

**CRITICAL EVALUATION OF FACTORS AFFECTING
SUCCESS AND FAILURES OF SRI LANKAN
GOVERNMENT SERVICE MAJOR INFORMATION
TECHNOLOGY PROJECTS: A CASE- STUDY ON
INTEGRATED TREASURY MANAGEMENT
INFORMATION SYSTEM OF MINISTRY OF FINANCE
SRI LANKA**

Dissanayake Mudiyansele Weerasekara

(199150M)

Degree of Master of Business Administration in e Governance

Department of Computer Science and Engineering
Faculty of Engineering

University of Moratuwa
Sri Lanka

July 2024

**CRITICAL EVALUATION OF FACTORS AFFECTING
SUCCESS AND FAILURES OF SRI LANKAN
GOVERNMENT SERVICE MAJOR INFORMATION
TECHNOLOGY PROJECTS: A CASE- STUDY ON THE
INTEGRATED TREASURY MANAGEMENT
INFORMATION SYSTEM OF THE MINISTRY OF
FINANCE SRI LANKA.**

Dissanayake Mudiyanseelage Weerasekara

(199150M)

The dissertation was submitted to the Department of Computer Science and Engineering of the University of Moratuwa in partial fulfillment of the requirement for the degree of Master of Business Administration in e-Governance.

Department of Computer Science and Engineering
University of Moratuwa,
Sri Lanka

July 2024

DECLARATION

I declare that this is my own work, and this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any other university or institute of higher learning, and to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

Also, I hereby grant to the University of Moratuwa the non-exclusive right to reproduce and distribute my thesis/dissertation, in whole or in part, in print, electronic, or other medium. I retain the right to use this content, in whole or in part, in future works (such as articles or books).

(Signature of the candidate)

Date: 18.07.2024

The above candidate has carried out research for the Master's thesis under my supervision

Name of the Supervisor: Prof.de Silva C.R

Signature of the Supervisor:Date: 18/7/24

COPYRIGHT STATEMENT

I hereby grant the University of Moratuwa the right to archive and make available my thesis or dissertation in whole or in part in the University Libraries in all forms of media, subject to the provisions of the current copyright act of Sri Lanka. I retain all proprietary rights, such as patent rights. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

ABSTRACT

The implementation of information technology (IT) projects in government service organizations has become increasingly important in recent years. These projects have the project management, and technology adoption. This research study critically evaluates the factors influencing the success and failures of major information technology (IT) projects undertaken by the Sri Lankan government service, specifically focusing on the implementation of the Integrated Treasury Management Information System (ITMIS) by the Ministry of Finance.

IT project implementation in the public sector is known to be complex and challenging, impacting government services significantly. To identify the key factors that contributed to the success or failure of the ITMIS project, qualitative research methods were employed. In-depth interviews were conducted with key stakeholders, including government officials, IT professionals, and end-users directly involved in the project.

The study examines various dimensions relevant to project success, such as project management practices, stakeholder engagement, technical challenges, organizational culture, and change management. By conducting a comprehensive analysis of these factors, the research provides valuable insights and recommendations to enhance the success of future IT projects within the Sri Lankan government service.

The outcomes of this research contribute to the existing body of knowledge on IT project management in the public sector. Policymakers, project managers, and IT professionals engaged in similar initiatives can benefit from the practical recommendations derived from the study. These findings facilitate the improvement of project management practices, resource allocation, and the successful implementation of future IT initiatives within the public sector of Sri Lanka.

The findings of this research shed light on critical insights into the factors influencing the success and failure of IT projects within the Sri Lankan government service, specifically focusing on the implementation of the Integrated Treasury Management Information System (ITMIS) by the Ministry of Finance. Through an in-depth examination of project management practices, stakeholder engagement, technical challenges, organizational culture, and change management, this study provides actionable recommendations to enhance the success of future IT projects in the public sector.

Key Words (IT project implementation, Integrated Treasury Management Information System (ITMIS), Factors, Success and failure, Public sector)

ACKNOWLEDGEMENT

I would like to acknowledge the invaluable support and guidance provided by my supervisor, Professor C.R.De Silva, and the co-supervisor Mrs.Kumudu Kapiyangoda throughout the research process. Their insightful comments, constructive criticism, and constant encouragement have been instrumental in shaping this study. I would also like to extend my appreciation to the faculty members and staff of Moratuwa University, who have provided us with the necessary resources and facilities to complete this research project. Finally, I would like to express my gratitude to our family and friends who have supported us throughout this challenging journey. Without their encouragement and understanding, this research project would not have been possible.

