








Pengembangan



Enterprise Architecture Politeknik Negeri Batam









Architecture Vision

<p>Architecture Principles</p> 	<p>Architecture Goals</p> 	<p>Vision, Mission and Strategy</p> 	<p>Value Chain Diagram</p> 	<p>Business Model Canvas</p> 	<p>Organization Decomposition Diagram</p> 	<p>Solution Concept Diagram</p> 
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





Business Architecture

<p>Business Principles</p> 	<p>Organizational Actor Catalog</p> 
<p>Risk</p> 	<p>KPI</p> 
<p>Business Process</p> 	<p>Functional Decomposition Diagram</p> 
<p>Business Interaction Diagram</p> 	<p>Business Process-Risk Matrix</p> 
<p>Business Process-KPI Matrix</p> 	






Data Architecture

<p>Data Principles</p> 	<p>Data Entity-Data Component Catalog</p> 
<p>Conceptual Data Diagram</p> 	<p>Logical Data Diagram</p> 
<p>Data-Business Process Matrix</p> 	<p>Data-Application Matrix</p> 

Application Architecture

<p>Application Principles</p> 	<p>Application Portfolio Catalog</p> 
<p>Application Use Case Diagram</p> 	<p>Application User and Location Diagram</p> 
<p>Application Communication Diagram</p> 	<p>Application-Business Process Matrix</p> 
<p>Application-Classification Matrix</p> 	<p>Application-Data Matrix</p> 

Technology Architecture

<p>Technology Principles</p> 	<p>Technology Standard Catalog</p> 
<p>Environment and Location Diagram</p> 	<p>Network Communication Diagram</p> 
<p>Technology-Application Matrix</p> 	

Architecture Implementation

<p>Architecture Implementation Planning</p> 	<p>Architecture Governance</p> 
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Enterprise Architecture Politeknik Negeri Batam

Architecture Vision

Architecture Principles



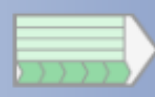
Architecture Goals



Vision, Mission and Strategy



Value Chain Diagram



Business Model Canvas



Organization Decomposition Diagram



Solution Concept Diagram



Business Architecture

Business Principles



Organizational Actor Catalog



Risk



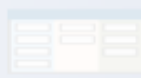
KPI



Business Process



Functional Decomposition Diagram

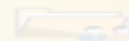


Data Architecture

Data Principles



Data Entity-Data Component Catalog



Conceptual Data Diagram



Logical Data Diagram



Data-Business Process Matrix

Data-Application Matrix

Application Architecture

Application Principles



Application Portfolio Catalog



Application Use Case Diagram



Application User and Location Diagram



Application Communication Diagram



Application-Business Process Matrix

Technology Architecture

Technology Principles



Technology Standard Catalog



Environment and Location Diagram



Network Communication Diagram



Technology-Application Matrix





Enterprise Architecture Politeknik Negeri Batam

Vision, Mission and Strategy

«Vision»

Menjadi politeknik generasi baru yang bermutu, unggul, adaptif, inovatif dan bermitra erat dengan industri dan masyarakat untuk mendukung Indonesia Maju dan Sejahtera 2045

«Mission»

Aktif dalam proses kreasi, penyebaran dan penerapan sains dan teknologi melalui layanan pendidikan tinggi vokasi dan penelitian terapan yang bermutu, terbuka, relevan, dan berkolaborasi erat dengan masyarakat dan industri dengan penerapan tata kelola

Tujuan Strategis

«Tujuan»

