TYPE YOUR PROJECT TITLE IN CAPITAL LETTERS HERE

by

Your Name in Title Case

Your Degree B.S., Name of University, City, Year Obtained

A Culminating Project (EM 670)

Submitted to:

Committee member names

St. Cloud State University

in Partial Fulfillment of the Requirements

for the Degree

Master of Engineering Management

Maple Grove/St. Paul, Minnesota

[Month, year of completion]

ACKNOWLEDGEMENTS

This section is optional. You may opt to acknowledge those who helped you on this project here.

ABSTRACT

Abstract should be a brief, comprehensive summary of the contents of the report. It should not exceed 300 words. It should describe the problem of the project in one sentence if possible, the objective, methodology in brief, and the results of the study. The implications or application of the project can also be stated here. Please note that abstract is NOT written in a paragraph format. Therefore, do NOT indent the first line of the abstract.

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APPENDIX

A. Sample Test Questionnaire
B. Table of Specifications

[The exact wording and capitalization used in the text should be used on these pages. Roman numerals, dot leaders and numbers should be aligned on the right.]

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[The exact wording and capitalization used in the text should be used on this page. Dot leaders and numbers should be aligned on the right.]

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[The exact wording and capitalization used in the text should be used on this page. Dot leaders and page numbers should be aligned on the right.]

Chapter I

INTRODUCTION

Introduction

Introduction should be short, may be a paragraph or two. It should focus on what a reader should expect to read from your culminating project report. Please note that the final project report should be written in past tense because the project is completed, in a third person format, and should be at least 50 pages in length not including the title pages. Do not use the words "I", "you", or "we". Instead, you can use the term "author." The first line of every paragraph should have 0.5" indentation.

This culminating project guideline is written in a template format so that you can use this template directly to type in your final project report. However, this template does not completely adhere to the style guide set by Graduate Studies. For more information on exact formatting and style go to: Starred Paper Manual" on the Graduate Studies website or buy a style guide from the Husky bookstore. You can also get additional help from Graduate Studies at a fee to format the report based on their requirements. This guideline document will help you in preparing the actual content of your final project report.

Problem Statement

A problem statement identifies the root cause (why) for conducting the project and is stated very briefly - may be in a sentence or two. In other words, you need to state why undertook this project. Remember to write in past tense. Do NOT write the objective of your project here.

Nature and Significance of the Problem

State the importance of the problem here and explain how the project was useful.

Objective of the Project

List specific objective(s)/goal(s) of your project. The objective of the project can be described in a sentence or two. For e.g., the objective of this project was to evaluate the effectiveness of lean implementation at ABC Company.

Project Questions

In most case, you will be using "Project Questions" as your heading. Hypotheses are essential when working on experimental type of project, whereas research questions provide guidance for the kinds of data the researcher should collect, analyze, and interpret. It is a common practice to have at least 2-3 questions based on the problem of your study. Avoid writing yes/no type of questions. These questions are answered when you actually execute the project. Stating your questions starting with "what" is a good example.

Limitations of the Project

State the limitations of your project. Usually, the limitations emerge after the project is completed.

Definition of Terms

State precisely what the terms in the problem and the project mean. See an example below:

Lean Manufacturing. An overall methodology that seeks to minimize the resources required for production by eliminating waste (non-value added activities) that inflate costs, lead times and inventory requirements.

<u>Summary</u>

Chapter II

BACKGROUND AND REVIEW OF LITERATURE

Introduction

Provide a brief introduction on what will be covered in this chapter or in other words what should a reader expect to read from this chapter.

Background Related to the Problem

Here you can describe in detail the background related to the problem you had undertaken. Description of the company, the type of products they manufacture, description of the area you are analyzing all go under here.

Literature Related to the Problem

Use the SCSU library website and go to the database related to your discipline. Then search for articles published in journals or conference proceedings that focus on problem similar to yours. You can also check the Engineering Management Journal (EMJ) in the library database for articles related to Engineering Management. It can be located under "Business Source Premier" on the link: <u>http://libdata.stcloudstate.edu/page.phtml?page_id=169</u>

Describe these articles here. Also, you should explain how this literature is related to your problem. There are several ways of doing in-text citations. See the examples below.

