# STUDY OF FACTORS IMPACTING THE COMPLETION OF ERP SYSTEMS IMPLEMENTATION WITHIN A PLANNED TIMELINE

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The dissertation was submitted to the Department of Computer Science and Engineering of the University of Moratuwa in partial fulfilment of the requirement for the Degree of Master of Business Administration in Information Technology.

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#### **ABSTRACT**

Enterprise Resource Planning (ERP) systems are among the most important IT-enabled business innovations during the recent past. A critical issue concerning the implementers and managers of ERP systems is the completion of implementation ERP projects within the planned timeline. The research presented in this study has as its focus the analysis of the factors which impact the completion of ERP systems implementation within the planned timeline in the company named EnterpriZe as a case study.

Based on an extensive literature review, five factors have been identified as the most critical factors which impact the completion of ERP implementation. These five factors; Clear objectives and scope of work, top management support, realistic project plan and estimates, the aptitude of project manager, and team collaboration have been considered as independent variables when developing the conceptual framework and the hypotheses of the study. To evaluate and determine the most significant factors impacting project timeline delays, a survey was distributed among employees of EnterpriZe. Thereafter, Pearson correlation coefficient analysis has been conducted for gathered primary data. The analysis revealed that all five factors have a positive relationship with the completion of ERP implementation within the planned timeline that was used as the dependent variable.

Further, to recommend an effective guideline towards project completion within planned timeline the study was continued to see how well EnterpriZe can do the same process by adapting to the proposed guideline. Based on the facts which were revealed from the data analysis, recommendations have been made which can be used as a guideline for project managers and management to complete an ERP systems implementation on time, on budget and with agreed scope of work.

Keywords: Enterprise Resource Planning (ERP), Implementation life cycle, Key Success Factors (KSF)

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# **TABLE OF CONTENTS**

DECLAR	RATIC	NN	I
COPYRIC	GHT S	STATEMENT	II
ABSTRA	CT		III
ACKNO	WLEI	OGEMENT	IV
TABLE (	OF C	ONTENTS	V
LIST OF	Figu	JRES	VIII
LIST OF	Тав	LES	IX
LIST OF	Авв	REVIATIONS	X
1. IN	ΓRO	DUCTION	1
1.1.	Bac	ckground	1
1.1	.1.	Motivation	2
1.1	.2.	Research Scope	2
1.2.	Pro	blem Statement	2
1.2	.1.	Research Objectives	4
1.2	.2.	Research Significance	4
1.3.	The	esis Outline	5
2. LIT	ΓER A	ATURE REVIEW	6
2.1 O	verv	iew	6
2.2	ER	P Implementation Life Cycle	6
2.3	Ke	y Success Factors	9
2.3	.1	Clear Objectives and Scope of Work	. 11
2.3	.2	Top Management Support	12
2.3	.3	Realistic Project Plan and Estimates	12
2.3	.4	Aptitude of Project Manager	. 13
2.3	.5	Team Collaboration	. 14
2.4	Imp	plementation Completion Dimensions	. 15
2.5.	Sur	nmary	. 16
3. RE	SEA	RCH METHODOLOGY	. 17
3.1	Intı	oduction	. 17
3.2	Res	search Methodology	. 17
3.3	Op	erationalization of Theoretical Framework	. 19
3.3	.1.	Population and Sample Selection	20

3.	3.2	Data Collection	21
4. D	ATA	ANALYSIS	22
4.1	Int	roduction	22
4.2	Re	liability Analysis	22
4.3	De	emographic Analysis	25
4.	3.1	Gender Distribution	25
4.	3.2	Age Distribution	26
4.	3.3	Experience at Current Employer	26
4.	3.4	Overall Experience	27
4.	3.5	Job Role and Designation	28
4.	3.6	Projects Involved	29
4.4	De	escriptive Statistics Analysis	30
4.	4.1	Clear Objectives and Scope of Work	30
4.	4.2	Top Management Support	30
4.	4.3	Realistic Project Plan and Estimates	31
4.	4.4	Aptitude of Project Manager	31
4.	4.5	Team Collaboration	32
4.	4.6	Project Completion within the Planned Timeline	32
4.5	Co	orrelation Analysis	33
4.	5.1	Clear Objectives and Scope of Work	33
4.	5.2	Top Management Support	34
4.	5.3	Realistic Project Plan and Estimates	35
4.	5.4	Aptitude of Project Manager	36
4.	5.5	Team Collaboration	37
4.	5.6	Correlation by Age Distribution	38
4.	5.7	Correlation by Total Work Experience	39
4.	5.8	Correlation by Current Work Experience	40
4.	5.9	Correlation by Job Role	41
4.6	Re	egression Analysis	42
4.	6.1	Clear Objectives and Scope of Work	42
4.	6.2	Top Management Support	43
4.	6.3	Realistic Project Plan and Estimates	44
4	64	Aptitude of Project Manager	45