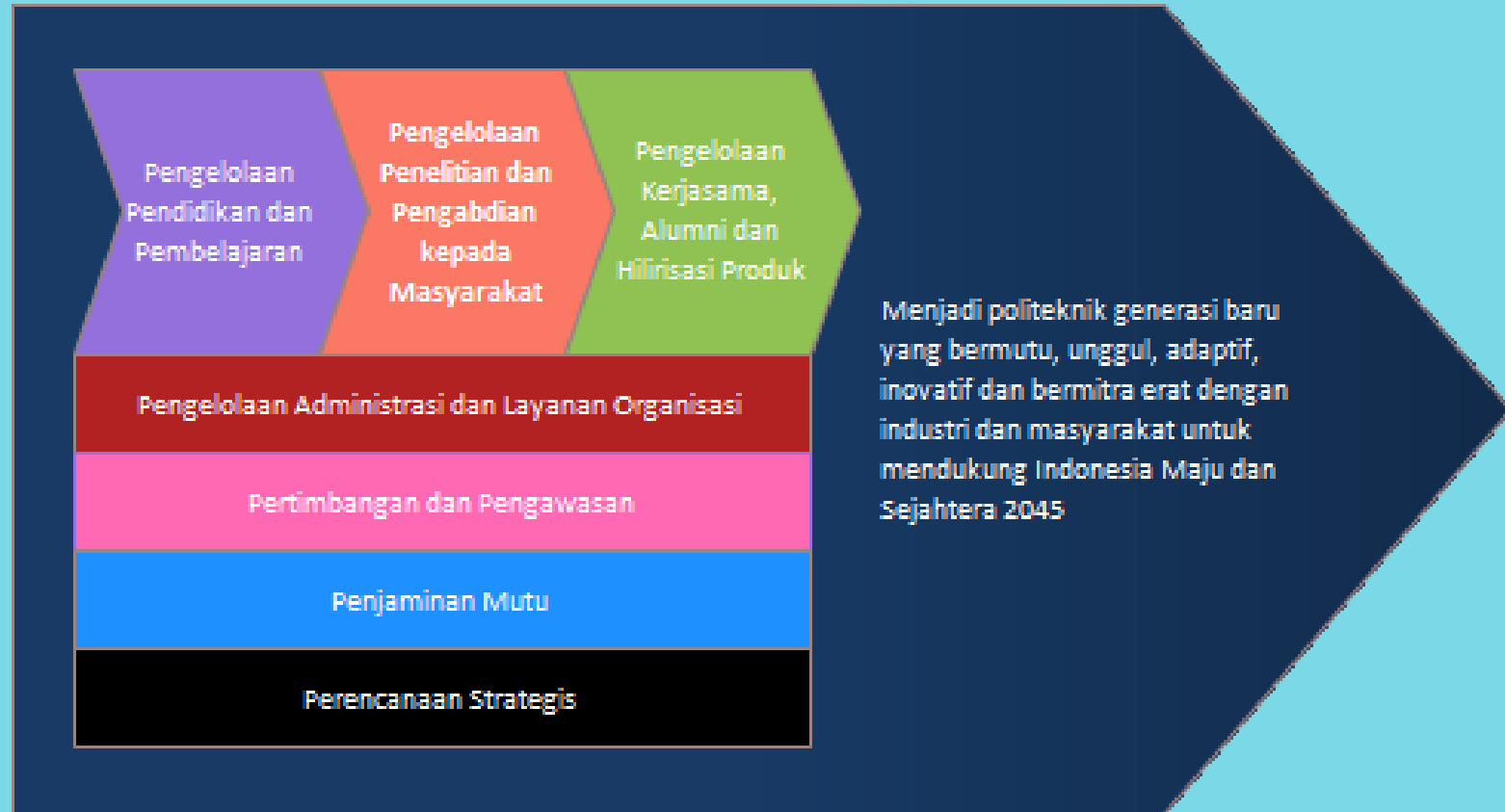
Terwujudnya layanan, sumber daya dan output pembelajaran dan penelitian yang bermutu, akses terbuka, Inovatif, relevan dengan kebutuhan industri dan masyarakat

«Tujuan»

Terwujudnya organisasi dengan yang transparan, akuntabel, produktif dan bermutu



Value Chain Diagram



Menjadi politeknik generasi baru yang bermutu, unggul, adaptif, inovatif dan bermitra erat dengan industri dan masyarakat untuk mendukung Indonesia Maju dan Sejahtera 2045


Business Model Canvas
Key Partners


Industri

Masyarakat

Key Activities

Key Resources


Dosen

Kurikulum

Laboratorium

Value Propositions


Kurikulum yang memfasilitasi Merdeka Belajar dan berpedoman pada Project Based Learning

