Bringing Research to Life

"Come on over here and meet Robert Buffet." The president of the Economic Development Council seized Myra Wines by the elbow and propelled her across the dining room to meet a tall young man suited in navy blue pinstripes. She recognized his name: He was the local manager of a national accounting firm.

"Robert Buffet, meet Myra Wines, consumer affairs manager for MindWriter."

"Hello, Robert," she said. She studied him carefully, from his brightly shined black shoes to his razor cut hair. He was about the same age as her new consultant, Jason Henry, but something in the way he held himself suggested a self-assurance that Jason had not yet developed. This young man dressed like a banker, while Jason suggested a sincere yet somehow impatient librarian.

"And what a pleasure it is to meet you," he said in a ripe baritone voice, smiling with his lips but not his eyes, which had wandered to a prominent banker who was chatting with a competing CPA.

"Here's the situation, Myra," said the president. "The state commerce secretary has been concerned for some time about the extent to which entrepreneurial companies, which are popping up all over the state, are actually investing in job-building technology. They have contracted with Robert's firm to study the situation in five counties, assess job creation and the like, and report this back to Tallahassee."

Myra asked, "Am I right in suspecting that the governor is worried that these start-up companies are investing in robotics and computers and not creating new manufacturing jobs?"

"Basically, that is the concern, Ms. Wines," said the tall young man. "We have already cut the contract, you see, in Tallahassee, and so we have the green light to select our five sites and commence the interviewing."

"The thing is, Myra," said the president, "before their task force can come into a county and start interviewing and collecting data, they have got to have the sponsorship of a business group. In this county, it is our council that has to look over their proposal and assure the business community it is in their best interests to cooperate."

"And you want me to critically examine their proposal and let you know what I think."

"By two weeks from Friday, please," said the president, "as a favor."

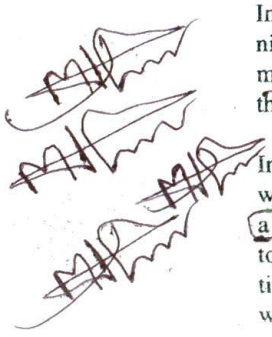
"Here is a copy of our proposal," said the tall young man. "How awfully nice chatting with you." He grasped her hand, gave it one shake, patted the council president on the shoulder, and headed for the refreshment table, where a local auto dealer presented an easy target for a sales pitch.

The Purpose of the Research Proposal

A proposal is an individual's or company's offer to produce a product or render a service to a potential buyer or sponsor. The purpose of the research proposal is

1. To present the management question to be researched and relate its importance.
2. To discuss the research efforts of others who have worked on related management questions.
3. To suggest the data necessary for solving the management question and how the data will be gathered, treated, and interpreted.

In addition, a research proposal must present the researcher's plan, services, and credentials in the best possible way to encourage the proposal's selection over competitors. In contract research, the survival of companies depends on their ability to develop winning proposals.[1] A **proposal** is also known as a work plan, prospectus, outline, statement of intent, or draft plan.[2] The proposal tells us what, why, how, where, and to whom the research will be done. It must also show the benefit of doing the research.[3]



Many students and beginning researchers view the proposal as unnecessary work. In actuality, the more inexperienced a researcher is, the more important it is to have a well-planned and adequately documented proposal. The research proposal is essentially a road map, showing clearly the location from which a journey begins, the destination to be reached, and the method of getting there. Well-prepared proposals include potential problems that may be encountered along the way and methods for avoiding or working around them, much as a road map indicates alternate routes for a detour.

Sponsor Uses

A poorly planned, poorly written, or poorly organized proposal damages the researcher's reputation more than the decision not to submit a proposal.

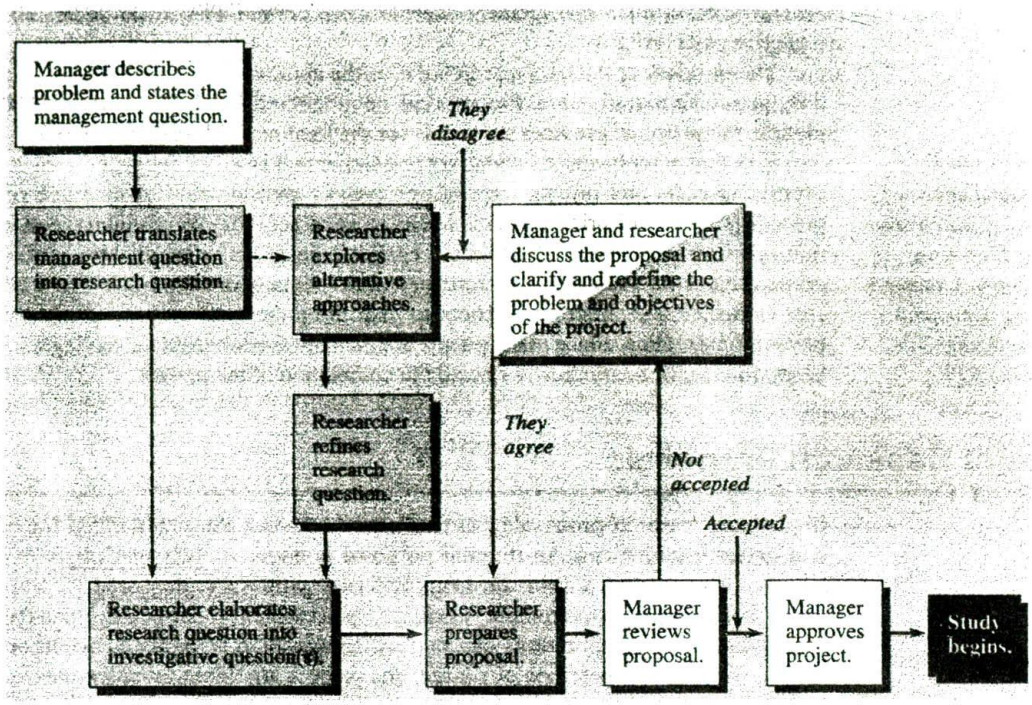
All research has a sponsor in one form or another. The student researcher is responsible to the class instructor. In a corporate setting, whether the research is being done in-house by a research department or under contract to an external research firm, management sponsors the research. University-, government-, or corporate-sponsored (grant) research uses grant committees to evaluate the work.

A research proposal allows the sponsor to assess the sincerity of the researcher's purpose, the clarity of his or her design, the extent of his or her relevant background material, and fitness for undertaking the project. Depending on the type of research and the sponsor, various aspects of a standard proposal design are emphasized. The proposal displays the researcher's discipline, organization, and logic. It thus allows the research sponsor to assess both the researcher and the proposed design, to compare them against competing proposals on current organizational, scholastic, or scientific needs, and to make the best selection for the project.

Comparison of the research project results with the proposal is also the first step in the process of evaluating the overall research. By comparing the final product with the stated objectives, it is easy for the sponsor to decide if the research goal—a better decision on the management question—has been achieved.

Another benefit of the proposal is the discipline it brings to the sponsor. Many managers, requesting research from an in-house, departmental research project, do not adequately define the problem they are addressing. The research proposal acts as a catalyst for discussion between the person conducting the research and the manager. The researcher translates the management question, as described by the manager, into the research question and outlines the objectives of the study. Upon review, the manager

EXHIBIT 4–1 Proposal Development



may discover that the interpretation of the problem does not encompass all the original symptoms. The proposal, then, serves as the basis for additional discussion between the manager and the researcher until all aspects of the management question are understood. Parts of the management question may not be researchable, or at least not subject to empirical study. An alternate design, such as a qualitative or policy analysis study, may need to be proposed. Upon completion of the discussions, the sponsor and researcher should agree on a carefully worded research question. As Exhibit 4–1 reveals, proposal development can work in an iterative fashion until the sponsor authorizes the research to proceed.

