THE TECHNICAL PROPOSAL

(PROJECT STATEMENT)

A Writing Guide

English 273

Technical Communication

Thanks to Paul Gamache

D3 - THE TECHNICAL PROPOSAL - A WRITING GUIDE

What is a "Proposal"?

A proposal is a specialized document that is written before a project begins. As its name suggests, it proposes a course of action to the reader, usually to solve a problem (either existing or potential). Some proposals are "solicited" – that is, written in response to a request for proposals (RFP) – while others are "unsolicited" – written on your own initiative.

- **Solicited proposals** must contain a consideration of the specific requirements for the job as outlined in the request for proposals. Make sure that your proposal covers all of these mandatory requirements.
- Unsolicited proposals must contain an extra element: you must persuade the reader that a problem exists and that action must be taken. Often, the reader will be unaware of any problem.

If you are writing in response to an external client's project, think of your project as solicited – it's an answer to a problem the client has posed. If you are developing or suggesting your own project, then your assignment is an unsolicited proposal. Either way, your proposal must contain a persuasive element.

What is the PURPOSE of a Proposal?

A proposal serves two functions:

- It identifies the problem, its consequences, and the solution.
- It persuades the reader that the writer (or team) is capable of solving the problem and should be hired (or the project should be approved).

In other words, your technical proposal must be more than just a description of your project – it must also "sell" your analysis, your approach, your solution, and your services/team. Above all, your proposal must convince the reader that you know what you are doing and can deliver what they need. It's all about building confidence.

Remember: a proposal is – above everything else – a persuasive document.

What Approach Should my Proposal Take?

As mentioned, a proposal is a persuasive document. There are three critical issues to remember when you are trying to persuade:

- a) Focus on what the *reader* will gain.
- b) Focus on *benefits*, not costs.
- c) Focus on the *action* that you want the reader to take.

Let's look at how each applies to a proposal:

1. Reader Gains: "What's in it for me?"

Often, proposal writers focus on themselves – why they want to undertake the project, what they will get out of it, etc. This is understandable since they believe in their project and want to take it on. However, what they fail to do is look at the project from the reader's point of view. "Why should I?" the reader will always ask. "What's in it for me?"

What persuades are the reader benefits. You may get a great deal out of the project (money, satisfaction, knowledge and skill, etc.), but the fact that you will gain something is not enough for the reader to give their approval. What persuades the reader to give you the go-ahead is a belief that they – the reader – will gain something from the project.

Never assume that the reader will see the benefits of your project. Instead, assume that these must be pointed out, and do so at every opportunity.

2. Benefits vs. Cost: "What will this cost me?"

Since the reader will be footing the bill, they are naturally concerned about how much that bill will be. This means that the reader's focus will naturally go toward the cost and away from the benefits, which is precisely what you want to prevent. Costs dissuade; benefits persuade.

To persuade, focus on what the reader will get, both immediately, in the short term, and in the longer term. Say, in effect "Look at how much you will get (and for so little)." You must cover costs (both time and money), but try to show that these costs represent good value – a sensible <u>investment</u>.

3. Action: "So...what do you want me to do?"

The whole point of persuasion is to lead the reader to act. For this reason, you must end your proposal with a strong <u>action statement</u> in which you tell the reader precisely what you want them to do (along with all of the specific details that will allow them to do it). Of course, this means that you must know ahead of time exactly what you want the reader to do. And this action must be specific; it's no good asking the reader to approve your project without also indicating how, when, and where that approval should happen. Will you contact the reader? Or should they contact you? how? where? by when? If you're not sure, ask your instructor.

Make it easy for the reader to approve your proposal and to contact you with the good news.

How are Proposals Structured?

