

## DAFTAR ISI

LEMBAR PENGESAHAN .....	i
LEMBAR PERNYATAAN ORISINALITAS .....	i
ABSTRAK .....	iii
ABSTRACT .....	iv
KATA PENGANTAR .....	i
DAFTAR ISI.....	ii
DAFTAR GAMBAR .....	vii
DAFTAR TABEL.....	viii
DAFTAR SINGKATAN DAN LAMBANG.....	ix
BAB I Pendahuluan.....	1
I.1 Latar Belakang.....	1
I.2 Rumusan Masalah.....	3
I.3 Tujuan Penelitian .....	3
I.4 Manfaat Penelitian .....	3
I.5 Batasan Masalah .....	4
I.6 Sistematika Penulisan .....	4
BAB II LANDASAN TEORI .....	6
II.1 Enterprise.....	6
II.2 Architecture .....	6
II.3 Enterprise Architecture.....	6
II.4 Framework.....	7
II.5 <i>The Open Group Architecture Framework (TOGAF)</i> .....	8
II.6 TOGAF ADM ( <i>Architecture Development Model</i> ) .....	9
II.7 Tools Perancangan Enterprise Architecture .....	16
II.8 DISKOMINFO Kabupaten Padang Pariaman.....	16
II.9 State Of the Art.....	17
BAB III METODOLOGI PENELITIAN.....	20
III.1 Model Konseptual .....	20
III.2 Sistematika Penelitian .....	21
BAB IV PERSIAPAN DAN IDENTIFIKASI.....	32
IV.1 Deskripsi Obyek Penelitian.....	32
IV.2 Identifikasi Kebutuhan Data .....	32
IV.3 Metode Pengumpulan Data.....	<b>Error! Bookmark not defined.</b>
IV.4 Struktur Organisasi .....	34
IV.5 Visi dan Misi.....	35
IV.6 Gambaran Kondisi Aplikasi Existing .....	35

BAB V ANALISIS DAN PERANCANGAN.....	39
V.1 Preliminary Phase.....	39
<b>V.1.1 Langkah-Langkah Pada Preliminary Phase.....</b>	39
V.1.1.1 <i>Scope the Enterprise Organizations Impacted.....</i>	39
V.1.1.2 Confirm Governance and Support Frameworks.....	39
V.1.1.3 <i>Define and Establish Enterprise Architecture Team and Organization .....</i>	39
V.1.1.4 Identify and Establish Architecture Principles.....	40
V.1.1.5 Tailor TOGAF and Other Selected Architecture Framework..	40
V.1.1.6 <i>Develop a Strategy and Implementation Plan for tools and techniques.....</i>	40
<b>V.1.2 Output Preliminary Phase.....</b>	40
V.1.2.1 <i>Principles Catalog.....</i>	40
V.2 Architecture Vision.....	44
<b>V.2.1 Langkah-langkah fase Architecture Vision .....</b>	44
V.2.1.1 <i>Establish the Architecture Project .....</i>	45
V.2.1.2 <i>Identify Stakeholders, Concerns, and Business Requirements...</i>	45
V.2.1.3 <i>Confirm and Elaborate Business Goals, Business Drivers, and Constraints .....</i>	45
V.2.1.4 <i>Evaluate Business Capabilities .....</i>	45
V.2.1.5 <i>Assess Readiness for Business Transformation .....</i>	45
V.2.1.6 <i>Define Scope.....</i>	45
V.2.1.7 <i>Confirm and Elaborate Architecture Principle, Including Business Principles .....</i>	46
V.2.1.8 <i>Develop Architecture Vision .....</i>	46
V.2.1.9 <i>Define the Target Architecture Value Propositions and Kpis..</i>	46
V.2.1.10 <i>Identify the Business Transfor Mation Risks and Mitigation Activities.....</i>	46
V.2.1.11 <i>Develop Statement of Architecture Work .....</i>	47
<b>V.2.2 Ouput Architecture Vision .....</b>	47
V.2.2.1 <i>Stakeholder Map Matrix.....</i>	47
V.2.2.2 <i>Value Chain Diagram .....</i>	56
V.2.2.3 <i>Solution Concept Diagram .....</i>	57
V.2.2.4 <i>Requirment Catalog .....</i>	58
V.3 Business Architecture .....	58
<b>V.3.1 Langkah-langkah fase Business Architecture .....</b>	59
V.3.1.1 <i>Select Refrence Models, Viewpoints, and Tools.....</i>	59
V.3.1.2 <i>Develop Baseline Business Architecture Description .....</i>	59
V.3.1.3 <i>Develop Target Business Architecture Description .....</i>	59
V.3.1.4 <i>Perform Gap Analysis .....</i>	59
V.3.1.5 <i>Define Candidate Roadmap Components .....</i>	59
V.3.1.6 <i>Resolve Impacts Across the Architecture Landscape.....</i>	60
V.3.1.7 <i>Conduct Formal Stakeholder Review.....</i>	60
V.3.1.8 <i>Finalize the Business Architecture.....</i>	60
V.3.1.9 <i>Create Architecture Definition Document .....</i>	60
<b>V.3.2 Output fase Business Architecture .....</b>	60
V.3.2.1 <i>Business Footprint Diagram .....</i>	60
V.3.2.2 <i>Driver/Goal/Objective Catalog.....</i>	61