Appendix C provides further information on RFPs.

For an outside research contract, the process is different. Proposals are usually submitted in response to a request for bid, or **request for proposal (RFP)**. The researchers may wish to convince the sponsor that his or her approach to the research question differs from that indicated by the management question specified in the initial RFP. In this way, the researcher can show superior understanding of the management dilemma compared to researchers submitting competing proposals.

Researcher Benefits

A proposal is even more beneficial for the researcher than for the sponsor. The process of writing a proposal encourages the researcher to plan and review the project's logical steps. Related management and research literature should be examined in developing the proposal. This review prompts the researcher to assess previous approaches to similar management questions and revise the research plan accordingly. Additionally,

developing the proposal offers the opportunity to spot flaws in the logic, errors in assumptions, or even management questions that are not adequately addressed by the objectives and design.

The in-house or contract researcher uses the approved research proposal as a guide throughout the investigation. Progress can be monitored and milestones noted. At completion, the proposal provides an outline for the final research report.[4]

Researchers often develop Gantt charts of the logical research steps, similar to the one in Exhibit 3–6 in Chapter 3, as working documents when developing responses to RFPs.

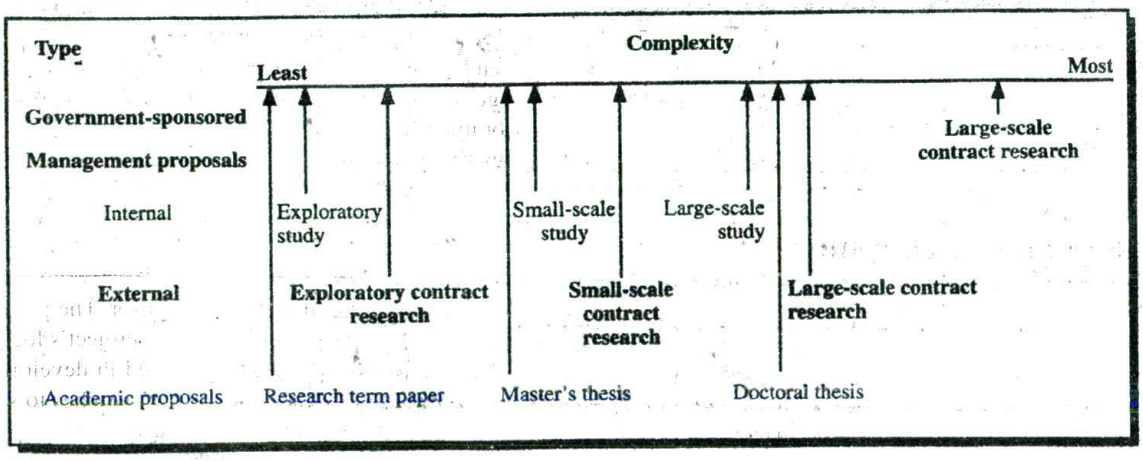
Like any other business, a contract researcher makes his or her profit from correctly estimating costs and pricing the research project appropriately. A thorough proposal process is likely to reveal all possible cost-related activities, thus making cost estimation more accurate. As many of these cost-associated activities are related to time, a proposal benefits a researcher by forcing a time estimate for the project. These time and cost estimates encourage researchers to plan the project so work progresses steadily toward the deadline. Since many people are inclined to procrastinate, having a schedule helps them work methodically toward the completion of the project.

Types of Research Proposals

In general, research proposals can be divided between those generated for internal and external audiences. An internal proposal is done by staff specialists or by the research department within the firm. External proposals sponsored by university grant committees, government agencies, government contractors, not-for-profit organizations, or corporations can be further classified as either solicited or unsolicited. With few exceptions, the larger the project, the more complex the proposal. In public sector work, the complexity is generally greater than in a comparable private sector proposal.

There are three general levels of complexity: exploratory studies, small-scale studies, and large-scale studies. These are noted in Exhibit 4–2. The exploratory study generates the most simple research proposal. More complex and common in business is the small-scale study—either an internal study or an external contract research project. The large-scale professional study, worth up to several million dollars, is the most complex proposal we deal with here. Government agency large-scale project RFPs usually gen-

EXHIBIT 4–2 Proposal Complexity



erate proposals running several hundred pages and use the same modules that we discuss next. However, each agency has unique requirements, making generalized coverage beyond the scope of this text.

Exhibit 4–3 displays a set of modules for building a proposal. Their order can represent an outline for a proposal. Based on the type of proposal you are writing you may

EXHIBIT 4–3 Modules to Include in Proposals: A Comparison of Management-Oriented Proposals and Student Proposals

Proposal Types / *Proposal Modules*	Management						Government	Student		
	Internal			External						
	Exploratory Study	Small-Scale Study	Large-Scale Study	Exploratory Contract	Small-Scale Contract	Large-Scale Contract	Large-Scale Contract	Term Paper	Master's Thesis	Doctoral Thesis
Executive summary		✔	✔	✔	✔	✔	✔			
Problem statement	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Research objectives	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Literature review			✔			✔	✔		✔	✔
Importance/ benefits of study			✔	✔	✔	✔	✔			✔
Research design	✔	✔	✔	✔	✔	✔	✔		✔	✔
Data analysis						✔	✔			✔
Nature and form of results		✔	✔		✔	✔	✔		✔	✔
Qualification of researchers				✔	✔	✔	✔			
Budget		✔	✔	✔	✔	✔	✔			
Schedule	✔	✔	✔	✔	✔	✔	✔			✔
Facilities and special resources			✔	✔	✔	✔	✔		✔	✔
Project management			✔			✔	✔			
Bibliography			✔			✔	✔	✔	✔	✔
Appendixes/ glossary of terms			✔			✔	✔		✔	✔
Measurement instrument			✔			✔	✔			✔

Take some time to review Exhibit 4–3. Compare the proposal modules suggested for each type of study. This will increase your understanding of proposals.

choose the appropriate modules for inclusion. This is a general guide, and sometimes more or less than what is shown here is appropriate for a specific purpose. For example, most small-scale studies do not require a glossary of terms. Terms are defined within the body of the proposal. However, if the proposal deals with an esoteric subject that is not familiar to management, it is appropriate to add a glossary. For a solicited study, the RFP will indicate both the content headings and their order.

Internal Proposals

Internal proposals are more succinct than external ones. At the least complex end of the continuum in Exhibit 4–2, a one- to three-page memo from the researcher to management outlining the problem statement, study objectives, research design, and schedule is enough to start an exploratory study. Privately and publicly held businesses are concerned with how to solve a particular problem, make a decision, or improve an aspect of their business. Seldom do businesses begin research studies for other reasons. Regardless of the intended audience, in the small-scale proposal, the literature review and bibliography are consequently not stressed and can often be stated briefly in the research design. Since management insists on brevity, an executive summary is mandatory for all but the most simple of proposals (projects that can be proposed in a two-page memo do not need an executive summary). Schedules and budgets are necessary for funds to be committed. For the smaller-scale projects, descriptions are not required for facilities and special resources, nor is there a need for a glossary. Since managers familiar with the problem sponsor small projects, the associated jargon, requirements, and definitions should be included directly in the text. Also, the measuring instrument and project management modules are not required. Managers will typically leave this detail for researchers.

