Proposal Report

Description:

Proposals are directed toward a customer, a potential sponsor, a funding agency, company board, etc. to briefly outline

* problem statement, societal impact of the project,
* company organization (human resources, etc.),
* specific requirements and objectives of the project,
* approach to the solution of the problem
* outline of the requirements for any standards that the product would need to comply with,
* deliverables and expected outcomes of the project,
* tentative cost-budget analysis,
* time plan (Gantt chart),

and should answer the following questions:

* Is the problem sufficiently important to justify money, company time, and your effort?
* Is the project well defined and realistic?
* Have you outlined a sound approach, including your ability to perform the tasks?

Estimated Length:

10 pages plus Appendices (12pt., linespacing: 1.5 lines)

The body should carry the main message, while the appendices contain supporting information, data backing up your claims in the body, and detailed calculations which may be of importance to some readers who require additional details. If the appendix does not contribute to the overall document, don't put it in. You as the writer have to make the decision on what should be included or not. Try putting yourself in the position of the reader: an intelligent, lay person.

What is a Project Proposal?

A project proposal is written to make an offer and to try to convince a supervisor or a future customer to accept it. In a project proposal you state that, in exchange for time and/or money, you will give them something that they want (an analysis of a procedure, for example), make something they desire (a prototype of a new product), or do something they wish to have done (redesign an existing structure). In other words, you are asking a decision-maker to invest a resource, (time or money or both), so that the project you propose can be completed, and your readers, whether a future supervisor within your own organization, or your client for your project, will invest their resources carefully. Therefore, it is crucial that your proposal answers questions your readers may have about what you propose to them. For example, the most important question your proposal readers will want answered is how does your proposal relate to them? In other words, what problem will it solve, what need will it address, and why is it important to them? Secondly, your proposal readers would like to know exactly what you are proposing to make or do, and how it relates to the problem you are describing. In other words, they will want to be convinced that you have a plausible solution procedure to the problem, and to know what this solution procedure involves. Your readers would also like to know exactly what they would be getting from a given project, and how much these deliverables will cost. Further, they would like to be assured of your capability to analyze and solve your project's problem, and produce the deliverables that you claim you will produce. A successful project proposal identifies and answers all of the above needs. In order to respond to those needs, a project proposal usually should include the following components:

* A Title Page, which lists a brief descriptive title of your project, the names, titles and addresses of the individual(s) to whom the proposal is being submitted, the names, titles, and phone numbers of the individual(s) submitting the proposal, and the date of submission. Title Pages may also include additional information such as the proposed starting date of the project, the proposed project duration and completion date, and the cost of the project or amount of funding required.

* A Table of Contents, which lists main sections and subsections of the proposal, and the beginning page numbers for each.

* An Executive Summary, which provides a brief (about one page) overview of the proposed project. This is probably the most important section of your proposal, because it provides a clearly defined problem and proposed solution procedure, justification that the team is capable of solving the problem, a description of the expected project deliverables, and estimated cost and duration of the project. The Executive Summary is often the only section of your proposal that some readers will read; and must present all the relevant information as clearly and effectively as possible. It is often the last section to be written.

* An Introduction, which provides a complete background of the project, problem statement, societal impact of the project, scope and organization of the report.

* Team Organization, which provides the organizational structure of the company, academic background of the team members, and their tasks in the project. This section provides a summary of the group's qualifications for the project. Identify key personnel and describe directly related education and experience. Also include each member's responsibility for the duration of the project. An organizational chart to identify the specific areas of responsibility of each team member may be appropriate.

* Requirement Analysis, which provides the project requirements and the objectives to establish the scope and boundaries of the project. If possible, this section should have quantifiable measures of performance.

For example, "This project seeks to cut the maintenance costs by at least 20%" or, "The equipment will run for at least 2 hours on 4 AA size batteries."

* Standards Section composed of draft description/discussion of the requirements for any Standards for the project. The team is supposed to come up with initial ideas for what kind of standards would be required to successfully implement the project.

* Solution Procedure, which identifies the approach that the team will use to meet the project objectives. You should explain here your principal tasks at subsystem level, their duration, their sequence, and their particular purposes. Wherever possible, the methods and task to be performed should be outlined in logical sequence and explained in detail. Do not assume the reviewer will fill in the gaps in your logic. Part of the Solution Procedure will be a proposed schedule. A common way of identifying project milestones and due dates is to use a graphic representation of the task relationships, such as a Gantt Chart (a bar chart showing timeliness for each principal task) or a PERT/CPM Chart (a network representation of the project that shows the sequential relationship between project activities). The Solution Procedure should also describe the relevant instrumentation and facilities required to complete the research or product development. The Solution Procedure should include a budget that estimates the anticipated R&D costs over the life of the project. Wherever possible, provide sufficient commentary on the budget to facilitate understanding by all parties involved.

* Expected Deliverables, which provides the reader with a description of the products and/or services they can expect from your efforts such as documents, equipment, software, etc.

* Conclusion, which briefly recaps the key points of the proposal. Summarize the current problem, the steps you propose to take to solve the problem, your concluding remarks including benefits to the client and environmental effects.

Tips for Writing Your Project Proposal

An effective proposal will identify and meet the needs of your readers by first considering what they will expect to learn from the proposal, and by then providing that information clearly and effectively. Your final grade for your proposal will be based on how well you have been able to do this, using the guidelines provided. Therefore, while writing your proposal, remember to:

* Imagine yourself in your readers' position and ask if it answers all of your questions. Your client would like to know that you can provide a sound and concrete technical solution to the problem, along with a clear procedure for arriving at such a solution. They will also want to know that you can offer realistic and reasonable costing with demonstrated financial responsibility, and realistic and reasonable timing with intelligent and thoughtful planning.

* Take into consideration that there are other possible solutions to the problem at hand, and examine the strengths and weaknesses of those alternative solutions.

* Keep in mind that effective professional communication should promote goodwill between you and your client. Present an effective plan for communicating with your client, and promise quality control and reliability checks on work in progress.

* Check spelling, grammar and punctuation before printing out the final draft of your proposal, and be sure that the final draft appears as a professional document, free of errors.

- Make sure the proposal is paginated properly, and is also reader-friendly. In other words, is it laid out effectively, can a reader spot new sections easily, does it look professional, etc.?

- Be candid and state where problems exist. Factual rather than promotional information is required.

- Note that writing style varies depending on the writer and the intended reader. However following are often true:

  - Diversity of sentence structure is desirable to stimulate reader's interest, but should not unnecessarily add to the length or should not confuse the reader.

  - Your written proposal and future reports should emphasize the concise documentation of a technical, complex engineering activity.

  - Lack of needed information cannot be covered up by confusing statements.

  - Use concise sentences; nouns should not be I, we, there, it, this, etc.

QUICK ACCESS LINKS

- Student Roadmap
- Proposal Report Description
- Evaluation Rubrics
- Lecture Notes
- Projects
- Schedule

NEWS

01.11.18: Venues of Standard Committee Meetings are announced:

- Devices competing to catch falling balloons: **DZ-17**
- Devices trying to score in each other's goals: **EA-307**
- Vehicles chasing each other around a closed course with varying properties: **D-131**
- Devices trying to extract the plan of their surroundings: **EA-306**

18.10.18: Lecture Notes are updated.

04.10.18: Introduction lecture slides are uploaded.

28.09.18: Projects are announced.

28.09.18: Schedule is uploaded.

24.09.18: Course Website is Live

PROJECT FAIR