Proposals follow the modular "summary – beginning – middle – end" structural pattern that all oral and written reports tend to have. Remember however, that this pattern is indeed that – a pattern, not a recipe – and the specific structure of each proposal (and each report) must be designed to suit the specific project, situation, reader, etc. Proposal structure is not a matter of right or wrong, but more or less effective. You must design your proposal to work. In other words, you must create a document that will give your specific reader enough confidence in you to approve your project and hire you to do the work. That said, your proposal should contain certain sections, each one designed to give the reader confidence that you can handle each essential aspect of the project. Here are the major parts of a typical proposal (in order).

1. Summary/Overview

General Advice

The Summary is the first section in every report. The purpose of the summary is, as the name suggests, to <u>summarize the key points</u> so that your reader will get all of the crucial information right away. A clear, concise summary will show the reader that you understand "the big picture" – you have a good idea of what you are getting into (and what you are getting the reader into!) – and that you have done your homework. Since the summary also sets the tone for the whole proposal, make sure that it focuses on what the reader will get and indicates exactly what you want the reader to do.

The Summary should be <u>concise</u> – don't waste your or the reader's time. Try to limit your summary to three of four sentences that cover the highlights; save the details/explanations for later.

Make sure that your Summary is <u>specific</u>. Include actual findings – figures, costs, dates, etc. as well as the actual solutions/steps you recommend. Instead of writing general statements such as, "This problem is costing the company a great deal of money," state the problem and cite actual costs: "Excessive employee absenteeism is costing the company \$XXX per month." Instead of "I have made some recommendations," list the actual steps to be followed.

Your Summary should also be <u>complete</u>. Many reports are never read all the way through. For this reason, make sure that your Summary contains all of the essential information that your reader <u>needs to know</u>. Summarize each major section in turn: the Introduction, the Conclusion (which, itself, is a summary of the body of the report), and the Action Statement.

Although the Summary is the first section in your proposal, <u>write it last</u> (after all, you can't summarize something until it exists, right?). Remember, <u>suspense</u> is a literary technique, not a business communication technique; we <u>want</u> to give it away at the beginning!

Use the heading "Summary" or "Synopsis," which are synonyms.

Specific Advice for this Assignment

Begin with an overview of the current situation, the problem with this situation, the consequences of this problem, and your suggested solution (and how you will accomplish it). List the benefits (for the reader!) of your solution as well as the projected completion date and cost. Finish with an indication of when you need to receive approval.

2. Introduction/Background

General Advice

The Introduction is the first section that you write, even though it is the second section that is read. An Introduction "sets the scene" by introducing the topic, the problem, the situation, the proposal purpose, the research methodology, the proposal structure/design, the authorization (who asked for the report?), and any other background information/details that your reader needs in order to make sense of what you are about to present.

Remember that your reader may not be familiar with the topic or information in your proposal, especially if you were asked to investigate a problem and recommend a solution. Since you have studied the situation in detail, you are familiar with it – but your reader is not. Therefore, you must make sure that you give the reader the entire <u>context</u> that they need in order to understand the significance of the details you will present, to evaluate the analysis you will undertake, and to judge the feasibility of the suggestions you will recommend.

If you have trouble writing you Introduction, imagine that you are presenting your proposal <u>orally</u> to a group. What would you <u>say</u> to the audience as soon as you stand? What would you say next? And after that? Write down everything you would say, stopping as soon as you begin the details. What you write down will be your Introduction (more or less – it may need some polishing).

NOTE: Don't confuse the Introduction with the Summary. The Summary will contain some of the same information as the Introduction, but overall they are different. If you remember that the Introduction contains the information that you would begin with if you were speaking to an audience, you should be okay.

Specific Advice for this Assignment

Examine the current situation, the problem and its consequences, and how your project will make things better. What will your project do/achieve? Explain why this suggested solution appeals to you. Finish by indicating what your proposal will do, and how it will do it. (In other words, what will the reader see as they read on?) Use the heading "Introduction" (and sub-headings if necessary).