External Proposals

An external proposal is either solicited or unsolicited. A **solicited proposal** is often in response to an RFP. The proposal is likely competing against several others for a contract or grant. An **unsolicited proposal** represents a suggestion by a contract researcher for research that might be done. An example of such a proposal might be a consulting firm proposing a research project to a client that has retained the consultancy for other purposes. Another example of an unsolicited proposal might be a research firm that proposes an omnibus study to a trade association to address problems arising from a change in the cultural or political-legal environments. The unsolicited proposal has the advantage of not competing against others but the disadvantage of having to speculate on the ramifications of a management dilemma facing the firm's management. In addition to being an outsider assessing an internal problem, the writer of an unsolicited proposal must decide to whom the document should be sent. Such proposals are often time-sensitive, so the window of opportunity might close before a redirected proposal finds its appropriate recipient.

The most important sections of the external proposal are the objectives, design, qualifications, schedule, and budget. In contract research, the results and objectives sections are the standards against which the completed project is measured. The executive summary of an external proposal may be included within the letter of transmittal. As the complexity of the project increases, more information is required about project management and the facilities and special resources. As we move toward government-sponsored research, particular attention must be paid to each specification in the RFP. To ignore or not meet any specification is to automatically disqualify your proposal as "nonresponsive."[5]

We offer a sample of an external proposal in Appendix D.

Structuring the Research Proposal

Consider again Exhibit 4–3. Using this reference, you can put together a set of modules that tailors your proposal to the intended audience. Each of the following modules is flexible, so its content and length may be adapted to specific needs.

Executive Summary

You might find it valuable to revisit the management-research question hierarchy and the research process model in Chapter 3 prior to reading this section.

The **executive summary** allows a busy manager or sponsor to understand quickly the thrust of the proposal. It is essentially an informative abstract, giving executives the chance to grasp the essentials of the proposal without having to read the details.[6] The goal of the summary is to secure a positive evaluation by the executive who will pass the proposal on to the staff for a full evaluation. As such, the executive summary should include brief statements of the management dilemma and management question, the research objectives/research question(s), and the benefits of your approach. If the proposal is unsolicited, a brief description of your qualifications is also appropriate.

Problem Statement

This section needs to convince the sponsor to continue reading the proposal. You should capture the reader's attention by stating the management dilemma, its background, its consequences, and the resulting management question. The importance of answering the management question should be emphasized here if a separate module on the importance/benefits of study is not included later in the proposal. In addition, this section should include any restrictions or areas of the management question that will not be addressed.

Problem statements too broadly defined cannot be addressed adequately in one study. It is important that the management question distinguish the primary problem from related problems clearly. Be sure your problem statement is clear without the use of idioms or clichés. After reading this section, the potential sponsor should know the management dilemma and the question, its significance, and why something should be done to change the status quo.[7]

Research Objectives

This module addresses the purpose of the investigation. It is here that you lay out exactly what is being planned by the proposed research. In a descriptive study, the objectives can be stated as the research question. Recall that the research question can be further broken down into investigative questions. If the proposal is for a causal study, then the objectives can be restated as a hypothesis.

The objectives module flows naturally from the problem statement, giving the sponsor specific, concrete, and achievable goals. It is best to list the objectives either in order of importance or in general terms first, moving to specific terms (i.e., research question followed by underlying investigative questions). The research question(s) (or hypotheses, if appropriate) should be separated from the flow of the text for quick identification.

The research objectives section is the basis for judging the remainder of the proposal and, ultimately, the final report. Verify the consistency of the proposal by checking to see that each objective is discussed in the research design, data analysis, and results sections.

Literature Review

The **literature review** section examines recent (or historically significant) research studies, company data, or industry reports that act as a basis for the proposed study.

MANAGEMENT Tip

Begin your discussion of the related literature and relevant secondary data from a comprehensive perspective, moving to more specific studies that are associated with your problem. If the problem has a historical background, begin with the earliest references.

Avoid the extraneous details of the literature; do a brief review of the information, not a comprehensive report. Always refer to the original source. If you find something of interest in a quotation, find the original publication and ensure you understand it. In this way, you will avoid any errors of interpretation or transcription. Emphasize the important results and conclusions of other studies, the relevant data and trends from previous research, and particular methods or designs that could be duplicated or should be avoided. Discuss how the literature applies to the study you are proposing; show the weaknesses or faults in the design, discussing how you would avoid similar problems. If your proposal deals solely with secondary data, discuss the relevance of the data and the bias or lack of bias inherent in it.

A literature review might reveal that the sponsor can answer the management question with a secondary data search rather than the collection of primary data. We discuss this more fully in Chapter 10.

The literature review may also explain the need for the proposed work to appraise the shortcomings and/or informational gaps in secondary data sources. This analysis may go beyond scrutinizing the availability or conclusions of past studies and their data, to examining the accuracy of secondary sources, the credibility of these sources, and the appropriateness of earlier studies.

Close the literature review section by summarizing the important aspects of the literature and interpreting them in terms of your problem. Refine the problem as necessary in light of your findings.

Importance/ Benefits of the Study

In this section you describe explicit benefits that will accrue from your study. The importance of "doing the study now" should be emphasized. Usually, this section is not more than a few paragraphs. If you find it difficult to write, then you have probably not adequately clarified the management dilemma. Return to the analysis of the problem and ensure, through additional discussions with your sponsor or your research team or by a reexamination of the literature, that you have captured the essence of the problem.

This section also requires you to understand what is most troubling to your sponsor. If it is a potential union activity, you cannot promise that an employee survey will prevent unionization. You can, however, show the importance of this information and its implications. This benefit may allow management to respond to employee concerns and forge a linkage between those concerns and unionization.

The importance/benefits section is particularly important to the unsolicited external proposal. You must convince the sponsoring organization that your plan will meet its needs.

Research Design

In Chapter 6, we discuss design strategies.

Up to now, you have told the sponsor what the problem is, what your study goals are, and why it is important for you to do the study. The proposal has presented the study's value and benefits. The design module describes what you are going to do in technical terms. This section should include as many subsections as needed to show the phases of the project. Provide information on your proposed design for tasks such as sample selection and size, data collection method, instrumentation, procedures, and ethical requirements. When more than one way exists to approach the design, discuss the methods you have rejected and why your selected approach is superior.

Data Analysis

A brief section on the methods used for analyzing the data is appropriate for large-scale contract research projects and doctoral theses. With smaller projects, the proposed data

MANAGEMENT Tip

When there is no statistical or analytical expertise in the company, sponsors are more likely to hire professional help to interpret the soundness of this section.

analysis would be included within the research design section. It is in this section that you describe your proposed handling of the data and the theoretical basis for using the selected techniques. The object of this section is to assure the sponsor you are following correct assumptions and using theoretically sound data analysis procedures.

This module is often an arduous section to write. You can make it easier to write, read, and understand your data analysis by using sample charts and tables featuring "dummy" data.

The data analysis section is so important to evaluating contract research proposals that the researcher should contact an expert to review the latest techniques available for use in the particular research study and compare these to the proposed techniques.

Nature and Form of Results

Upon finishing this section, the sponsor should be able to go back to the statement of the management question and research objectives and discover that each goal of the study has been covered. One should also specify the types of data to be obtained and the interpretations that will be made in the analysis. If the data are to be turned over to the sponsor for proprietary reasons, make sure this is reflected. Alternatively, if the report will go to more than one sponsor, that should be noted.

