THE IMPORTANCE OF RESEARCH

Never have we needed a good crystal ball more than we do today. Yesterday's answers to business challenges no longer solve today's problems. Our society is undergoing fundamental changes as it shifts from the industrial age into the information age. Technology has and will continue to accelerate this change. The success of enterprise more than ever hinges on information—new ideas and strategies for providing goods and services. Information, carefully cultivated and used, is the lifeblood of every successful organization.

Because of this increasing emphasis on information, primary research skills are needed by managers, supervisors and anyone coping with today's business problems. Research isn't just for professors and graduate students. It is the key to good decisions and organizational effectiveness.

Research Skills Build Your Career Value

A recent survey done by the Administrative Management Society indicates that the ranks of middle managers have decreased by 25% over the last three years, largely because corporate leaders believe that layoffs in this area coupled with new technology will lead to greater productivity. What this means is that competition for the manager's job is increasing. People who want to ascend the corporate ladder will need to have modern skills. Just as the ability to obtain and use capital wisely was the mainspring of the industrial society, the ability to obtain and use information wisely will be the driving force behind the information age.

One of the manager's most important tools in obtaining information is primary research. People who are good researchers create a career advantage that will pay off handsomely.
THE PURPOSE OF RESEARCH

The purpose of research is to answer questions—to advance knowledge. A great deal of knowledge has been obtained through trial and error and chance experience. That method is a useful, but risky way of getting good answers.

In some cases, trial and error may be an acceptable option. Children learn basic skills by trying and failing until they get it right. There is no other way to learn how to walk or catch a ball.

A higher level of learning, however, uses logic, which leads to conclusions based on previous generalizations and experiences. Logical thinking puts different concepts together to form a new conclusion or concept. Research is simply a systematic way of doing this. It incorporates data-gathering methods to advance our understanding and make better decisions.

Here is a simple example you have probably experienced: If you decide to buy a new car, we doubt that you would just walk into the nearest dealer and grab the first car in sight. Instead, you would probably do some research. You might read stories in automobile magazines or consumer’s guides to compare features. Perhaps you’ll talk to friends who have recently bought new cars and ask about their experiences. You might even count the number and type of new cars you see on the streets, assuming that if a lot of people are buying a certain brand, it must be pretty good.

This is the kind of research you have been doing all along. The object of this book is to help you do more effective research.

Researching is not mysterious; it’s not exceptionally complex. It can become a day-to-day activity that produces huge dividends in the form of good answers and good decisions.

WHAT’S YOUR RESEARCH I.Q.?
A Quick Check of Your Research I.Q.

Answer the following true or false:

1. Research takes many forms but is always systematic in its approach.
2. Careful research is essential in solving any business problem.
3. Research is a sophisticated science using precise methods only.
4. Any problem can be solved with library research.
5. Statistical analysis must be done to get any meaningful conclusions from research.

Author comments on Research I.Q.:
THE NATURE AND SCOPE OF BUSINESS RESEARCH

Business research has four unique characteristics:

1. Business research is almost always applied research. This means that it is problem-oriented with the objective of obtaining information to help solve a specific business problem or make a decision.

2. Business research tends to have a time limit. It makes little sense to gather information about a decision that was made three weeks ago or to get information next week that we need today. Information is highly perishable. It gets old and useless very quickly. Like fish, if you don't consume it when fresh, it loses a lot of its flavor—and starts to smell bad!

3. Business research is done in an environment in which conditions change rapidly. The answers to research questions asked today may very well differ from the answers to the same questions obtained yesterday. In those areas where the manager needs to "stay in tune" with the changing landscape, the same research questions might need to be asked repeatedly. Successful organizations develop a culture where constant research is an integral part of their operation.

4. Business is a for-profit enterprise, so research must have some cost limits applied. Research can be expensive and time consuming (although many economical approaches can be used). If faced with a $10 problem, don't waste $1,000 on research. Likewise, a million-dollar decision must have a bigger budget for research than a $100 decision.
RESEARCH CAN BE CLASSIFIED AS PRIMARY OR SECONDARY

For our purposes, the following definition will apply: Research is the process of getting dependable answers to important questions using a systematic method of gathering, analyzing and interpreting evidence. Its end product is knowledge.

