Analyze data

by: testing hypotheses

noting trends, relationships,

implications, causes, effects, significance, comparisons, contrasts

9. Derive conclusions

to:

answer the research problem note significance of findings point out implications

10. Write the research report

by:

making a scholarly presentation publishing the results integrating the findings in the literature

The foregoing list is somewhat arbitrary both in the order of presentation and in the number of steps listed. For example, one researcher may determine the elements of the problem before surveying the field of literature. Perhaps the steps could be reduced to nine by combining steps four and five. What is important is that, regardless of the order of the steps or the number of steps, all of the elements of the scientific method have been included when the research is completed.

The development of scientific methods of investigations has led the way to more efficient research. The importance of research method cannot be overestimated in the advances that have been made as a result of scientific research carried out in all disciplines.

Identifying the Goals of Research

Traditionally, research has been classified by the researcher's goal or purpose for undertaking research—that of *pure* or *applied* research.

Pure research is also known as *basic*, *fundamental*, *disinterested*, or *free*. Pure research is characterized as having no prevailing goal and of being of interest only to one's colleagues. The major thrust is a deeper understanding of the universe and the