This section also contains the contractual statement telling the sponsor exactly what types of information will be received. Statistical conclusions, applied findings, recommendations, action plans, models, strategic plans, and so forth are examples of the forms of results.

Qualifications of Researchers

Look for these elements in a proposal when hiring a contract researcher.

This section should begin with the principal investigator, then provide similar information on all individuals involved with the project. Two elements are critical:

1. Professional research competence (relevant research experience, the highest academic degree held, and memberships in business and technical societies).
2. Relevant management experience.[8]



SNAPSHOT Pebble Beach: Finding the Link to Five-Star Service

Each year the Mobil Travel Guide bestows its coveted five-star rating on a very select group of restaurants and hotels. Five-star establishments stand out from four-star establishments because of "their out-of-the-ordinary attention to detail [and] the consistency with which they achieve their goals at the same high level in every aspect of their operation, from the physical environment to the cuisine and service." Pebble Beach Company is the holding company for several resorts, including The Inn at Spanish Bay, a restaurant that earned the coveted five-star award in 1999 but was unable to retain it in 2000 or 2001.

Guided by a mission stressing seven core values, Pebble Beach management believes that hiring exceptional people and keeping them fulfilled and motivated is the only way to maintain exceptional customer service. As a result of this philosophy, Pebble Beach uses both qualitative and quantitative research to track employee concerns, performance, and attitudes. Qualitatively, Pebble Beach uses "town meetings" structured like brainstorming sessions. Quantitatively, it uses employee questionnaires, tracking responses longitudinally and matching them to shifts in critical performance measures.

If you were crafting a research proposal to determine why The Inn at Spanish Bay lost one highly valued star, what employee issues would you propose be researched? What sections would you include in your proposal?

www.pebblebeach.com

www.mobil.com

www.exxonmobiltravel.com

With so many individuals, research specialty firms, and general consultancies providing research services, the sponsor needs assurance that the researcher is professionally competent. Past research experience is the best barometer of competence, followed by the highest academic degree earned. To document relevant research experience, the researcher provides concise descriptions of similar projects. Highest degree usually follows the person's name (e.g., S. Researcher, Ph.D. in Statistics). Society memberships provide some evidence that the researcher is cognizant of the latest methodologies and techniques. These follow the relevant research experience as a string or bulleted list, with organization name followed by term of membership and any relevant leadership positions.

Researchers are increasingly in the business of providing advice, not just research services. And businesses are looking for quality advice. Comparatively, the researcher who demonstrates relevant management or industry experience will be more likely to receive a favorable nod to his or her proposal. The format of this information should follow that used for relevant research experience. The entire curriculum vitae of each researcher need not be included unless required by the RFP. However, researchers often place complete vitae information in an appendix for review by interested sponsors.

Research companies often subcontract specific research activities to firms or individuals that specialize or offer specific resources or facilities. This is especially true for studies involving qualitative research techniques such as in-depth personal interviews and focus groups. Usually brief profiles of these companies are provided in this section only if their inclusion enhances the credibility of the researcher. Otherwise, profiles of such subcontractors are included in an appendix of the final report, rather than in the proposal.

Budget

The budget should be presented in the form the sponsor requests. For example, some organizations require secretarial assistance to be individually budgeted, whereas others insist it be included in the research director's fees or the overhead of the operation. In

SNAPSHOT

Bissell: Small, Yet Powerful

When CEO Mark Bissell returned from a European business trip with a prototype appliance, a steam cleaner named Steam Gun, he challenged the marketing research director to determine the marketing for the new product within a one-month time frame. With a full-scale research project out of the question, the research director chose a small-scale ethnography study using real world observations of people's interactions with the product. He approached a local Parent Teacher Association, a ready source of female respondents, which distributed the Steam Gun to 20 volunteers. He followed up the test with in-home visits. Within 30 days, the research director knew the name must be changed and that those in the "serious cleaner" target segment would need to be convinced that steam cleaning with chemical-free water would be effective. He delivered a marketing program in the requisite time for the newly named BISSELL® Steam 'n Clean®. The primary budget item in the research was a $1,500 donation to the PTA, proving that research budgets for successful decision making come in all sizes.



www.bissell.com

EXHIBIT 4–4 Sample Proposal Budget for a Research Program

Budget Items	Rate	Total Days	Charge
A. Salaries			
1. Research director, Jason Henry	$200/hr	20 hours	$ 4,000
2. Associate	100/hr	10 hours	1,000
3. Research assistants (2)	20/hr	300 hours	6,000
4. Secretarial (1)	12/hr	100 hours	1,200
Subtotal			$12,200
B. Other costs			
5. Employee services and benefits			
6. Travel			$ 2,500
7. Office supplies			100
8. Telephone			800
9. Rent			
10. Other equipment			
11. Publication and storage costs			100
Subtotal			$ 3,500
C. Total of direct costs			$15,700
D. Overhead support			5,480
E. Total funding requested			$21,180

addition, limitations on travel, per diem rates, and capital equipment purchases can change the way in which you prepare a budget.

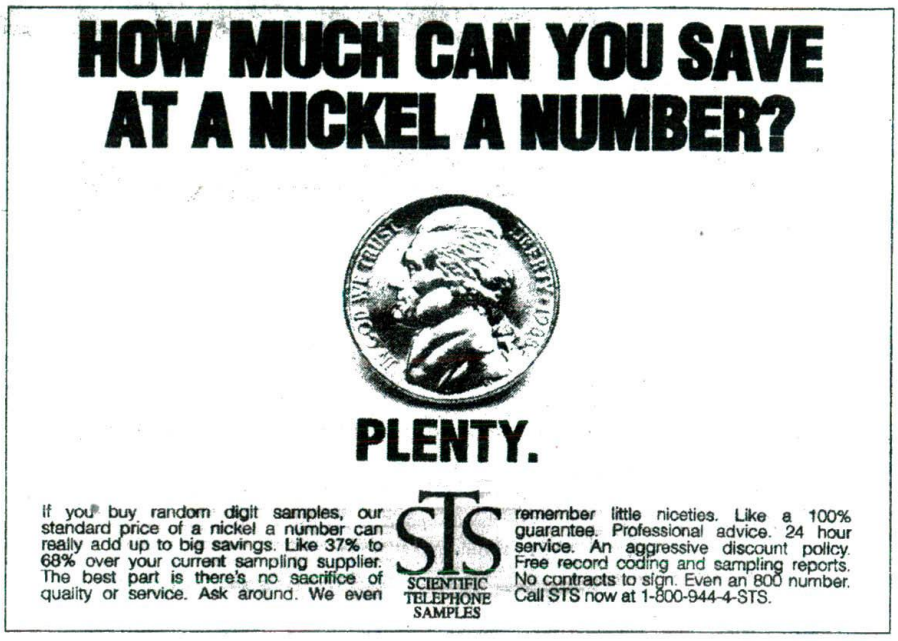
Typically, the budget should be no more than one to two pages. Exhibit 4–4 shows one format that can be used for small contract research projects. Additional information, backup details, quotes from vendors, and hourly time and payment calculations should be put into an appendix if required or kept in the researcher's file for future reference.

The budget statement in an internal research proposal is based on employee and overhead costs. The budget presented by an external research organization is not just the wages or salaries of its employees but the person-hour price that the contracting firm charges.