When we search through publications (books, magazines, newspapers, pamphlets, government documents, atlases, encyclopedias, etc.) looking for answers to questions, we are doing what is called secondary research. The use of secondary research techniques allows managers to save their companies much time and money by avoiding unnecessary duplication. The attitude here should be, “Why reinvent the wheel when it’s so much easier to read about what others have already done?”

For many research questions, a literature search should be done first to find relevant data that will either answer the question outright or help refine it further. When you reviewed a copy of Consumer Reports before buying a car, you were using secondary research. A skilled librarian and some patient snooping around at a good library can help you in these efforts.

Let’s assume, however, that the library research effort has not yet yielded a solid answer to the question. You’ve read the car magazine but still aren’t ready to make a buying decision based on this information. You want to be certain that you are buying the best car for you.

Then you will find it necessary to do primary research—to collect primary data that must be obtained firsthand from nonpublished information sources. Such information comes from four sources:

- OBSERVATIONS
- SURVEYS
- INTERVIEWS
- EXPERIMENTS

In our car-buying example, you may well use all four. You will observe how well the car seems to be built, how it sounds, how it handles on the road. You may take an informal survey by interviewing some friends who have bought similar cars. You may even try an experiment where you’ll try driving several cars over the same roads at the same speeds to see which handles better.
RESEARCH CAN ALSO BE CLASSIFIED AS BASIC OR APPLIED

Basic research seeks to further human knowledge about our world. This type of research does not necessarily solve a specific problem. Basic research sometimes is called "pure" or "fundamental" research. Scientists who study the laws of nature to understand these phenomena further are doing basic research. Business examples of such research questions may be "How does population growth affect business cycles?" or "What are the relationships between weather and consumer behavior?" These questions are the stuff of "think tanks."

Applied research, on the other hand, is problem-oriented. It seeks to solve specific problems by providing information that will facilitate an appropriate decision. Business examples: "How will a 10% price increase affect our profits?" or "Where should we locate a new store, factory or distribution center?"

Applied research is what business people do to get the information needed for good decisions. With correct and accurate data, most business decisions become quite obvious.

### TYPES OF RESEARCH

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<th>Basic</th>
<th>Applied</th>
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<tr>
<td><strong>Primary</strong></td>
<td><strong>Collect Data to Solve Specific Problems</strong></td>
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<tr>
<td>Collect Data to Further General Knowledge</td>
<td>Search Publications to Solve Specific Problems</td>
</tr>
<tr>
<td><strong>Secondary</strong></td>
<td></td>
</tr>
<tr>
<td>Search Publications to Gain Further Knowledge</td>
<td>Search Publications to Solve Specific Problems</td>
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**Exercise: Your Turn**

In the chart below, write an example from your organization of each type of research.

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**Who**

**What**

**Why**

**Where**

**When**
PROBLEMS FOR PRIMARY, APPLIED RESEARCH

The following are examples where primary, applied research can be useful in reaching a business decision. The sample research questions have been grouped within four business functions found in most companies.

I. Marketing

- What price should we charge for our product?
- What distribution channels should be used?
- How well does the product match up with the competitor's product?
- How effective is the company's advertising?
- How will this new product be received by the consumers?
- What percentage of market penetration does Product X have?
- What is Product X's image in the consumer's mind?

II. Finance

- What would be the market reaction to a new stock offering?
- How does that typical investor view the company?
- What is the market value of the fixed assets in the manufacturing division?
- Do most of the Fortune 500 companies use this procedure?
- What do the accounting supervisors think about the new computer installation?
III. Manufacturing

- Who is the most reliable vendor for this raw material?
- What is the most efficient plant layout and location for Product X?
- Does Product X meet the quality control standard?
- Would it be possible to substitute raw material Y for Z?
- What automated warehouse system should be purchased?
- What lighting system gives the highest increase in productivity?
- What is the exact nature of this production task?

IV. Personnel

- What skills are required for this job?
- What is the salary range for similar employees in this area?
- What type of training would be desirable for this job?
- How do employees feel about their job, the company and its management?
- How good is the communication among employees, supervisor and subordinates?
- Which employees are promotable?

