

Table of Contents

Abstract	iv
Preface	v
Dedication Sheet	vi
Table of Contents	vii
List Of Figures	xii
List of Tables.....	xiii
List of Terms.....	xvii
Chapter I Introduction.....	1
I.1 Background	1
I.2 Problem Formulation.....	4
I.3 Objectives.....	4
I.4 Scopes.....	4
I.5 Benefits.....	5
Chapter II Literature Review	6
II.1 Preceding / Related Research.....	6
II.2 Digitalization	7
II.3 Financial Technology	8
II.4 Information Technology Governance (ITG)	9
II.5 Fintech Regulations regarding ITG.....	11
II.6 ITGM Framework	12
II.6.1 COBIT.....	12
II.6.2 ITIL v4	16
II.6.3 Continuous Improvement/Continuous Development (CI/CD)	18

II.7	Frameworks Comparison	20
II.8	Reasons for the Chosen Method.....	21
Chapter III	Research Methodology.....	23
III.1	Conseptual Model.....	23
III.1.1	Environment.....	24
III.1.2	Knowledge	24
III.1.3	IS Research.....	25
III.2	Systematic Research	25
III.2.1	Problem Identification.....	26
III.2.2	Requirements Determination	27
III.2.3	Designing and Constructing.....	27
III.2.4	Demonstration.....	28
III.2.5	Evaluation Methods	28
III.3	Data Collection	29
III.4	Data Analyzation	30
III.4.1	Design Factor Prioritization	30
III.4.2	DevOps Focus Area Prioritization	31
III.4.3	ITGM Objectives Prioritization	31
III.4.4	Seven Components Component	31
III.4.5	Gap Recommendation.....	32
III.4.6	Resource, Risk, Value Recommendation.....	32
III.4.7	Roadmap Implementation Recommendation.....	33
III.4.8	Evaluation Method.....	33
Chapter IV	Data Analytics, Collecting, and Processing.....	34

IV.1	Data Collection	34
IV.2	Data Processing.....	34
IV.2.1	Research Object Description.....	34
IV.3	Data Analysis Result.....	39
IV.3.1	Initial determination of the scope of the ITGM System	39
IV.3.2	Scope of IT Governance Improvement	45
IV.3.3	Determining Models Priority	50
IV.3.4	Current ITGM Assessment	52
IV.4	<i>Seven Components</i> Achievement Assessment Result.....	53
IV.4.1	Process Component.....	54
IV.4.2	Organization Structure Component.....	57
IV.4.3	Policies, Principles, and Frameworks Component.....	58
IV.4.4	Information Component	60
IV.4.5	Culture, Ethics, and Behaviour Component.....	64
IV.4.6	People, Skills, and Competencies Component.....	66
IV.4.7	Application, Infrastructure, and Service Component.....	68
IV.5	Determine Target Conditions (Gap Analysis)	69
IV.5.1	Process Component.....	69
IV.5.2	Organization Structure Component.....	71
IV.5.3	Policies, Principles, and Frameworks Component.....	73
IV.5.4	Information Component	74
IV.5.5	Culture, Ethics, and Behaviour	77
IV.5.6	People, Skills, and Competencies Component.....	78
IV.5.7	Application, Infrastructure, and Service Component.....	80

IV.6	Potential Improvement.....	81
IV.6.1	Potential Improvement Aspect: People.....	83
IV.6.2	Potential Improvement Aspect: Process	85
IV.6.3	Potential Improvement Aspect: Technology.....	87
IV.7	Resource, Risk, and Value (RRV) Analysis	89
IV.8	Improvement Priority.....	92
IV.8.1	Improvement Priority Aspect: People.....	92
IV.8.2	Improvement Priority Aspect: Process.....	93
IV.8.3	Improvement Priority Aspect: Technology.....	94
Chapter V	Design Recommendations	95
V.1	Designing ITGM Recommendation	95
V.1.1	Designing Aspect: People (Organization Structure and Culture, Ethics, and Behaviour)	95
V.1.2	Designing Aspect: Process (Process and Information)	105
V.1.3	Designing Aspect: Technology	110
V.2	Roadmap Implementation Design Recommendation.....	114
V.3	Impact of Design Recommendations	117
V.3.1	Process Component.....	117
V.3.2	Organization Structure Component.....	119
V.3.3	Policies, Principles, and Frameworks Component.....	121
V.3.4	Information Component	123
V.3.5	Culture, Ethics, and Behaviour Component.....	127
V.3.6	People, Skills, and Competencies Component.....	129
V.3.7	Application, Infrastructure, and Service Component.....	132

Chapter VI Conclusion and Suggestion 134

 VI.1 Conclusion 134

 VI.2 Suggestion..... 135

References 136

ATTACHMENTS 138

 Attachment A: Design Factor Result 138

 Attachment B: Assessment Gap Result..... 165

 Attachment C: Recommendation Design..... 271