The detail the researcher presents may vary depending on both the sponsors' requirements and the contracting research company's policy. Some research companies, particularly in database and computerized analysis areas, quote on the basis of "man-machine hours" involved in a project. The man-machine hour is the hourly fee charged for a person with computer hardware and organizational resources. Here, rather than separating the "other costs" of Exhibit 4–4, these costs are embedded in a combined rate. One reason why external research agencies avoid giving detailed budgets is the possibility that disclosures of their costing practices will make their calculations public knowledge, reducing their negotiating flexibility. Since budget statements embody a work strategy depicted in financial terms that could be used by the recipient of the proposal to develop a replicate research plan, vendors are often doubly careful.

The budget section of an external research contractor's proposal states the total fee payable for the assignment. When it is accompanied by a proposed schedule of payment, this is frequently detailed in a purchase order. Like other large ticket-price services delivered over time in stages (e.g., building a home), payments can be paid at stages of completion. Sometimes a retainer is paid at the beginning of the contract, then a percentage at an intermediate stage, and the balance on completion of the project.

Understanding budgeting concerns is critical to a research specialist like Scientific Telephone Samples (STS), which provides random digit and business samples to those conducting telephone surveys.



MANAGEMENT Tip

It is extremely important that you retain all information you use to generate your budget. If you use quotes from external contractors, get the quotation in writing for your file. If you estimate time for interviews, keep explicit notes on how you made the estimate. When the time comes to do the work, you should know exactly how much money is budgeted for each particular task.[9]

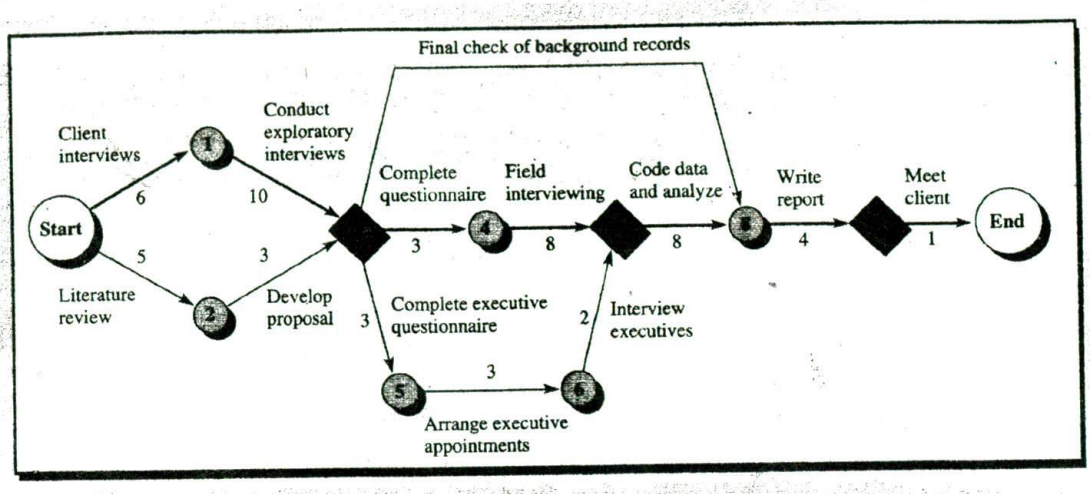
Some costs are more elusive than others. Do not forget to build the cost of proposal writing into your fee. Publication and delivery of final reports can be a last-minute expense that may be easily overlooked in preliminary budgets.

Schedule

Your schedule should include the major phases of the project, their timetables, and the milestones that signify completion of a phase. For example, major phases may be (1) exploratory interviews, (2) final research proposal, (3) questionnaire revision, (4) field interviews, (5) editing and coding, (6) data analysis, and (7) report generation. Each of these phases should have an estimated time schedule and people assigned to the work.

It may be helpful to you and your sponsor if you chart your schedule. You can use a Gantt chart, shown in Chapter 3, Exhibit 3–6. Alternatively, if the project is large and complex, a **critical path method (CPM)** of scheduling may be included.[10] In a CPM chart, the nodes represent major milestones, and the arrows suggest the work needed to get to the milestone. More than one arrow pointing to a node indicates all those tasks must be completed before the milestone has been met. Usually a number is placed along the arrow showing the number of days or weeks required for that task to be completed. The pathway from start to end that takes the longest time to complete is called the critical path, because any delay in an activity along that path will delay the end of the entire project. An example of a CPM chart is shown in Exhibit 4–5. Software programs designed for project management simplify scheduling and charting the schedule. Most are available for personal computers.

EXHIBIT 4–5 CPM Schedule



Facilities and Special Resources

Often, projects will require special facilities or resources that should be described in detail. For example, a contract exploratory study may need specialized facilities for focus group sessions. Computer-assisted telephone or other interviewing facilities may be required. Alternatively, your proposed data analysis may require sophisticated computer algorithms, and therefore, you need access to an adequate system. These requirements will vary from study to study. The proposal should carefully list the relevant facilities and resources that will be used. The costs for such facility use should be detailed in your budget.

Project Management

The purpose of the **project management** section is to show the sponsor that the research team is organized in a way to do the project efficiently. A master plan is required for complex projects to show how all the phases will be brought together. The plan includes

- The research team's organization.
- Management procedures and controls for executing the research plan.
- Examples of management and technical reports.
- The research team's relationship with the sponsor.
- Financial and legal responsibility.
- Management competence.

Tables and charts are most helpful in presenting the master plan. The relationships between researchers and assistants need to be shown when several researchers are part of the team. Sponsors must know that the director is an individual capable of leading

the team and acting as a useful liaison to the sponsor. In addition, procedures for information processing, record control, and expense control are critical to large operations and should be shown as part of the management procedures.

The type and frequency of progress reports should be recorded so the sponsor can expect to be kept up-to-date and the researchers can expect to be left alone to do research. The sponsor's limits on control during the process should be delineated.

Full service research firms like Compass Marketing Research offer a wide array of facilities and services suitable for numerous proposed research designs.

Compass Marketing Research

Discover the *TRUE* Course in Data Collection

The *true* course is the course that is most accurate, reliable and quick. Compass points the way to service, professionalism and integrity in the world of data collection. We have the technology, the equipment, the facilities, the staff and supervisory personnel to meet your most demanding and unusual specifications. Our experienced project managers identify problems, recommend solutions, communicate effectively.

FACILITIES, RECRUITING AND INTERVIEWING

Focus Groups, One-on-One Interviews, Taste Tests, Audience Interviewing, etc.

Respondents Who Meet the Requirements

- On premises, supervised, validated recruiting
- A diverse demographic population
- Consumers, professionals, executives, technicians, business owners

State-of-the-Art Focus Group Suites

- Spacious, comfortable, client viewing and respondent rooms
- Connecting, private, client lounges with video monitor
- Portable, company owned, video teleconferencing
- Latest technology for quality audio and video recording
- Separate restroom facilities for clients and respondents
- Separate client, respondent and staff entrances

Facilities Designed to Meet Unique Research Needs

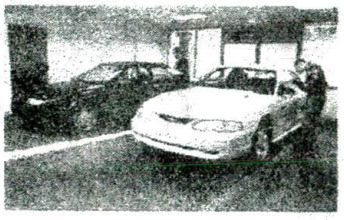
- *Test Kitchen:* (25 x 24) large refrigeration units, conventional oven, microwave, freezer, warehouse product storage
- *Display Room:* (25 x 29) wide double doors, drive up ramp to easily accommodate automobiles, recreation vehicles, boats, etc.
- *Multipurpose Room:* 500 square foot room right off test kitchen ideal for: taste tests, theatre seating
- *One-On-One Rooms:* one-way mirror viewing, audio and video recording
- *CRT Telephone Interviewing:* 110 Stations



Our In-House Test Kitchen



Magellan Focus Group Room



Telephone Room

Video Focus Direct

Follow your *TRUE* source to the best Atlanta has to offer

Call: Larry Weltin Scott Taylor Debra Wilson

1-800-627-7667 (in Atlanta) 770-448-0754 (fax) 770-416-7586

www.cmrcompass.com

This section also discusses any details such as printing facilities, clerical help, or information-processing capabilities to be provided by the sponsor rather than the researcher. In addition, rights to the data, the results, and authority to speak for the researcher and for the sponsor are included.

