#### **Contents of Outline Document**

#### Introduction

This section aims to give a general overview of the main topics of the study and to be able to awaken the reader with the concepts of the research study. The first paragraph includes the opening statements concerning the main topic leading to the specific topic. The second paragraph presents a discussion on the specific topic leading to the main problem. The succeeding paragraphs emphasize the presentation of the main problem. Finally, a solution is proposed to solve the problem together with its corresponding strategy.

The introduction has two (2) main purposes: 1) to give an overview of the main points of the thesis, and 2) to awaken the reader's interest. It is recommended to rewrite the introduction one last time when the writing is done, to ensure that it connects well with the conclusion. In line with this, a particular scenario may be presented and over the conclusion it should be returned from a different – richer or even contrasting perspective.

Sample:

VEHICLE MONITORING SYTEM USING RADIO FREQUENCY IDENTIFICATION (RFID) FOR CAVITE STATE UNIVERSITY, INDANG, CAVITE

PAGLAUM P. BAGA-AN JOHN REY G. BON

An undergraduate thesis outline submitted to the faculty of the Department of Information Technology, College of Engineering and Information Technology, Cavite State University, Indang, Cavite, in partial fulfillment of the requirements for the degree of Bachelor of Science in Information Technology. Prepared under the supervision of Ms. Gladys G. Perey.

#### Statement of the Problem

A statement of the problem is normally used in research that outlines the problem to be solved by a research study. Generally, a problem statement outlines the negative points of the current situation and describes why it matters. The most important goal of a problem statement is to define the problem being addressed in a clear and precise manner. Its main focus is to process the improvement of activities and steer the scope of the research study.

Ideally, the problem must be well-defined. It is very important to identify the *Main Problem* or the overall problem and the *Specific Problems* relating to the research study. The *introduction* to the problem statement presents why a particular topic is chosen. It gives the idea of how the proponent/s arrive at selecting the research study. There are several ways to present problem statement. One is by asking questions leading to the presentation of the identified problem. Another way is to start a narrative story of how the problem came about or how it occurred. Others begin with a discussion of the present-day and appropriate issues. Although there are different styles in stating the problem, the objectives stay the same, and that is to show that the problems being measured for the research study really exist. A well-done problem statement involves a long iterative process, but creates a clarity that makes the proponent/s save time later in the process.

## **Objectives of the Study**

While the problem formulation aids to describe the aim of the research study, the objectives provide an accurate description of the specific actions to take in order to reach this goal. As with the problem formulation, the overall objective should be framed in a single sentence. It is equally important to state the objectives for pursuing a particular research study be established. The objectives are identified as to *General* or *Main Objective* and *Specific Objectives*.

The general objective must be in response to solve the main or overall problem stated. On the other hand, the specific objectives are related to the set specific problems. It is recommended to present the specific problems in descending order of importance. The SMART criteria must be carefully considered in formulating the specific objective such as for being *specific, measurable, attainable, realistic* and *time-bound*.

## Significance of the Study

The Significance of the Study contains explanations on how the reader will be convinced that the research study is worth doing. It presents the value of the study both to the researcher and to the stakeholders. It contains discussions about the

possible solutions to existing problems or improvement to unsatisfactory conditions; who are the beneficiaries and what are their identified benefits; contribution to the body of knowledge and its implications.

**Time and Place of the Study** - written in paragraph form stating the month and year the study will start and end and the place/s where the study will be conducted. Time of the study starts on the day when the proposal is approved and the researcher/s start preparing the experiments or instruments for data gathering up to the day when the researchers are ready to present the result for final defense. *Place* or *places* of the study is or are where the study will be conducted.

Scope and Limitation of the Study – Scope refers to what will be covered by the investigation or experimentation such as the extent of the study area, parameter to be tested or measured, sampling techniques or tools that will be used, focus and depth of the investigation analysis and the statistical tools that will be used to make generalizations. This can be written by identifying the modules that the study will be featuring as well as the complete description of each of the modules. Limitation means limits to the area of coverage, sampling strategy or sample size, sensitivity and accuracy of instruments, availability of facilities or equipment, interpretation of data, statistical analysis applicable, and monetary considerations. Some limitations can be restrictions due to the political, social, cultural or ethical considerations of the study.

**Definition of Terms** – the terms that will be written in this section can be "operational definition" or "general definition" or both. Operational definition means how the term is used in the study. General definition is the meaning of the term as written in general references like a dictionary. Definitions are written in sentence format. All terms are arranged in alphabetical order like a dictionary.

#### **Theoretical Framework**

A theoretical framework consists of concepts and, together with their definitions and reference to relevant scholarly literature, existing theory that is used for your particular study. It demonstrates an understanding of theories and concepts that are relevant to the topic of the research study and is related to the broader areas of knowledge being considered.

