

CHAPTER 3: RESEARCH METHODOLOGY

The objective of this research was to find critical factors that influence the effectiveness of eGovernment initiatives in the solution implementation stage as well as the solution operational stage, and to then formulate an evaluation model to analyze those factors at the organizational level. The key eGovernment projects and initiatives under the Ministry of Public Administration and Home Affairs in Sri Lanka have been included as the sample space to test the effectiveness factors in the evaluation model. The development of this evaluation model was done after an extensive literature review in related areas in relation to developing countries, and through a pilot study done in an organizational context in Sri Lanka.

To fulfill this objective, the author attempted to formulate factors based on the methodology given under section 3.1. These formulated factors were then abstracted to develop the conceptual methodology (see Figure 3.1), which provided an analytical basis for this research.

3.1 Research Design and Approach

According to Yin (2003), a research design is the logic that links the data to be collected (and the conclusions to be drawn) to initial questions of study. As this research has the ability to interact with many social and human aspects, it has much more justifications to use a qualitative research approach. Also, the author decided to use a case based research strategy, as the qualitative research approach works well with a case based research strategy. For case based research studies, five components of a research design are especially important:

1. A study's questions;
2. Its propositions, if any;
3. Its units of analysis;
4. The logic linking the data to the propositions; and
5. The criteria for interpreting the findings.

Covering these preceding five components of research design will effectively force to begin constructing a preliminary theory related to the topic of study.

The research methodology is the way to systematically solve the research problem by logically adopting various steps. There are several ways of doing scientific research, such as case studies, experiments, surveys, histories, and the analysis of archival information (Yin 2003). Yin also points out that, each strategy has peculiar advantages and disadvantages, depending on three conditions: (a) the type of research question, (b) the control an investigator has over actual behavioural events, and (c) the focus on contemporary as opposed to historical phenomena. In general, case studies are the preferred strategy when “how” or “why” questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context. It also explores the ability of the investigator to address a broader range of historical and behavioural issues.

3.2 The Conceptual Methodology

The Conceptual Model, which will be discussed in Chapter 4, was formulated based on two sources.

1. Literature Review
2. Pilot Study

The development of the Effectiveness Evaluation Model was done after extensive literature review (discussed in detail in Chapter 2), in related areas in relation to developing countries, and through a pilot study done in the Sri Lankan organizational context. The pilot study was carried out to get some clarification on the proposed evaluation model. This pilot survey gave valuable insights into important factors being studied along with the information derived parallelly via the ongoing literature review. This confirmed the research approach both by existing theories and by a fresh set of real observations in the Sri Lankan government organizational context. In this pilot study, in order to represent all stakeholders, a few preliminary interviews were carried out with apex body officials, ministry officials, ministry employees and vendors related to ongoing eGovernment initiatives.

In this research, those who have more eGovernment implementation experiences were selected upfront for the pilot study such as eHRM, ePMS, eBMD and HHL etc. The

factors that might not have been identified from the literature survey have been identified through the exploratory study during the case analysis. There are a significant number of models developed to identify factors during implementation and separate models for during operations. It is very hard to find a single model for both implementation and operational stages.

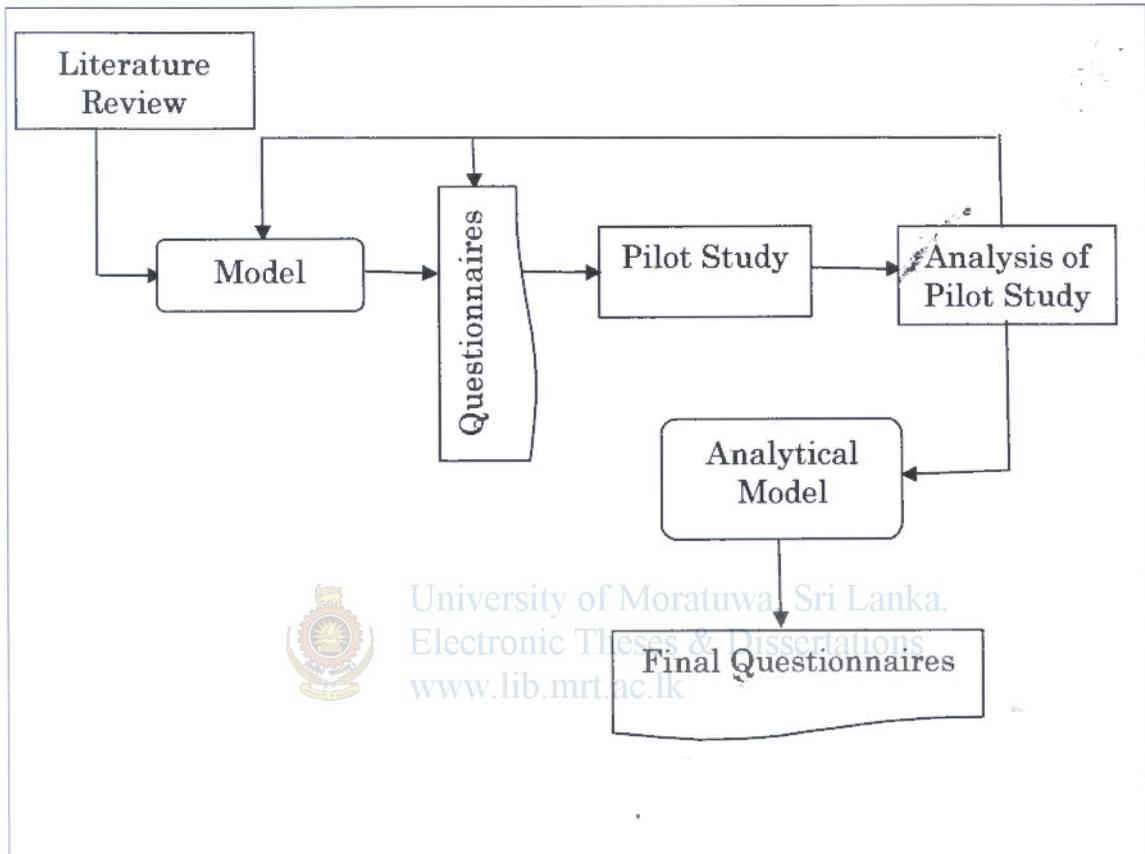


Figure 3.1: The Conceptual Methodology

The author attempted to formulate factors based on the conceptual methodology given in Figure 3.1. (In the next chapter the author mainly focuses on the concept of the analytical model, the eGovernment Solution Effectiveness Evaluation Model [eGSEEM] and definitions of the factors and different perspectives of that model.)