Payment frequency and timing are also covered in the master plan. Finally, proof of financial responsibility and overall management competence is provided.

Bibliography

For all projects that require a literature review, a bibliography is necessary. Use the bibliographic format required by the sponsor. If none is specified, a standard style manual will provide the details necessary to prepare the bibliography.[11] Many of these sources also offer suggestions for successful proposal writing.

Appendixes

Glossary The researcher should include a glossary of terms whenever there are many words unique to the research topic and not understood by the general management community. This is a simple section consisting of terms and definitions, similar in format to the glossary in this textbook. Also, the researcher should define any acronyms used, even if they are defined within the text (e.g., CATI for computer-assisted telephone interviewing).

Measurement Instrument For large projects, it is appropriate to include samples of the measurement instruments if they are available when you assemble the proposal. This allows the sponsor to discuss particular changes in one or more of the instruments. If the proposal includes the development of a custom-designed measurement instrument, omit this appendix section.

Other Any detail that reinforces the body of the proposal can be included in an appendix. This includes researcher vitae, profiles of firms or individuals to which work will be subcontracted, budget details, and lengthy descriptions of special facilities or resources.

To see how some of these elements were incorporated in the MindWriter research proposal, see Exhibit 4–6.

EXHIBIT 4–6 Proposal for MindWriter CompleteCare Satsifaction Research

When last we checked, Myra and Jason were preparing a proposal for Gracie Uhura, product manager at MindWriter Corporation.

Myra decided to exclude the "executive summary" for two reasons: The proposal is short and the essentials will be contained in the cover letter. The proposal follows the components discussed in this chapter. It is an appropriate adaptation for an internal, small-scale study. The module "qualification of researcher" was not needed because MindWriter's employee solicited the proposal; Myra had prejudged the researcher's qualifications.

EXHIBIT 4–6 Continued

Repair Process Satisfaction Proposal
Mindwriter Corporation CompleteCare Program

Problem Statement

MindWriter Corporation has recently created a service and repair program, CompleteCare, for its portable/laptop/notebook computers. This program promises to provide a rapid response to customers' service problems.

MindWriter is currently experiencing a shortage of trained technical operators in its telephone center. The package courier, contracted to pick up and deliver customers' machines to CompleteCare, has provided irregular execution MindWriter has also experienced parts availability problems for some machine types.

Recent phone logs at the call center show complaints about CompleteCare; it is unknown how representative these complaints are and what implications they may have for satisfaction with MindWriter products.

Management desires information on the program's effectiveness and its impact on customer satisfaction to determine what should be done to improve the CompleteCare program for MindWriter product repair and servicing.

Research Objectives

The purpose of this research is to discover the level of satisfaction with the CompleteCare service program. Specifically, we intend to identify the component and overall levels of satisfaction with CompleteCare. Components of the repair process are important targets for investigation because they reveal:

(1) How customer tolerance levels for repair performance affect overall satisfaction, and

(2) Which process components should be immediately improved to elevate the overall satisfaction of those MindWriter customers experiencing product failures.

We will also discover the importance of types of product failure on customer satisfaction levels.

Importance/Benefits

High levels of user satisfaction translate into positive word-of-mouth product endorsements. These endorsements influence the purchase outcomes for (1) friends and relatives and (2) business associates.

Critical incidents, such as product failures, have the potential to either undermine existing satisfaction levels or preserve and even increase the resulting levels of product satisfaction. The outcome of the episode depends on the quality of the manufacturer's response.

An extraordinary response by the manufacturer to such incidents will preserve and enhance user satisfaction levels to the point that direct and indirect benefits derived from such programs will justify their costs.

This research has the potential for connecting to ongoing MindWriter customer satisfaction programs and measuring the long-term effects of CompleteCare (and product failure incidents) on customer satisfaction.

Research Design

Exploration: Qualitative We will augment our knowledge of CompleteCare by interviewing the service manager, the call center manager, and the independent package company's account executive. Based on a thorough inventory of CompleteCare's internal and external processes, we propose to develop a mail survey.

Questionnaire Design A self-administered questionnaire (postcard size) offers the most cost-effective method for securing feedback on the effectiveness of CompleteCare. The introduction on the postcard will be a variation of MindWriter's current advertising campaign.

Some questions for this instrument will be based on the investigative questions we presented to you previously, and others will be drawn from the executive interviews. We anticipate a maximum of 10 questions. A new five-point expectation scale, compatible with your existing customer satisfaction scales, is being designed.

Although we are not convinced that open-ended questions are appropriate for postcard questionnaires, we understand that you and Mr. Malraison like them. A comments/suggestions question will be included. In addition, we will work out a code block that captures the call center's reference number, model, and item(s) serviced.

Logistics The postal arrangements are: box rental, permit, and "business reply" privileges to be arranged in a few days. The approval for a reduced postage rate will take one to two weeks. The budget section itemizes these costs.

Pilot Test We will test the questionnaire with a small sample of customers using your tech-line operators. This will contain your costs. We will then revise the questions and forward them to our graphics designer for layout. The instrument will then be submitted to you for final approval.

Evaluation of Nonresponse Bias A random sample of 100 names will be secured from the list of customers who do not return the questionnaire. Call center records will be used for establishing the sampling frame. Nonresponders will be interviewed on the telephone and their responses compared statistically to those of the responders.

Data Analysis

We will review the postcards returned and send you a weekly report listing customers who are dissatisfied (score a "1" or "2") with any item of the questionnaire or who submit a negative comment. This will improve your timeliness in resolving customer complaints. Each month, we will provide you with a report consisting of frequencies and category percentages for each question. Visual displays of the data will be in bar chart/histogram form. We propose to include at least one question dealing with overall satisfaction (with CompleteCare and/or MindWriter). This overall question would be regressed on the individual items to determine each item's importance. A performance grid will identify items needing improvement with an evaluation of priority. Other analyses can be prepared on a time and materials basis.

EXHIBIT 4–6 Continued

The open-ended questions will be summarized and reported by model code. If you wish, we also can provide content analysis for these questions.

Results: Deliverables

1. Development and production of a postcard survey. MindWriter employees will package the questionnaire with the returned merchandise.
2. Weekly exception reports (transmitted electronically) listing customers who meet the dissatisfied customer criteria.
3. Monthly reports as described in the data analysis section.
4. An ASCII diskette with each month's data shipped to Austin by the fifth working day of each month.

Budget

Card Layout and Printing Based on your card estimate, our designer will lay out and print 2,000 cards in the first run ($500). The specifications are as follows: 7-point Williamsburg offset hi-bulk with one-over-one black ink. A gray-scale layer with a MindWriter or CompleteCare logo can be positioned under the printed material at a nominal charge. The two-sided cards measure 4 1/4 by 5 1/2.

This allows us to print four cards per page. The opposite side will have the business reply logo, postage paid symbol, and address.

