APPLICABILITY OF STANDARD PROJECT MANAGEMENT APPROACH IN SOLVING ISSUES RELATED TO SOFTWARE PROJECTS –THE CASE STUDY OF CEB

MASTER OF BUSINESS ADMINISTRATION IN

INFORMATION TECHNOLOGY



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This dissertation is submitted to the Department of Computer Science, University of Moratuwa in partial fulfillment of the requirements for the Degree of Master of Business Administration in Information Technology

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DECLARATION

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any University, contain any material previously published or written by another person except where due reference is made in the text.

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I endorse the declaration by the candidate. Moratuwa, Sri Lanka, Electronic Theses & Dissertations Signature of the supervisor

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ABSTRACT

Ceylon Electricity Board is the national electricity utility provider for the whole island. Incorporation of state of art technologies and standards are vital within the responsibilities bounded for the organization to fulfill the electricity requirements of the nation. With the increase of number of software projects, which are in multiple stages, it is required for the IT division to manage those projects efficiently and effectively. In order to meet this requirement, the research work focuses on deriving a Project Management Model with Processes Management, which is required to be tailored to the business need.

Further, this dissertation gives in detail the findings of a case study carried out by investigation of a suitable Project Management Model. In this process, existing software environment was investigated including as to how the IS activities were carried during past 20 years, main project types, major activities and current stages of those projects. With the increases of software to be handled, users of software systems might encounter certain difficulties in the absence of an appropriate management approach. Therefore, the dissertation has also included the approach carried out for the exploring significant problematic areas faced by the software users within the CEB environment.

The result indicates a Project Management Model, which incorporated practices from PMBOK, PRINCE2 and DSDM. According to the outcome, Project Management Model consists of four layers. Layer 1 indicates the factors affecting the project. This mainly consists of PMBOK knowledge areas. Majority of user problems were represented because of the lack of utilization of activities of these knowledge areas. Layer 2 indicates the strategic focus, which needs to align with the software environment. Layer 3 represents the project process, which consist of initiation, planning, execution and closure. Set of practices and tools were introduced for software implementation projects. Finally, the Layer 4 represents some major factors, which functions as foundation for many projects. Some of them are skills development, project environment and job positions. All in all, the above four layers of this PM model represent a comprehensive PM solution that is well represented by the findings of this research.

DEDICATION

This thesis is dedicated to my beloved parents who have always been with me in every hurdle I cleared.

Meththa Perera

December 2007



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ABBREVIATION

AGM	Assistant General Manager
CEB	Ceylon Electricity Board
СММ	Capability Maturity Model
CSC	Consumer Service Center
DGM	Deputy General Manager
DSDM	Dynamic System Development Method
EDP	Electronic Data Processing
EE	Electrical Engineer
ES	Electrical Superintendent
ESB	Electricity Service Board
FMIS	Finance Management System
GIS	Geographical Information System
HP	Havelett Packard ersity of Moratuwa, Sri Lanka
HR	Human Resources onic Theses & Dissertations
IEEE	Institute of Electrical & Electronic Engineering
IM	Information Management
IS	Information System
IT	Information Technology
MIS	Management Information System
OGC	Office of Government Commerce
PM	Project Management
PMBOK	Project Management Body Of Knowledge
PMI	Project Management Institute
POS	Point Of Sale
PRINCE	PRojects IN Controlled Environments
RDBMS	Relational DataBase Management System
SK	Store Keeper
SMC	Service Main Connection
SME	Small to Medium-sized Enterprises

WAN	Wide Area Network
WBS	Work Breakdown Structure
WIP	Work In Progress
WPN	Western Province North
WPS	Western Province South
R1	Region 1
R2	Region 2
R3	Region 3
R4	Region 4



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