Hasil Penelitian yang dapat langsung diterapkan

Technopark untuk mendukung Technopreneurship

Laboratorium yang mendukung kebutuhan training

Lembaga Sertifikasi yang terakreditasi

Customer Relationships


Offline: Kegiatan Magang Industri dan Kerjasama bentuk lain

Online: Social Media (Youtube, Facebook, Instagram, WhatsApp, dan Twitter), Situs polibatam.ac.id

Channels


Telepon

polibatam.ac.id

Instant Messaging (WA, Facebook Messenger)

Social Media (Youtube, Facebook, Twitter, Intagram)

Customer Segment


Industri

Masyarakat

Mahasiswa

Cost Structure

Gaji Dosen dan karyawan

Biaya Operasional

Biaya sarpras

Biaya penelitian dan pengabdian masyarakat


Revenue Streams

APBN

Biaya kuliah mahasiswa

Biaya training dan sertifikasi












Enterprise Architecture Politeknik Negeri Batam






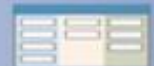
Organization Decomposition Diagram



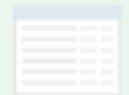
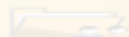


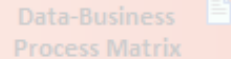

Architecture Vision

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Business Architecture

<p>Business Principles</p> 	<p>Organizational Actor Catalog</p> 
<p>Risk</p> 	<p>KPI</p> 
<p>Business Process</p> 	<p>Functional Decomposition Diagram</p> 

Data Architecture

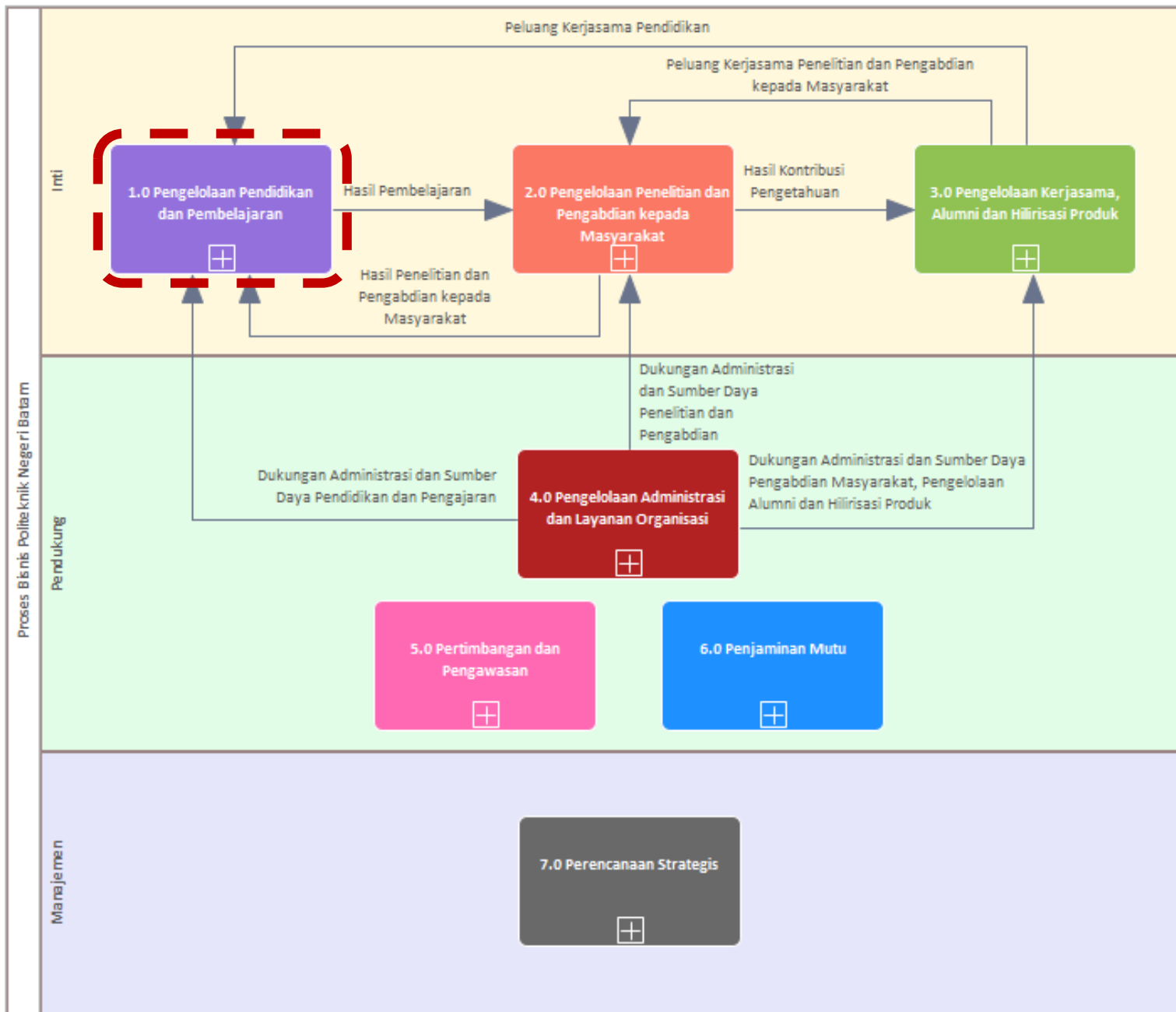
<p>Data Principles</p> 	<p>Data Entity-Data Component Catalog</p> 
<p>Conceptual Data Diagram</p> 	<p>Logical Data Diagram</p> 
<p>Data-Business Process Matrix</p> 	<p>Data-Application Matrix</p> 