Cost Summary

Interviews	$1,550.00
Travel costs	2,500.00
Questionnaire development	1,850.00
Equipment/supplies	1,325.00
Graphics design	800.00
Permit fee (annual)	75.00
Business reply fee (annual)	185.00
Box rental (annual)	35.00
Printing costs	500.00
Data entry (monthly)	430.00
Monthly data files (each)	50.00
Monthly reports (each)	1,850.00
Total start-up costs	$11,150.00
Monthly run costs	$1,030.00*

*An additional fee of 0.21 per card will be assessed by the post office for business reply mail. At approximately a 30 percent return rate, we estimate the monthly cost to be less than $50.

Evaluating the Research Proposal

Proposals are subject to either formal or informal reviews. *Formal reviews* are regularly done for solicited proposals. The formal review process varies, but typically includes:

- Development of review criteria, using RFP guidelines.
- Assignment of points to each criterion, using a universal scale.
- Assignment of a weight for each criterion, based on importance of each criterion.
- Generation of a score for each proposal, representing the sum of all weighted criterion scores.

The sponsor should assign the criteria, the weights, and the scale to be used for scoring each criterion before the proposals are received. The proposal then should be evaluated with this checklist of criteria in hand. Points are recorded for each criterion reflecting

the sponsor's assessment of how well the proposal meets the company's needs relative to that criterion (e.g., 1 through 10, with 10 being the largest number of points assigned to the best proposal for a particular criterion). After the review, the weighted criterion scores are added to provide a cumulative total. The proposal with the highest number of points wins the contract.

Several people, each of whom may be assigned to a particular section, typically review long and complex proposals. The formal method is most likely to be used for competitive government, university, or public sector grants and also for large-scale contracts.

Small-scale contracts are more prone to informal evaluation. In an *informal review*, the project needs, and thus the criteria, are well understood but are not usually well documented. In contrast to the formal method, a system of points is not used and the criteria are not ranked. The process is more qualitative and impressionistic. Exhibit 4–7 shows Myra Wines's informal review of the proposal discussed in the opening vignette.

In practice, many factors contribute to a proposal's acceptance and funding. Primarily, the content discussed above must be included to the level of detail required by the sponsor's RFP. Beyond the required modules, other factors can quickly eliminate a proposal from consideration or improve the sponsor's reception of the proposal, among them:

- Neatness.
- Organization, in terms of being both logical and easily understood.
- Completeness in fulfilling the RFP's specifications, including budget and schedule.
- Appropriateness of writing style.
- Submission within the RFP's timeline.

Although a proposal produced on a word processor and bound with an expensive cover will not overcome design or analysis deficiencies, a poorly presented, unclear, or disorganized proposal will not get serious attention from the reviewing sponsor. Given that multiple reviewers may be evaluating only a given section, the reviewer should be able to page through the proposal to any section of interest.

In terms of the technical writing style of the proposal, the sponsor must be able to understand the problem statement, the research design, and the methodology. The sponsor should clearly understand why the proposed research should be funded and the exact goals and concrete results that will come from the study.

The proposal also must meet specific RFP guidelines set by the sponsoring company or agency, including budgetary restrictions and schedule deadlines. A schedule that does not meet the expected deadlines will disqualify the proposal. A budget that is too high for the allocated funds will be rejected. Conversely, a low budget compared to competing proposals suggests that something is missing or there is something wrong with the researchers.

Finally, a late proposal will not be reviewed. While current project disqualification due to lateness may appear to be the worse result here, there is a possible longer-term effect created. Lateness communicates a level of disrespect for the sponsor—that the researcher's schedule is more important than the sponsor's. A late proposal also communicates a weakness in project management, which raises an issue of professional competence. This concern about competence may continue to plague the researcher during future project proposal reviews.

EXHIBIT 4–7 Informal Proposal Review

Myra Wines
200 ShellPoint Tower
Palm Beach, Florida 33480

Mr. Harry Shipley, President
Economic Development Council
1800 ShellPoint Tower
Palm Beach, Florida 33480

Dear Harry,

I have reviewed Robert Buffet's proposal for an investigation of the job creation practices of local companies and, in short, I am very much concerned with several aspects of the "proposal." It is not really a proposal at all, as it lacks sufficient detail.

First let me mention that I shared Buffet's proposal with Mr. Jason Henry, an independent research consultant working with me on a MindWriter project. Mr. Buffet and his organization may one day represent competition for Mr. Henry, and you must therefore be aware of a potential conflict of interest and perhaps discount the opinions stated here. Since I am delivering this letter to you in two days rather than the two weeks you requested, you may wish to discuss my comments with others.

What you and Mr. Buffet gave me is an abbreviated research plan for our county, but since it lacks many features found in a comprehensive proposal, I immediately saw it was not the full proposal that had been funded by the state commerce secretary. I called Tallahassee and reached a young woman who hemmed and hawed and refused to say if she was authorized to mail me the full proposal. Finally, I gave up arguing and gave her your address and told her she could mail it to you if she experienced an outbreak of belief in government-in-the-sunshine.

I then made several calls to people in Tallahassee whom I know from my days in TV. Did you know that this research idea is being floated by our senior U.S. senator, who is eager to throw a monkey wrench into the president's tax incentives plan? The senator whispered it to the governor and the governor whispered it to her commerce secretary, and here we are.

The problem statement is rather long and convoluted, but, in short, it poses the questions, "Are new high-tech companies creating jobs for residents of our county? Or are they bringing technical and manufacturing workers from outside the state and bypassing the local work force? Or are they doing research in these companies with a low level of manufacturing job creation? Or are they investing in "smart" capital equipment that does not create jobs?" If you cut through the verbiage, I think you can see the project is right dead on the mark with its questions.

The research objectives section is fairly straightforward. Buffet's people are going to identify all the companies in this county in the NAICS code groups associated with "high tech" and collect information on the number of locally hired employees in various job categories, chiefly in production, and also collect data on capital investments, debt, and other financial data, which Mr. Henry says makes good sense to collect and ought to be easy to do.

There is a section called Importance of the Study, which is full of platitudes and does not get around to mentioning the pending tax legislation. But at least the platitudes are brief.

I become nervous in the Design section. It calls for Mr. Buffet's group to go on site with a "team" and conduct in-depth interviews with the chief operating officer (COO), treasurer, and comptroller of each company and enter the data into a spreadsheet. I have double-checked this with Mr. Henry and also with a banker friend, and both of them assure me that a simple questionnaire might be mailed to the COO. There is no need whatsoever to send in a team to conduct open-ended interviews. While there might be a noncompliance problem associated with filling out a form, this might appropriately be attended to by pointing out the auspices—the state commerce secretary and your Economic Development Council—with an interview request as a last resort.

The proposal contains no budget and no specific list of researchers who will comprise the team. The firm would have carte blanche to go in with anyone on their payroll and try to induce the subjects to stray beyond the stated research objectives to talk about anything at all. Obviously such license would be a marketing tool and might allow the researchers to collect a list of researchable problems not related to the secretary's needs, as stated in the problem section.

I strongly advise you to tell Mr. Buffet to collect the information through a simple mail survey. Offer to send it out under your council's letterhead, or see if you can get the commerce office or even the governor's office to send it out. But do not subject your local business community to unstructured, free-ranging visits, which are clearly not justified by the research objectives.

Sincerely,

Myra

SUMMARY



A proposal is an offer to produce a research product or render a service to the potential buyer or sponsor. The research proposal presents a problem, discusses related research efforts, outlines the data needed for solving the problem, and shows the design used to gather and analyze the data.

Proposals are valuable to both the research sponsor and the researcher. The sponsor uses the proposal to evaluate a research idea. The proposal is also a useful tool to ensure that the sponsor and investigator agree on the research question. For the beginning researcher, the proposal enables learning from other researchers. In addition, the completed proposal provides a logical guide for the investigation.