Some of the above examples of research questions might be answered with secondary (library) research, but if the library doesn’t offer a solid answer, be ready to find your own with primary research.
GROUND RULES FOR THE BUSINESS RESEARCHER

The following six ground rules will help you avoid serious methodological mistakes at the onset of any primary research effort.

1. Always Know What You Are Researching

It is possible for researchers to get so wrapped up in acquiring new data that they forget to keep a specific research problem in the forefront of their minds. They go off onto tangents and diversions from the primary purpose of the study, delaying the research findings and the business decision.

The "80/20 rule" applies here. The research can obtain 80% of the needed information by focusing on the relevant and critical 20% of the research factors. In other words, to get 100% of the information, it will take five units of effort but to obtain 80% of the information, only one unit of effort is necessary. By confining your attention to only the most relevant questions and data, your research project can be accomplished faster with less cost than trying to do an all encompassing research effort.

2. Always Test a Research Model

A model is a conceptual representation of the project or plan. Just as a manufacturer wouldn't design a new product without first building several models, so should the researcher build a model first.

A model presents a framework from which to work. The structure is useful because it assures that the researcher, in the excitement to implement a project, does not overlook important steps, which, if not considered, might render the research worthless.

Using a pilot study is the best way to test a model. The pilot study, in which the researcher analyzes a small sample of data, quickly reveals any glitches in methodology. These glitches can then be fixed before the company spends a lot of time and effort on more extensive research. This is an example of using a model. Once the methodology is checked for soundness, the database can be reliably expanded. A big pile of untested data is useless.
GROUND RULES FOR THE BUSINESS RESEARCHER (continued)

3. Never Use Only One Information-Gathering Technique

No matter how scientific the data-gathering technique is, findings should be checked by at least one additional research method. For example, a survey research approach might well be validated by personal interviews. Systematic observations of people may be checked against their productivity reports. The two-technique approach is professionally known as the use of nonrepetitive, redundant measures. The adage is: If the research is worth doing, it is worth validating with a second approach. Or as the old carpenter used to say, "Measure it twice before cutting it once."

4. Use the KISS Principle

When it comes to studying a problem, keep it short and simple (KISS). Don’t carry on an extensive research project simply for the sake of the research. Remember the objective is to get good data that is useful to a business decision. This data is to be obtained as quickly, efficiently and inexpensively as possible.

When a great deal of money is spent on an elaborate research project, people will have high expectations for the result. If the problem does not warrant that kind of effort, the natural consequence will be a big letdown.

Furthermore, the more complicated the project is, the more likely something will go wrong. Complex, multidimensional research can be difficult to administer and confusing to interpret. It is better to do a series of separate, little studies. Keep the apples and oranges separate.
5. If Necessary, Hire a Professional

If the research decision is critical to the company and requires complex statistical tools beyond your experience, get help from a statistician or a professional research designer. This is not as expensive or difficult as it might seem. Many large organizations have specialists on staff who are paid to be in-house consultants for such efforts. Don’t be too ego-involved to get other people’s ideas and expertise. Research is often a team effort.

For smaller companies or when an in-house specialist is not available, get help in the open market. Outside consultants are readily available. They are fast, efficient, and although seemingly expensive, they can save companies a great deal of time and effort.

An excellent source for technical help can be found on university campuses. Colleges and universities that offer graduate programs generally have students or faculty who will help with interesting research. A phone call or two will usually obtain a name of a qualified person who can resolve research design and statistical questions for a minimal cost.

Remember too that faculty members are often eager to research real world problems so they can publish their results in professional journals or share their experiences in the classroom. By so doing, they build professional credibility and promotion opportunities. This can be a win-win situation for them and for you.
GROUND RULES FOR THE BUSINESS RESEARCHER (continued)

6. Make the Decision

Once the research has been completed, the manager should use the information to make a decision. It is important to do something with the research—don’t just continue researching the problem to death. At some point you need to quit cutting bait and start fishing.

Decisions are never made with 100% certainty. The manager who procrastinates, using the need for more information as the excuse, does the company no service.

One could argue that there is always the need for more information, especially on high-cost decisions. But using that excuse because the manager is afraid to make a decision is irresponsible.

Primary research exists to make better decisions. When careful research points the way, make the decision without delay.