Application Architecture

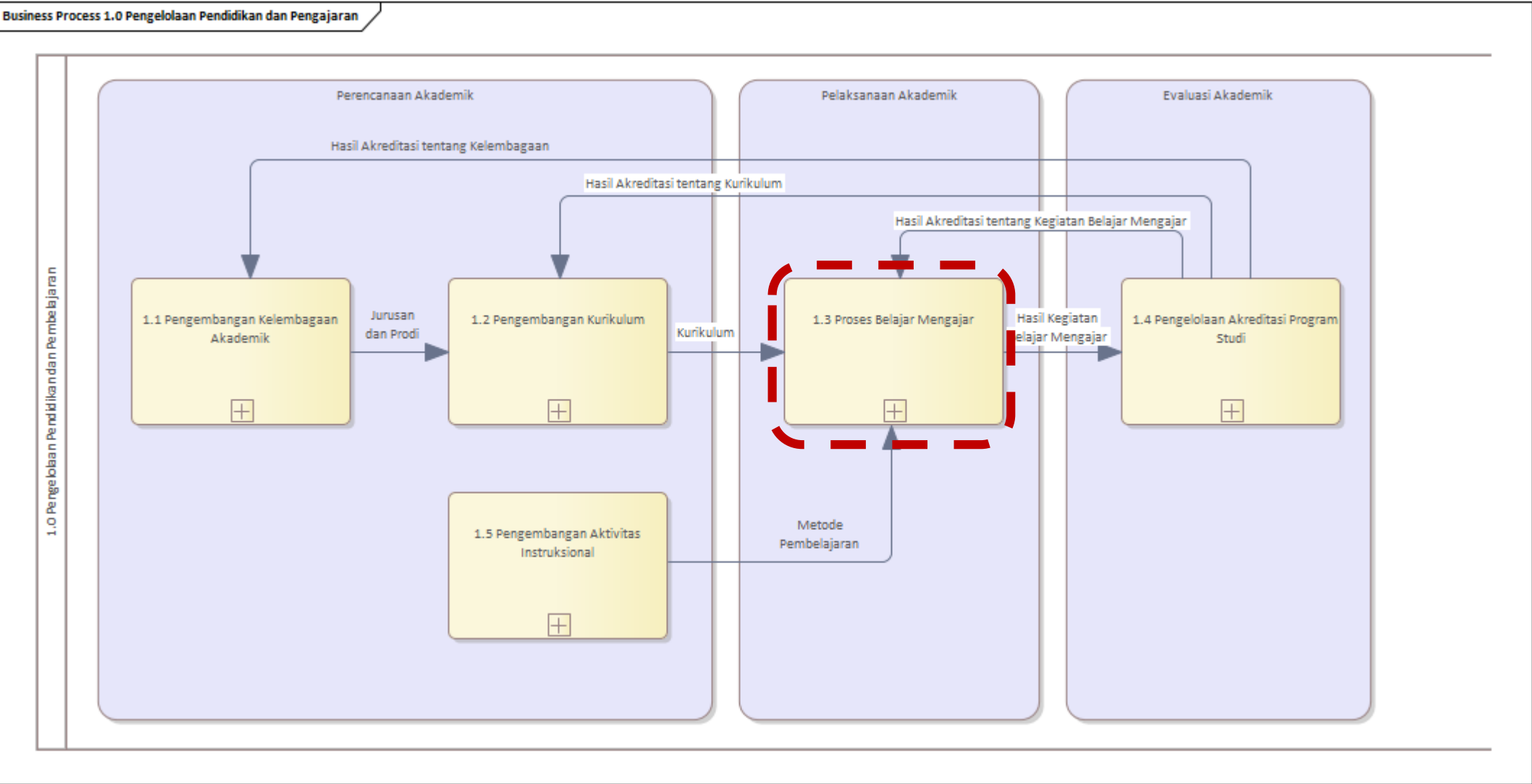
<p>Application Principles</p> 	<p>Application Portfolio Catalog</p> 
<p>Application Use Case Diagram</p> 	<p>Application User and Location Diagram</p> 
<p>Application Communication Diagram</p> 	<p>Application-Business Process Matrix</p> 

