

## LIST OF TABLES

Table II-1 EA Framework Comparison Table .....	17
Table II-2 State of The Art.....	19
Table III-1 Data Collection .....	30
Table III-2 Data Processing and Artifact Development.....	32
Table III-3 Research Schedule and Timeline.....	39
Table IV-1 Existing Applications .....	46
Table IV-2 Problems Description of IT Planning Unit.....	48
Table V-1 Principle Catalogue.....	49
Table V-2 Stakeholder Catalogue .....	53
Table V-3 Business Requirement Catalogue .....	58
Table V-4 Goal/Objective/Requirement Catalogue .....	59
Table V-5 Business Interaction Matrix .....	63
Table V-6 Business Service/Function Catalogue.....	66
Table V-7 Organizational/Actor Catalogue .....	69
Table V-8 Table Actor/Role Matrix.....	71
Table V-9 Existing Process of Procedure Drafting.....	74
Table V-10 Targeting Process of Procedure Drafting.....	76
Table V-11 Existing Process of Risk Assessing .....	78
Table V-12 Targeting Process of Risk Analysis .....	79
Table V-13 Existing Process of Work Programs Planning Submission .....	81
Table V-14 Targeting Process of Work Programs Planning Submission.....	83
Table V-15 Existing Process of Work Programs Planning Evaluation.....	85
Table V-16 Targeting Process of Work Programs Planning Evaluation .....	87
Table V-17 Existing Process of Work Programs Planning Evaluation.....	89
Table V-18 Targeting Process of Work Programs Planning Reporting.....	90
Table V-19 NPF GAP Analysis of Business Architecture.....	91
Table V-20 RIA GAP Analysis of Business Architecture .....	92
Table V-21 Data Requirement Catalogue .....	94
Table V-22 Data Entity Catalogue .....	95
Table V-23 Data Entity/Business Function.....	99
Table V-24 Application/Data Matrix .....	100

Table V-25 NPF Gap Analysis of Data Architecture.....	106
Table V-26 RIA GAP Analysis of Data Architecture.....	107
Table V-27 Application Requirement Catalogue.....	109
Table V-28 Application Portfolio Catalogue .....	110
Table V-29 Application Interface Catalogue .....	111
Table V-30 Application/Organization Catalogue .....	112
Table V-31 Application/Role Matrix .....	114
Table V-32 Application/Function Matrix .....	115
Table V-33 Application/Interaction Matrix .....	116
Table V-34 NPF Gap Analysis of Application Architecture .....	129
Table V-35 RIA GAP Analysis of Application Architecture .....	131
Table V-36 Technology Requirement Catalogue .....	132
Table V-37 Technology Standard Catalogue .....	133
Table V-38 Technology Portfolio Catalogue.....	135
Table V-39 Application/Technology Matrix .....	140
Table V-40 NPF GAP Analysis of Technology Architecture.....	144
Table V-41 RIA GAP Analysis of Technology Architecture .....	146
Table V-42 Implementation Factor Assessment and Deduction Matrix.....	149
Table V-43 Consolidate GAP's, Solution, and Dependencies Matrix: NPF ....	153
Table V-44 Consolidate GAP's, Solution, and Dependencies Matrix: RIA Business Architecture.....	158
Table V-45 Consolidate GAP's, Solution, and Dependencies Matrix: RIA Data Architecture.....	159
Table V-46 Consolidate GAP's, Solution, and Dependencies Matrix: RIA Application Architecture.....	161
Table V-47 Consolidate GAP's, Solution, and Dependencies Matrix: RIA Technology Architecture.....	162
Table V-48 Work Package Identification Catalogue .....	165
Table V-49 Cost of ERMS Application Development .....	173
Table V-50 Benefit of ERMS Application Development .....	176
Table V-51 Investment Valuation of ERMS Application Development .....	178
Table V-52 Cost of Perform Application Development .....	180

Table V-53 Benefit of Perform Application Development.....	183
Table V-54 Investment Valuation of Perform Application Development .....	186
Table V-55 Cost of ERP Improvement.....	188
Table V-56 Benefit of ERP Improvement .....	190
Table V-57 Investment Valuation of ERP Improvement.....	192
Table V-58 Asset Value Parameter.....	194
Table V-59 Likelihood of Occurrence Threat Parameter .....	194
Table V-60 Likelihood of Incident Scenario Parameter .....	195
Table V-61 Business Impact Parameter.....	195
Table V-62 Ease of Exploitation Parameter.....	195
Table V-63 Value and Risk Calculation of ERMS Application Development.	196
Table V-64 Value and Risk Calculation of Perform Application Development .....	197
Table V-65 Value and Risk Calculation of ERP Improvement .....	198
Table V-66 Value Assessment Parameter.....	199
Table V-67 Risk Assessment Parameter .....	200
Table V-68 Estimate Value and Risk.....	200
Table V-69 Business Value Assessment.....	201
Table V-70 Project Prioritization .....	203
Table V-71 Architecture Roadmap .....	206
Table V-72 Evaluation Justification.....	208
Table V-73 Evaluation Results of the EA Design .....	209