3. Proposal Body/Discussion

General Advice

The Body is where you place all your carefully gathered, selected and edited facts, arranged and presented in your graphs, tables, charts, lists, and so on. The body is organized according to your <u>outline</u>. (You have an outline, right?)

a) Focus

Include only the information that you will analyze. Include only as many facts and as much analysis as you need to persuade your reader. Similarly, make sure that your visual presentation of this data is <u>useful</u>; don't create a graph or a table just because you <u>can</u>. Leave any merely interesting information for the Appendix.

b) Analysis

You <u>must</u> follow all facts with analysis. Facts do not speak for themselves - they need you to speak for them. A fact without any interpretation is just a piece of trivia. For example, I just bought a new pen for \$1.19. **So what?** Why have I told you this fact? What does this fact <u>mean?</u> What's my point? For every fact that you include in your proposal, ask yourself, "So What? Why have I drawn the reader's attention to this fact? What's my point?" <u>Make sure that you use every fact to make a point.</u>

c) Length

The body will be the longest section of your report. It can range from one to one hundred pages (or more). Just make sure that all the information that you present really is important, not merely interesting.

d) Format

Use headings and subheadings – the more, the better. These headings should always tell the reader exactly what they are about to read. Headings also make locating specific bits of information easier. This is particularly true for born-digital documents. **DO NOT USE "BODY" AS A HEADING!** Use headings that either describe what's in that section or ask the question that the section is answering.

Specific Advice for this Assignment

Divide your proposal's discussion into the three parts that correspond to the questions that will go through the reader's mind:

- a) **Technical Section:** Is there a problem? Can it be solved? How? Is this suggestion feasible? Practical? The best solution? What problems could arise?
- **b)** Management Section: Are these the proper people to solve this problem for me? Are they knowledgeable enough? Experienced enough? Is their schedule reasonable? Do they have the necessary equipment and facilities? Do they have the required sources for materials? Are all responsibilities clear?
- c) Financial Section: What will it cost me? Are these cost estimates reasonable? Will they have enough money to finish the job? Who will pay for what?

As you can see from the three sections of the proposal discussion, you must persuade your reader on three fronts. What do these sections contain?

a) Technical Section: "Will it Work?"

The purpose of the technical section is to reassure the reader that the project is a good one in technical terms. For this reason, **focus on the project itself**. Convince your reader that your project is both technically feasible and practical. Cover the

- **Theory** that applies to the situation and your solutions.
- **Scope** of your project (that is, its "boundaries" or limitations how much it will solve).
- Methods/procedures that you will use.
- Steps/tasks that you will take.
- Parts/materials that your project will use.
- **Unknowns** that may arise (there are always unknowns!).

By the time the reader finishes reading the technical section, they should be convinced not only that your proposed project can be done and will work, but also that yours is the best solution for the problem.

b) Management Section: "Are these the right people? Can they do it?"

Even if the reader is convinced that your project is a great idea, they may simply take your idea and get someone else to do it. The only way to prevent this from happening is to convince the reader that you and your team are the right people to undertake this job – in other words, you must **focus on yourself and your planned actions.** Cover the:

- Team itself (Knowledge/Training? Experience? Skills?).
- Logistics of the project (Materials/parts? Suppliers? Transportation? Storage?).
- **Schedule/timeline**, both step-by-step and projected completion date.
- Facilities that you will need and have arranged to use.
- **Responsibilities** of each team member (Division of tasks/duties?).
- Agreement with the client that the project requires (Who will do what? How? When? Lines of authority? Report/communication agreement? Who gets what at the end?).

Sell the reader on <u>you</u>. Convince them that you will make good decisions. Give them confidence that you have the right people, the right facilities/equipment, and the right plan.

c) Financial Section: "What will it cost me? Are these costs reasonable?"

Finally, you must persuade your reader that you have the financial resources and know-how to complete the job as promised on time and on budget. No one wants a half-finished job; no one wants to put more money than planned into something.

Financing is usually a make-or-break issue; for this reason, you must pay particular attention to persuading the reader that you know how to control costs and have considered all of the project variables. Cover the:

- Cost breakdown for parts, material, rent, shipping, etc. (the more detailed, the better).
- Total cost (again, broken down).
- **Sources of money** (Who pays for what? Will you have enough? What if you need more?).