Technology Architecture

<p>Technology Principles</p> 	<p>Technology Standard Catalog</p> 
<p>Environment and Location Diagram</p> 	<p>Network Communication Diagram</p> 
<p>Technology-Application Matrix</p> 	

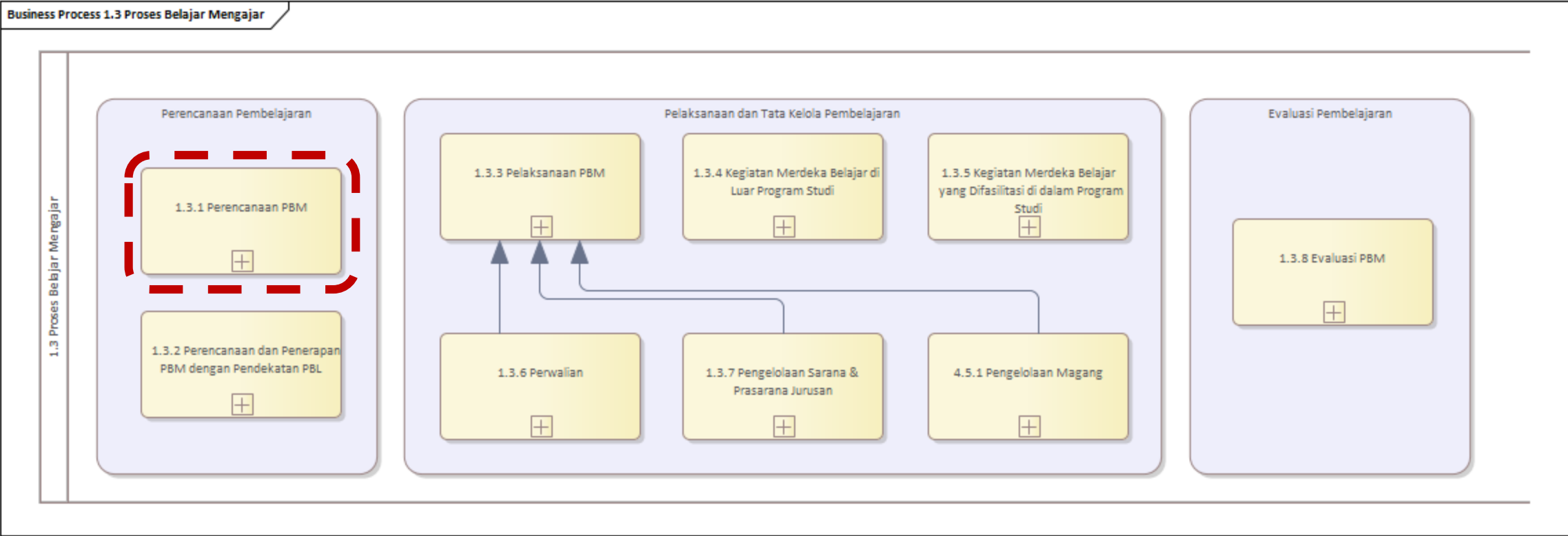


Proses Bisnis Level 1: 1.0 Pengelolaan Pendidikan dan Pengajaran

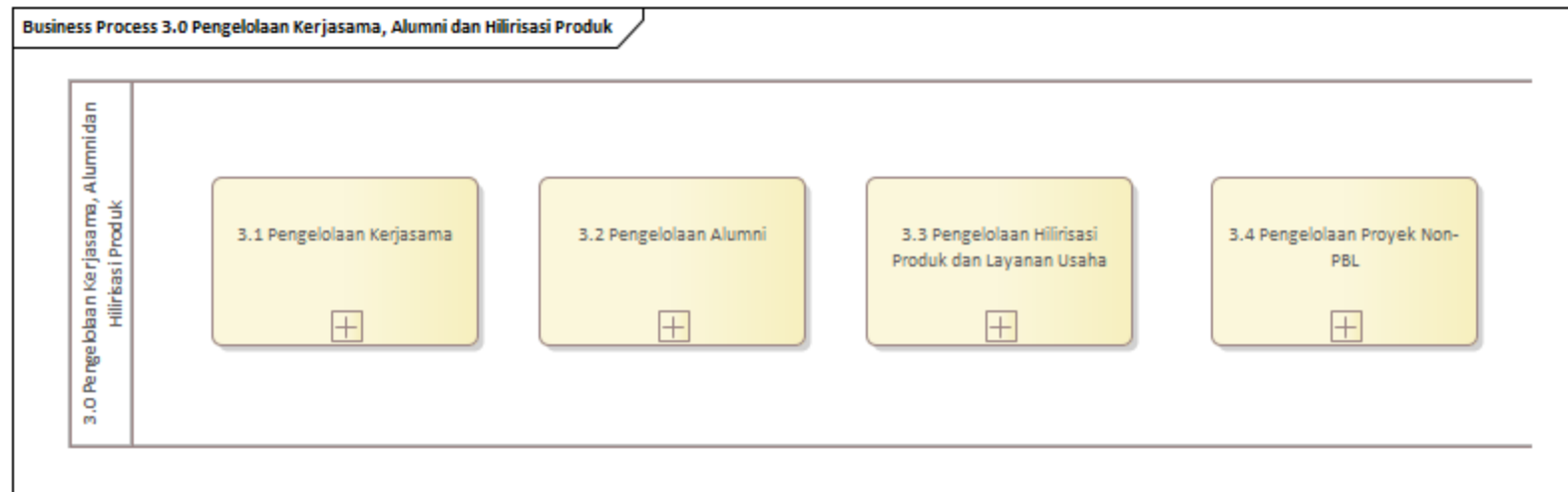