V.3.2.3 Functional Decomposition Diagram.....	63
V.3.2.4 Business Interaction Matrix .....	63
V.3.2.5 Business Service/Function Catalog.....	70
V.3.2.6 Organization/Actor Catalog.....	71
V.3.2.7 Role Catalog.....	72
V.3.2.8 Actor/Role Matrix.....	78
V.3.2.9 Process Flow Diagram ( <i>Organizational Process Diagram Target</i> ).....	79
V.3.2.10 GAP Analysis Business Architecture.....	80
<b>V.4 Information System Architecture.....</b>	<b>82</b>
V.4.1 Information System Architecture ( <i>Data Architecture</i> ) .....	82
<b>V.4.1.1 Langkah-langkah Information System Architecture (<i>Data Architecture</i>).....</b>	<b>82</b>
V.4.1.1.1 Select Reference Models, Viewpoints, and Tools.....	82
V.4.1.1.2 Develop Baseline Data Architecture Description .....	82
V.4.1.1.3 Develop Target Data Architecture Description .....	82
V.4.1.1.4 Perform Gap Analysis .....	83
V.4.1.1.5 Define Candidate Roadmap Components .....	83
V.4.1.1.6 Resolve Impact Across the Architecture Landscape .....	83
V.4.1.1.7 Conduct Formal Stakeholder Review.....	83
V.4.1.1.8 Finalize the Data Architecture .....	83
V.4.1.1.9 Create Architecture Definition Document .....	83
<b>V.4.1.2 Output Data Architecture .....</b>	<b>83</b>
V.4.1.2.1 Requirement Data Architecture .....	83
V.4.1.2.2 Data Entity/Data Component Catalog .....	84
V.4.1.2.3 Data Entity/Business Function Matrix .....	86
V.4.1.2.4 Application/Data Matrix .....	87
V.4.1.2.5 Conceptual Data Diagram .....	88
V.4.1.2.6 Logical Data Diagram .....	90
V.4.1.2.7 Data Dissemination Diagram .....	92
V.4.1.2.8 GAP Analysis Data Architecture.....	92
V.4.2 Fase Application Architecture.....	94
<b>V.4.2.1 Langkah-langkah Fase Application Architecture .....</b>	<b>94</b>
V.4.2.1.1 Select Reference Models, Viewpoints, and Tools.....	94
V.4.2.1.2 Develop Baseline Application Architecture Description .....	94
V.4.2.1.3 Develop Target Application Architecture Description .....	94
V.4.2.1.4 Perform GAP Analysis.....	95
V.4.2.1.5 Define Candidate Roadmap Components .....	95
V.4.2.1.6 Resolve Impacts Across the Architecture Landscape .....	95
V.4.2.1.7 Conduct Formal Stakeholder Review.....	95
V.4.2.1.8 Finalize the Application Archirecture .....	95
V.4.2.1.9 Create the Architecture Definition Document .....	95
<b>V.4.2.2 Output Application Architecture.....</b>	<b>95</b>
V.4.2.2.1 Application Architecture Requirment.....	95
V.4.2.2.2 Application Portfolio Catalog .....	96
V.4.2.2.3 Application Interfcae Catalog .....	97
V.4.2.2.4 Application/Organization Matrix .....	97
V.4.2.2.5 Application/Function Matrix.....	99