The theoretical framework is the "blueprint" for the research study inquiry. It not only serves as the guide on which to build and support the chosen study but also provides the philosophical, methodological, and analytical structure to define the

research study as a whole. It is a collection of interrelated concepts, like a theory but not necessarily so well worked-out. Furthermore, it guides the research study in determining the things to measure, and the statistical relationships to look for.

### **Conceptual Framework**

A conceptual framework represents the researcher's synthesis of literature on how to explain a phenomenon. It maps out the actions required in the course of the study given the researcher's previous knowledge of other researchers' point of view and observations on the subject of research. The conceptual framework is the researcher's understanding of how the particular variables in the study connect with others. Accordingly, it identifies the variables required in the research investigation. It is the researcher's "map" in pursuing the investigation.

A conceptual framework is represented by a diagrammatic presentation of the concept of the research study. It involves the inputs, processes involved and the expected output. The diagram describes the workflow and order of the activities to be conducted until the research study is completed. A short description and explanation of the diagram must always be included.

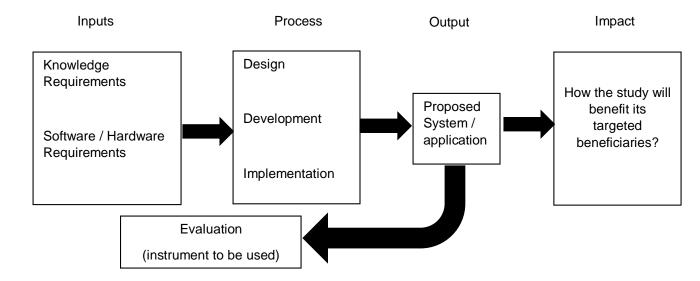


Figure 1. A Typical Conceptual Model of a System/Application

## Time and Place of the Study

The time and place of the study is written in paragraph form stating the month and year the study will start and end and the place/s of the study will be conducted. The **Time** starts on the day after the proposal was approved and starts gathering the data until the research study is ready to present for the final defense. **Place/s** is/are where the study will be conducted.

# Scope and Limitations of the Study

The Scope and Limitation of the Study explains what the study is all about. It also includes statement of the reason why the research study is conducted and how it will be resolved. The **Scope** refers to what will be included in the research study. It also discusses the portion/proportion of the totality suggested by the research topic and the problem statement that the researcher intends to cover, or will actually cover. It incorporates the giving of the "reason why" the research study is being pursued. In contrast, **Limitation** indicates the boundaries beyond the actual area of study. Also, limitation aims to identify potential weaknesses of the research study.

### **Definition of Terms**

The terms to be defined are arranged in an alphabetical list of important terms particularly ambiguous terms or those used in a special way. Defining important

terms is essential to ensure a common understanding of key concepts and terminology is shared between the researcher the reader, particularly if the term is unusual or not widely known.

Generally, important terms only need to be defined in two (2) ways: first, when the term is not widely known or understood; and second, when the term has specific or unique meaning in the context of the study, and it is essential that the reader of the research study understands its specific meaning.

# REVIEW OF RELATED LITERATURE (RRL)

An introductory statement opens the RRL with a general description of what literatures are found in relation to the problem being solved. The RRL should include books, journals, magazines, papers presented in scientific conferences or symposia, local studies, and foreign studies that will help build the credibility of the proposal, soundness or reliability of the methods used and relevance of the study being proposed. These literatures should be published in at least five years. Older literatures may be allowed but only those with complete and reliable URL addresses.

The APA (6<sup>th</sup> ed.) format in writing in-text citations and bibliographic information should be followed. Outlining the content of the RRL or the use of paragraph headings is very important for the organization. The RRL of the proposal is just the beginning of many literatures that the researcher/s would need. Additional literatures will be subsequently added when the results and discussion of the study will be written in the final manuscript. Synthesis of the information being cited is required at the end of the chapter. The number of citations cannot be strictly prescribed but a good RRL would have at least 20 or more citations of literatures published in the last five years, older publications are accepted depending on the nature of the study,

#### **METHODOLOGY**

The methodology is the most important part of the proposal. A detailed methodology is required for all proposed studies. It should include both the **materials** and **method** to be used in developing the study.

The **materials** provide the listings of all the materials needed for the study, its description/specifications of their use in the study. The **method** provides the chosen methodology that the researcher/s will be using in the development of the study. It will also show the step-by-step procedures of how the study will be conducted.

#### **REFERENCES**

The reference section of the proposal should be written using APA (6<sup>th</sup> ed.) format. Entries should be arranged in alphabetical order based on the surnames of authors. Bibliographic information for each source should be written in single space and double space between source. All literature sources cited in the RRL and other materials used in preparing the proposal should be reflected in this section.