Smith (2008) stated that such and such. Moreover, Jones (2004) describes the practical application of Y methodology in the following manner, "Exact quote here" (p. 20). It has been found that the economy is getting better and is expected that there will be 20% growth in the area of engineering and management (Smith & Johnson, 2009). If any of the information is obtained from a website you need to cite it as well (retrieved from: http://www.google.com).

Literature Related to the Methodology

Similarly, describe the literature related to the methodology that you are using in your project. You may be able to find several books or articles on the same topic.

If a figure or table is copied from source, it should be referenced. Table headings should go above the table. Figure headings go below the figure. When referring to Figure 1, "F" should be in capital. But, when stating this is shown in the figure on page 3, "f" should be in lower case. All the tables and figures should be cited and explained in-text.

Summary

Chapter III

METHODOLOGY

Introduction

Provide a brief introduction on what will be covered in this chapter or in other words what should a reader expect to read from this chapter.

Design of the Study

Describe the framework of your study. You can specify if you are going to use a quantitative approach, qualitative approach, or a mix of both. You should also provide a rationale for using a particular approach. For e.g., explain why a qualitative method works better for the project over a quantitative method?

Data Collection

Here you should provide a detail description about the data collection process. The information should be stated in a manner that can make the process repeatable by another person conducting the same project.

Data Analysis

You will just describe the tools and techniques that were used to analyze the data. The actual analysis of your data should be illustrated in the next chapter.

<u>Budget</u>

If your project involved any type of cost, itemize it here. Alternatively, if the cost were covered by a company, state it as well.

<u>Timeline</u>

Describe the timeline for the completion of your project. You may use Microsoft Project software to develop a Gantt chart. Apply your project management skills to show the timeline for each deliverable, sub-deliverable, and milestones of the project.

<u>Summary</u>

Chapter IV

DATA PRESENTATION AND ANALYSIS

Introduction

Provide a brief introduction on what will be covered in this chapter or in other words what should a reader expect to read from this chapter.

Data Presentation

In this section you will present the actual data that was collected. It may be easier to read if you can organize the data collected under different categories or sub-headings. It is important that you explain all the tables and figures illustrated in your report as a part of your write up.

Data Analysis

Explain the statistical or any other procedure that was used for analyzing the data. Also, interpret the analysis here.

<u>Summary</u>

Chapter V

RESULTS, CONCLUSION, AND RECOMMENDATIONS

Introduction

Briefly explain the content of this chapter.

<u>Results</u>

Summarize the overall methodology and the project and discuss the results obtained from the study. You should also state each of the project questions and describe how each question was answered by this project. It will be best to organize this part in a question and answer format.

<u>Conclusion</u>

Conclusion section should bring all the loose threads together. Describe in few paragraphs precisely what the study was about and what has been accomplished through the project. The conclusions should be entirely supported by the data presented in the report.

In conclusion, this document was prepared by Dr. Hiral Shah to help the students in the Engineering Management program with their final culminating project report. The content of the report was presented in its entirety.

Recommendations

Although, an effort was made to write the template using the Starred Paper Manual provided by the Graduate Studies at St Cloud State University, it is highly recommended that you go through the actual manual for formatting details or get the formatting done from Graduate Studies at a nominal charge.

Similar to the above paragraph, provide some recommendations for future work related to your project and/or recommendations on how to use the results of your study. Once your chair/committee has approved the report you need to submit ONE spiral bound copy so your final grade can be changed by the committee chair.

REFERENCES

Cite your references using the American Psychological Association (APA) guidelines. Only the works cited in-text in your report should be listed here. For more understanding on writing up your project report you can refer to:

Leedy, P.D., & Ormrod, J.E. (2010). *Practical research: Planning and design* (9the.d.). Upper Saddle River, NJ: Pearson.

American Psychological Association (2010). *Publication manual of the American Psychological Association (6thed.).* Washington, DC: APA.