We discuss two types of proposals: internal and external. Internal and external proposals have a problem-solving orientation. The staff of a company generates internal proposals. External proposals are prepared by an outside firm to obtain contract research. External proposals emphasize qualifications of the researcher, special facilities and resources, and project management aspects such as budgets and schedules. Within each type of proposal there are varying degrees of complexity; a proposal can vary in length from a two-page memo to more than 100 pages, from a telephone conversation to a multimedia presentation.

Proposals can be written with a set of sections or modules. The difference in type of proposal and level of project complexity determines what modules should be included.

Proposals can be evaluated formally or informally. The formal process uses a list of criteria and an associated point scale. The informal process is more qualitative. Important aspects beyond content include presentation style, timeliness, and credibility.

KEY TERMS

critical path method (CPM) 106
executive summary 101
literature review 101
project management 107
proposal 96
  solicited 100
  unsolicited 100
request for proposal (RFP) 97

EXAMPLES

Company	Scenario	Page
Bissell, Inc.	Small-budget ethnography study to guide the development of the Steam 'n Clean marketing plan.	104
Compass Marketing Research	Providing a wide array of facilities capable of handling many research designs.	108
Economic Development Council of Palm Beach*	Evaluating a proposal for a study designed to ascertain job creation practices among local companies.	95
MindWriter*	Proposal for evaluating CompleteCare program.	BRTL, throughout

Pebble Beach Company	Research with employees to assess customer service.	103
STS (Scientific Telephone Samples)	Providing names and phone numbers for telephone studies at a low cost.	106
Mobil Travel Guide	Develops a directory of restaurants and hotels based on standards of exceptional service using a rating system developed from an observation study.	103

*Due to the confidential and proprietary nature of most research, the names of some companies have been changed.

DISCUSSION QUESTIONS

Terms in Review

1. What, if any, are the differences between solicited and unsolicited proposals?

Making Research Decisions

2. You are the new manager of market intelligence in a rapidly expanding software firm. Many product managers and corporate officers have requested market surveys from you on various products. Design a form for a research proposal that can be completed easily by your research staff and the sponsoring manager. Discuss how your form improves communication of the research objectives between the manager and the researcher.
3. Consider the new trends in desktop publishing, multimedia computer authoring and display capabilities, and inexpensive videotaping and playback possibilities. How might these be used to enhance research proposals? Give several examples of appropriate use.
4. You are the manager of a research department in a large department store chain. Develop a list of criteria for evaluating the types of research activities listed below. Include a point scale and weighting algorithm.
   a. Market research.
   b. Advertising effectiveness.
   c. Employee opinion surveys.
   d. Credit card operations.
   e. Computer service effectiveness at the individual store level.

From Concept to Practice

5. Select a research report from a management journal. Outline a proposal for the research as if it had not yet been performed. Make estimates of time and costs. Generate a CPM schedule for the project following the format in Exhibit 4–5.
6. Using Exhibit 4–3 as your guide, what modules would you suggest be included in a proposal for each of the following cases?
   a. A bank interested in evaluating the effectiveness of its community contributions in dollars and loaned executive time.
   b. A manufacturer of leather custom-designed teacher development portfolios evaluating the market potential among teachers, who are now legally required to execute a professional development plan every three years.
   c. A university studying the possible calendar change from three 11-week quarters to two 16-week semesters.
   d. A dot-com that monitors clicks on banner ads interested in developing a different pricing structure for its service.
7. Review the Seagate proposal in Appendix D on page 793. Using Exhibit 4–3 as your guide, comment on what is or what is not contained therein.

WWW Exercises Visit our website for Internet exercises related to this chapter at www.mhhe.com/business/cooper8

CASES



PEBBLE BEACH CO.

RAMADA DEMONSTRATES ITS PERSONAL BEST

*All cases indicating a video icon are located on the Instructor's Videotape Supplement. All nonvideo cases are in the case section of the textbook. All cases indicating a CD icon offer a data set, which is located on the accompanying CD.

REFERENCE NOTES

1. Charles T. Brusaw, Gerald J. Alred, and Walter E. Oliu, *Handbook of Technical Writing*, 4th ed. (New York: St. Martin's Press, 1992), p. 375.
2. Paul D. Leedy, *Practical Research: Planning and Design*, 2nd ed. (New York: Macmillan, 1980), p. 79.
3. R. Lesikar and John Pettit, *Report Writing for Business*, 9th ed. (Burr Ridge, IL: Irwin, 1995).
4. Ibid., p. 51.
5. William J. Roetzheim, *Proposal Writing for the Data Processing Consultant* (Englewood Cliffs, NJ: Prentice-Hall, 1986), p. 106.
6. Brusaw, Alred, and Oliu, *Handbook*, p. 11.
7. Philip V. Lewis and William H. Baker, *Business Report Writing* (Columbus, OH: Grid, 1978), p. 58.
8. Robert G. Murdick and Donald R. Cooper, *Business Research: Concepts and Guides* (Columbus, OH: Grid, 1982), p. 112.
9. Roetzheim, *Proposal Writing*, pp. 67–68.
10. Many texts cover project management and include details of scheduling and charting techniques such as Gantt charts and CPM charts, which are beyond the scope of this text. See, for example, Chapter 3, "Network Analysis," in Don T. Philips, A. Ravindran, and James J. Solberg, *Operations Research: Principles and Practice* (New York: Wiley, 1976); or Chapter 6, "Network Models," in K. Roscoe Davis and Patrick G. McKeon, *Quantitative Models for Management* (Boston: Kent, 1981).
11. See, for example, Kate L. Turabian, *A Manual for Writers of Term Papers, Theses, and Dissertations* (Chicago: University of Chicago Press, 1996); Joseph Gibaldi and Walter S. Achtert, *MLA Handbook for Writers of Research Papers* (New York: Modern Language Association of America, 1999); and the *Publication Manual of the American Psychological Association* (Washington, DC: APA,1994).

REFERENCES FOR SNAPSHOTS AND CAPTIONS

Pebble Beach

"2001 Five-Star Award Winners List," *Mobil Travel Guide*, ExxonMobil Oil (http://www.mobil.com/mobil_consumer/travel/winners/winners_content.html).

"Inn at Spanish Bay Resort," Pebble Beach Resorts (http://www.pebblebeach.com/2b.html).

McGraw-Hill Video Library.

"Rating Criteria for Mobil Travel Guide" (http://www.maisonette.com/maisonette/fine-dining/5star.htm).

Bissell

Interview with Ann Lamb, director of communications, Bissell, Inc., August 3, 2001.

"Research on a Shoestring: How Bissell Steamrolled Its Way to the Top of Its Category," *American Demographics*, April 2001, pp. 38–39.

CLASSIC AND CONTEMPORARY READINGS

Krathwohl, David R. *How to Prepare a Research Proposal*. 3rd ed. Syracuse, NY: Syracuse University Press, 1988. A practical guide and framework for student projects.

Leedy, Paul D. *Practical Research: Planning and Design*. 6th ed. Englewood Cliffs, NJ: Prentice-Hall, 1996. Practical and readable sections guide students through the research process.

Locke, Lawrence F.; Waneen Wyrick Spiduso; and Steven J. Silverman. *Proposals That Work: A Guide to Planning Dissertations and Grant Proposals*. 4th ed. Thousand Oaks, CA: Sage Publications, 2000. An excellent guide for students and faculty advisers covering all aspects of the proposal process.