Summer - 2008
Internship Report Guidelines

Contents:

A. REPORT CONTENT:

1. Choice of Topic

The best topic for the report, if possible, is a single technical project on which you have spent a significant portion of your internship time. If you haven't focused on a single technical project, there are other options available. For example

- If you have worked on several applications or projects with both similarities and differences, you could compare and contrast the projects.

- You can analyze certain process, work routine and come up with some useful recommendations that can result in greater efficiency.

- You could pick on reasonably significant decision/decisions that you (or you and your supervisor, or you and your team) had to make during your work experience. If you did an analysis at the time, use that as the basis for your report and justify that decision.

- You could pick a problem, or something that didn't work out as expected, and analyze, as what could have been done differently, either from a project management or from a technical perspective. Analyze whether you could have achieved the outcome you originally expected.

2. Personal Contribution

Be sure to clearly state your personal role and contribution to the work that you are presenting.

3. Purpose, Problem Definition

A clear and concise definition of the problem(s) is essential to set the stage for the remainder of the report. Give a situation assessment about the problem like: *what is* versus *what might be*, and explain *why it is* important.

4. Analysis

A description of a procedure or a process, or a model, is not sufficient in itself. A demonstration of analysis, critical thinking, or evaluation of the process or procedure is a requirement. On the other hand, a feasibility study or an economic evaluation of a proposal, or the evaluation of alternative solutions to a problem are appropriate. Define any alternative solutions or approaches considered or possible. Define the criteria for evaluation of the alternatives (e.g. goals, constraints, risks, costs, benefits, etc.). Define and justify any assumptions you are required to make. Evaluate the alternatives, and select a course of action or a recommendation. Check back to make sure that the analysis and the recommendation are focused on solving the problem as you have defined it.

5. Conclusions and Recommendations or Action Plan

Summarize the conclusions and recommendations of your report. Recommendations should be focused on decisions or actions to be taken (or not taken) as a result of the analysis. If your

report includes an implementation plan, include suggestions for monitoring your actions or the assumptions you've made in proposing the action are reasonable, or that your conclusion is correct.

B. REPORT STYLE FORMAT & STRUCTURE:

1. Language

Technical reports are written in a relatively formal style (third person and passive voice). Precision and accuracy of language are valued. Check your spelling, grammar and punctuation.

2. Organization and Logic:

A concise report is preferred, rather than a lengthy report. However, "concise" should not be achieved at the expense of clarity or completeness. Provide sufficient information to convince a critical, technically trained reader that your conclusions and recommendations are well founded, reasonable and appropriate considering the criteria for evaluation.

Readability is valued. Good organization, suitable headings, careful page layout, and logical flow will enhance readability. Avoid acronyms if possible and otherwise define them. Make clear reference to tables, figures and glossaries, and make sure that the message delivered by a table or a figure is clear.

3. Structural Elements Required:

i. Preliminary Pages

- Front Cover
- Title Page
- Table of Contents
- List of Tables (for tables in the body of the report)
- List of Figures (for figures in the body of the report)
- Acknowledgements
- Executive Summary: A brief statement of the problem, method of solution and the general conclusions reached. Its purpose is to give the reader an idea of the nature of the report, its pertinence to the field of interest and its results without the necessity of reading the entire work.

ii. Body of the Report:

- Introduction

  Problem definition, why it is important, background information on the company or the technology, how the problem addressed relates to your work assignment, what

your role was, why the report was written, reference to previous work on the problem, etc.

- Main Section

  How you studied the problem, what you found, and what these findings mean. The main section of the report should be organized under logical headings appropriate to the content. Use figures and tables where they serve a specific purpose to make explanation easier, or save unnecessary detail in the text.

- Conclusions and Recommendations

  Provide a short summary of what you did and what it means. Emphasize statements of conclusions that can be supported by the analysis described in the report. Most recommendations should follow logically from the conclusions, although some recommendations may be speculative.

- References

- Glossary

  Provide a glossary if the text is necessarily heavy with specialized terms, mathematical symbols. If there is only the occasional term in the report, define it as part of the text.

- Appendix

  The appendix should contain any information that substantiates the report, but that is not required for a convincing understanding of your work. The appendix may contain bulky data such as maps, lengthy tables, computer printouts, descriptions of processes or operations etc. Not all reports need an appendix.

- Feedback

  Present your thoughts on the internship experience and how it can be further improved.