Thank you all for your contributions, support, and encouragement.

TABLE OF CONTENTS

DECLARATION.....	ii
COPYRIGHT STATEMENT.....	iii
ABSTRACT.....	iv
ACKNOWLEDGEMENT.....	v
TABLE OF CONTENTS.....	vi
LIST OF ABBREVIATIONS.....	viii
LIST OF APPENDICES.....	ix
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.1 Background and Context.....	1
1.2 Problem Statement and Research Question.....	2
1.2.1 Theoretical Gap.....	3
1.2.2 Empirical Gap.....	4
1.3 Objectives and Significance of the Study.....	5
1.4 Scope and Limitations.....	6
CHAPTER TWO.....	7
LITERATURE REVIEW.....	7
2.1 Introduction.....	7
2.2 Overview of ITMIS.....	7
2.3 Relevant Studies on ITMIS Implementation in Sri Lanka and other Countries....	9
2.4 Previous Studies on IT Project failures.....	9
2.5 Critical Success Factors and Challenges for ITMIS Implementation.....	10
2.5.1 Stakeholder Involvement.....	10
2.5.2 Project Management.....	10
2.5.3 Technological Capabilities.....	11
2.6 The Role of Organizational Culture in ITMIS Implementation.....	11
2.6.1 Organizational Culture and User Adoption.....	11
2.6.2 Organizational Culture and Project Management.....	11
2.6.3 Organizational Culture and Project Success.....	12
2.7 The Importance of User Training and Support.....	12
2.8 The Impact of COVID-19 on ITMIS Implementation.....	13
2.9 The Role of Data Quality in ITMIS Operation.....	13
2.10 The Importance of Change Management in ITMIS Implementation.....	14
2.12 The Role of IT Infrastructure in ITMIS Implementation.....	17
2.13 The Importance of User Willingness in ITMIS Implementation.....	18

2.14 The Role of Leadership in ITMIS Implementation.....	19
2.15 The Importance of Risk Management in ITMIS Implementation.....	20
CHAPTER THREE.....	21
THEORITICAL FRAMEWORK.....	21
3.1 Information Systems Success Model.....	21
CHAPTER FOUR.....	23
RESEARCH CONTEXT AND METHOD.....	23
4.1 Research Context.....	23
4.2 Research Method.....	23
4.3 Data Collection Methods and Instruments.....	24
4.4 Data Analysis Techniques and Procedures.....	25
4.5 Ethical Considerations.....	25
4.6 Limitations.....	25
4.6 Summary.....	25
CHAPTER FIVE.....	26
FINDINGS.....	26
5.1 System Quality.....	26
5.2 Information Quality.....	28
5.3 The Information Use.....	30
5.4 User Satisfaction.....	32
5.5 Individual Impact.....	34
5.6 Organizational Impact.....	35
CHAPTER SIX.....	38
DISCUSSION.....	38
CHAPTER SEVEN.....	41
CONCLUSION AND RECOMMENDATION.....	41
REFERENCES.....	43
APPENDICES.....	47
Appendix 1: De Lone and McLean’s IS success model (1992).....	47
Appendix 2: De Lone and McLean’s updated IS success model (2003).....	48
Appendix 3: Interview Guide for ITMIS Project Evaluation.....	49

LIST OF ABBREVIATIONS

Abbreviation	Description
ADB	Asian Development Bank
ERP	Enterprise Resource Planning
ICT	Information and Communication Technology
ICTA -	Information and Communication Technology Agency
IFMIS	Integrated Financial Management Information System
IRD	Inland Revenue Department
ISSM	Information Systems Success Model
IT	Information Technology
ITMIS	Integrated Treasury Management Information System
NSTC	National Science and Technology Council
PFBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PFMICP	Public Financial Management Improvement and Consolidation Project
PFM	Public Financial Management
RAMIS	Revenue Administration Management Information System
SME	Small and Medium-sized Enterprises
TAM	Technology Acceptance Model
UTAUT	Unified Theory of Acceptance and Use of Technology

LIST OF APPENDICES

Appendix	Description	Page
Appendix 1	De Lone and McLean's IS success model (2003)	53
Appendix 2	De Lone and McLean's updated IS success model (2003)	54
Appendix 3	Interview Guide for ITMIS Project Evaluation	55