Poor financial planning is often an indication of technical shortcomings (perhaps you didn't design the thing properly; perhaps you didn't know all that it entailed), and the reverse is also true: a clear, detailed, and accurate estimate of costs indicates that you understand all that is involved and have planned carefully.

4. Conclusion/Action Statement

General Advice

Your Conclusion follows the body of the report. In this section, summarize the body – the facts and analysis you have just presented in detail. Give an "overall" picture of the issue/situation.

Your Conclusion may look similar to your analysis; that's fine since your Conclusion should <u>summarize</u> the analysis – i.e., say what it all means. Remember, never leave your reader alone with the facts; if you do, one of two things will happen:

- 1) Your reader will not know what your point is.
- 2) They will interpret these facts in their own way.

In No.1 you have presented your reader with a collection of meaningless facts – literally! – trivia. In No.2 all your careful selecting, arranging, presenting, and analyzing of the information will have been wasted because your reader may come up with a different interpretation – a different "bottom line" – than you. If this happens, you will look as though you can gather facts, but you can't tell what they mean: you can't think.

Either way, your judgement will be called into question.

So, in your Conclusion, summarize what you discovered and what it all means – the "bottom line."

Specific Advice for this Assignment

Once again, remember that your proposal is meant to persuade. Thus, end positively. Express confidence in your plan and your team. Sum up what you are prepared to do and what the reader will get. Finish with a clear and specific statement of what you would like the reader to do (plus details: How? Where? By when? To whom?) so that you can get started. Give the names of the team contact person. Make sure that every team member signs the proposal.

5. Appendices

General Advice

Use an appendix to hold information that may be of interest to your reader but isn't necessary for the purpose of your report. Clearly label the section ("Appendix"). Whatever you put into an appendix may be referred to ("See Appendix C"), but it shouldn't be discussed at length in the report; if it is, include that information in the report itself.

For example, let's say that you sent out questionnaires to gather information for a report. After they were returned, you compiled the information and included it in your report discussion. What do you do with the actual questionnaires? If you put them into the report, they will clutter it hopelessly, yet you don't want to throw them away because the reader may be interested in the questions that were asked (the wording, perhaps) or the way they were answered. The solution is to put them into an appendix. That way, readers don't have to read through them, but can if they wish.

Specific Advice for this Assignment

For your proposal, **include a minimum of three appendix items** (drawings, calculations, specifications, etc.). Make sure that each appendix is identified, each page is numbered, and each item is labeled. Use a separate "title page" for the appendices (also numbered).

I hope this guide was useful.

D4 - THE TECHNICAL PROPOSAL - GUIDE-IN-BRIEF

Here is a summary of the longer document (*Proposal – A Writing Guide*). As with the assignment details sheet, remember that these are suggestions only; don't feel that you have to include everything here.

- 1. Summarize the proposal, telling the reader what you intend to design and build.
- 2. Present the background the situation that brought about the proposed project. What was the appeal? Get the reader interested, supportive, and excited about the project.
- 3. State what you propose to design and build, how you plan to help your clients take advantage of the opportunity, how you intend to help them with the situation.
- 4. Discuss the benefits of doing the proposed project, the advantages that come from designing and building it.
- 5. Describe exactly what the completed project would consist of, what it would look like, how it would work--describe the results of the project.
- 6. Discuss the method and theory or approach behind that method; enable readers to understand how you'll go about the proposed work.
- 7. Provide a schedule, including major milestones or checkpoints in the project.
- 8. Briefly list your qualifications for the project; provide a mini-resume of the background you have that makes you right for the project.
- 9. List the costs of the project, the resources you'll need to do the project, and the availability of these resources.
- 10. Conclude with a review of the benefits of doing the project (in case the shock from the costs section was too much), and urge the reader to get in touch or to accept the proposal.
- 11. Provide appendices (initial sketches, layouts, calculations) where applicable.