4.6	.5 Team Collaboration	46
4.7	Data Analysis Summary	47
5. RE	COMMENDATIONS AND CONCLUSION	48
5.1	Discussion of Research Findings	48
5.2	Recommendations	50
5.3	Research Limitations	52
5.4	Conclusion and Future Research	52
REFERE	NCES	54
APPEND	OIX A – RESEARCH INSTRUMENT	58
APPEND	DIX B – SUMMARY OF RESPONSES	61

# LIST OF FIGURES

Figure 2.1: PPM Model	7
Figure 2.2: Triple Constraint	66
Figure 3.1: Theoretical Framework	18
Figure 3.2 Number of Responses Received over Timeline	21
Figure 4.1: Reliability Analysis for Clear Objectives and Scope of Work	22
Figure 4.2: Reliability Analysis for Top Management Support	23
Figure 4.3: Reliability Analysis for Realistic Project Plan and Estimates	23
Figure 4.4: Reliability Analysis for Aptitude of Project Manager	24
Figure 4.5: Reliability Analysis for Team Collaboration	24
Figure 4.6: Reliability Analysis for Project Completion within Planned Timeline	25
Figure 4.7: Gender Distribution	26
Figure 4.8: Age Distribution	26
Figure 4.9: Current Working Experience Distribution	27
Figure 4.10: Overall Working Experience Distribution	27
Figure 4.11: Comparison of Current Working Experience and Overall Working	ing
Experience	28
Figure 4.12: Job Role Distribution	28
Figure 4.13: Designation Distribution.	29
Figure 4.14: Employee Work Load	29
Figure 4.15 Frequency Distribution for the Clear Objectives and Scope of Work	30
Figure 4.16 Frequency Distribution for the Top Management Support	30
Figure 4.17: Frequency Distribution for the Realistic Project Plan and Estimates	31
Figure 4.18: Frequency Distribution for the Aptitude of Project Manager	31
Figure 4.19: Frequency Distribution for the Team Collaboration	32
Figure 4.20: Frequency Distribution for the Project Completion within Plann	ned
Timeline	32
Figure 4.21: Scatter Plot of Clear Objectives and Scope of Work	33
Figure 4.22: Scatter Plot of Top Management Support	34
Figure 4.23: Scatter Plot of Realistic Project Plan and Estimates	35
Figure 4.24: Scatter Plot of Aptitude of Project Manager	
Figure 4.25: Scatter Plot of Team Collaboration	37

# LIST OF TABLES

Table 1.1: EnterpriZe Recent Project Time Plans	2
Table 2.1: Implementation Life Cycle Literature Summary	6
Table 3.1: Operationalization of Variables	19
Table 4.1: Correlation Coefficient of Clear Objectives and Scope of Work	33
Table 4.5: Correlation Coefficient of Team Collaboration	37
Table 4.6: Correlation by Age Distribution	
Table 4.7: Correlation by Total Work Experience	39
Table 4.8: Correlation by Current Work Experience	
Table 4.9: Correlation by Job Role	41
Table 4.10: Model Summary of Clear Objectives and Scope of Work	42
Table 4.11: ANOVA of Clear Objectives and Scope of Work	42
Table 4.12: Coefficients of Clear Objectives and Scope of Work	42
Table 4.13: Model Summary of Top Management Support	43
Table 4.14: ANOVA of Top Management Support	43
Table 4.15: Coefficients of Top Management Support	43
Table 4.16: Model Summary of Realistic Project Plan and Estimates	44
Table 4.17: ANOVA of Realistic Project Plan and Estimates	44
Table 4.18: Coefficients of Realistic Project Plan and Estimates	44
Table 4.19: Model Summary of Aptitude of Project Manager	45
Table 4.20: ANOVA of Aptitude of Project Manager	45
Table 4.21: Coefficients of Aptitude of Project Manager	45
Table 4.22: Model Summary of Team Collaboration	46
Table 4.23: ANOVA of Team Collaboration	46
Table 4.24: Coefficients of Team Collaboration	46
Table 4.25: Summary of Data Analysis	47

## LIST OF ABBREVIATIONS

ERP - Enterprise Resource Planning

PPM - Project Phase Model

WBS - Work Breakdown Structure

BPR - Business Process Reengineering

KSF - Key Success Factors

HR - Human Resource

CAC - Cronbach's Alpha Coefficient