Proses Bisnis **Level 1**: 1.0 Pengelolaan Pendidikan dan Pengajaran

Proses Bisnis **Level 2**: 1.1 Proses Belajar Mengajar

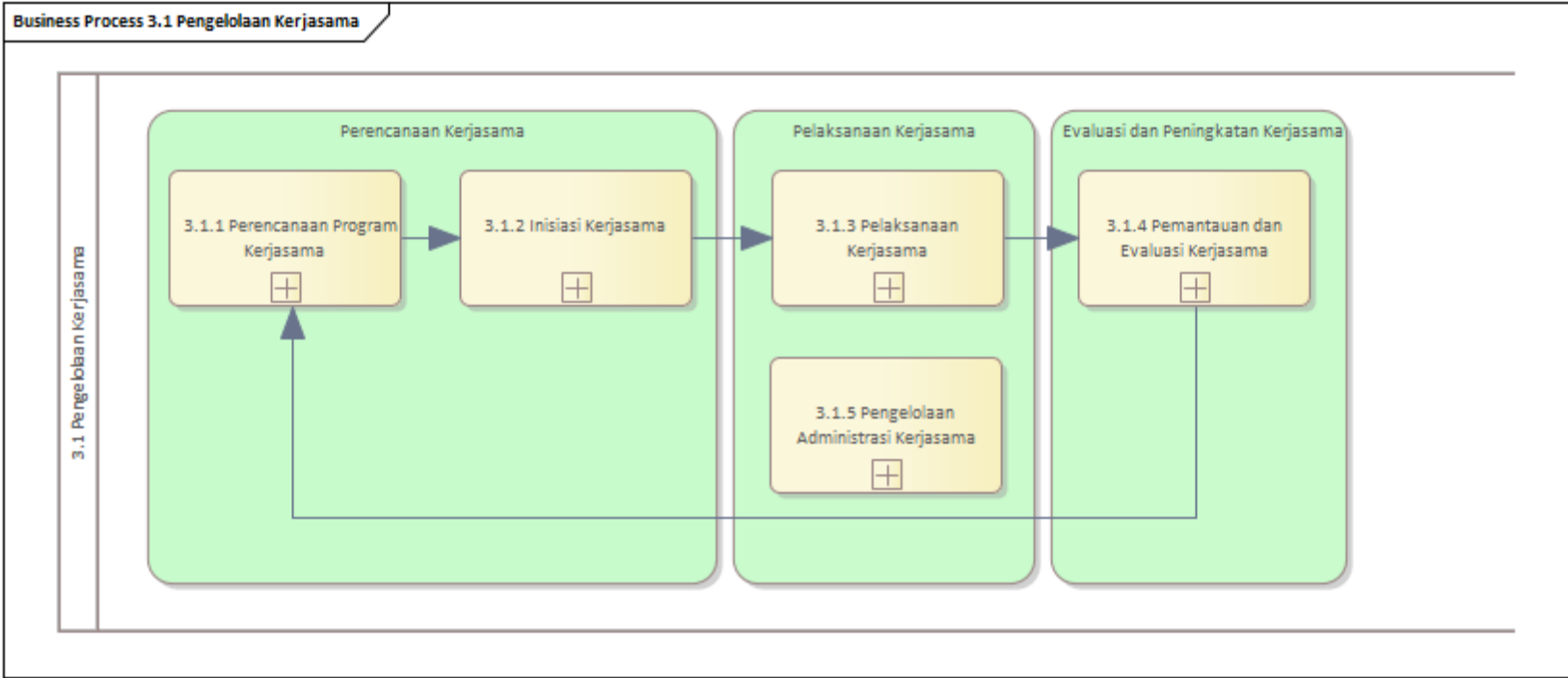


Proses Bisnis **Level 1**: 3.0 Pengelolaan Kerjasama, Alumni, dan Hilirisasi Produk



Proses Bisnis **Level 1**: 3.0 Pengelolaan Kerjasama, Alumni, dan Hilirisasi Produk

Proses Bisnis **Level 2**: 3.1 Pengelolaan Kerjasama



Regulasi

- Regulation::Statuta Politeknik Negeri Batam
- Regulation::Peraturan Pemerintah Republik Indonesia Nomor 60 Tahun 1999 tentang Pendidikan Tinggi
- Regulation::Pedoman Merdeka Belajar Direktorat Jenderal Pendidikan Tinggi Kementerian Pendidikan dan Kebudayaan 2020