V.4.2.2.7 Application Interaction Matrix.....	101
V.4.2.2.8 Application Communication Diagram .....	101
V.4.2.2.9 Application Use-Case Diagram.....	102
V.4.2.2.10 GAP Analysis Application Architecture .....	103
<b>V.5 Technology Architecture.....</b>	<b>103</b>
<b>V.5.1 Langkah-langkah Pada Fase Technology Architecture .....</b>	<b>103</b>
V.5.1.1 Select reference models,viewpoints, and tools .....	104
V.5.1.2 Develop Baseline Technology Architecture Description .....	104
V.5.1.3 Develop Target Technology Architecture Description .....	104
V.5.1.4 Perform Gap analysis.....	104
V.5.1.5 Define candidate roadmap components .....	104
V.5.1.6 Resolve impacts across the Architecture.....	104
V.5.1.7 Conduct formal stakeholder review .....	104
V.5.1.8 Finalize the Technology Architecture .....	105
V.5.1.9 Create the Architecture Definition Document .....	105
<b>V.5.2 Output Technology Architecture .....</b>	<b>105</b>
V.5.2.1 Technology Architecture Requirment.....	105
V.5.2.2 Technology Standart Catalog.....	106
V.5.2.3 Technology Portofolio Catalog .....	106
V.5.2.4 Application/Technology Matrix.....	109
V.5.2.5 Environtments and Location Diagram .....	109
V.5.2.6 Platform Decomposition Diagram .....	110
V.5.2.7 Gap Analysis Technology Architecture .....	110
<b>V.6 Opportunities and Solution.....</b>	<b>111</b>
<b>V.6.1 Langkah-langkah pada Opportunities and Solution .....</b>	<b>111</b>
V.6.1.1 Determine/Confirm Key Corporate Change Attributes .....	112
V.6.1.2 Determine Business Constrains for Implementation.....	112
V.6.1.3 Review and Consolidate GAP analysis Result from Phases B to D .....	112
V.6.1.4 Review Consolidate Requirements Across Related Business Functions .....	112
V.6.1.5 Consolidate and Reconcile Interoperability Requirments .....	112
V.6.1.6 Refine and Validate Dependencies.....	113
V.6.1.7 Confirm Readiness and Risk for Business Transformation....	113
V.6.1.8 Formulate Implementation and Migration Strategy .....	113
V.6.1.9 Identify and Group Major Work Packages .....	113
V.6.1.10 Identify Transition Architectures .....	113
V.6.1.11 Create the Architecture Roadmap & Implementation and Migration Plan .....	113
<b>V.6.2 Output Opportunities and Solution .....</b>	<b>114</b>
V.6.2.1 Implementation Fcator Assessment and Deducation Matrix .	114
V.6.2.2 Consolidate Gaps,Solutions, and Dependencies Matrix .....	119
V.6.2.4 Project Context Diagram .....	120
V.6.2.5 Benefit Diagram .....	121
<b>V.7 Migration Planning .....</b>	<b>121</b>
<b>V.7.1 Langkah-langkah Migration Planning .....</b>	<b>121</b>
V.7.1.1 Confirm Management Framework Interactions for Implementation and Migration Plan .....	122

V.7.1.2 Assign a Business Value to Each Work Package .....	122
V.7.1.3 Estimate Resource Requirements, Project Timings and Cost/Benefit Assessment and Risk Validation .....	122
V.7.1.4 Prioritize the migration Projects Through the Conduct of a Cost/Beneit Assessment and Risk Validation .....	122
V.7.1.5 Confirm Architecture Roadmap and Update Architecture Definition Document .....	123
V.7.1.6 Complete the Implementation and Migration Plan.....	123
V.7.1.7 Complete the Architecture Development Cycle and Document Lessons Learned.....	123
<b>V.7.2 Output Migration Planning.....</b>	<b>123</b>
V.7.2.1 Estimate Value Risk.....	123
V.7.2.2 Business Value Assessment .....	126
V.7.2.3 Project Development Priority .....	126
V.7.2.4 IT Roadmap .....	127
BAB VI KESIMPULAN DAN SARAN .....	128
VI.1 Kesimpulan .....	128
VI.2 Saran .....	128
DAFTAR PUSTAKA .....	130