Standar dan Regulasi

Aplikasi

Aplikasi

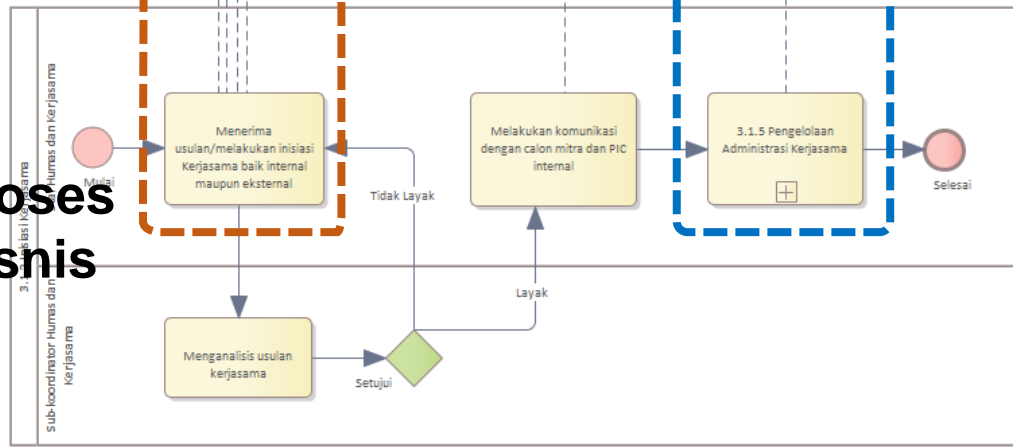
- Aplikasi SINDE (from Application)
- Website Helpdesk Polibatam (from Application)
- WhatsApp (from Application)
- Email (from Application)

Data

- MoU/PKS yang ditandatangani

Data

Proses Bisnis



Risiko

Risiko

- Calon mitra tidak memiliki kewenangan dalam hal legalisasi (from Kerjasama)
- Ruang lingkup tidak jelas (from Kerjasama)

KPI

KPI

- B.1.15.3 (from B.1.15 Standar Kerjasama)
- B.1.15.5 (from B.1.15 Standar Kerjasama)
- B.1.15.6 (from B.1.15 Standar Kerjasama)



Enterprise Architecture Politeknik Negeri Batam

Architecture Vision

Architecture Principles



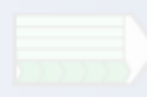
Architecture Goals



Vision, Mission and Strategy



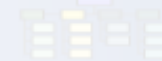
Value Chain Diagram



Business Model Canvas



Organization Decomposition Diagram



Solution Concept Diagram



Business Architecture

Business Principles



Organizational Actor Catalog



Risk



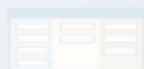
KPI



Business Process



Functional Decomposition Diagram



Data Architecture

Data Principles



Data Entity-Data Component Catalog



Conceptual Data Diagram



Logical Data Diagram



Data-Business Process Matrix



Data-Application Matrix



Application Architecture

Application Principles



Application Portfolio Catalog



Application Use Case Diagram



Application User and Location Diagram



Application Communication Diagram



Application-Business Process Matrix



Technology Architecture

Technology Principles



Technology Standard Catalog



Environment and Location Diagram



Network Communication Diagram



Technology-Application Matrix





KPI

Meningkatnya transparansi, akuntabilitas, produktivitas, kelestarian lingkungan dan mutu layanan organisasi



Meningkatnya Mutu, Akses, Relevansi dari Layanan, Sumberdaya dan Output Pembelajaran vokasi



Meningkatnya mutu dan relevansi penelitian, publikasi hasil penelitian serta kemampuan penerapan iptek dan inovasi



A. Indikator Kinerja Perguruan Tinggi Negeri



B. Standar Sistem Penjaminan Mutu Internal





B. Standar Sistem

B.1 Standar Pendidikan

B.2 Stan

B.4 Stan



B.4 Standar Layanan

B.4.1 Standar
Layanan
Administrasi
Mahasiswa dan
Lulusan

B.4.2 Standar
Layanan
Perpustakaan

B.4.3 Standar
Layanan
Kepegawaian

B.4.4 Standar
Layanan
Perencanaan
Anggaran

B.4.5 Standar
Layanan
Keuangan

B.4.6 Standar
Layanan Sistem
Informasi

B.4.7 Standar
Layanan
Pengadaan

B.4.8 Standar
Layanan
Pengelolaan
Aset dan
Persediaan

B.4.9 Standar
Layanan
Perawatan dan
Perbaikan

B.4.10 Standar
Layanan Humas

B.4.11 Standar
Layanan
Administrasi
Umum



Enterprise Architecture Politeknik Negeri Batam

Risk

Pengelolaan Pendidikan
dan Pengajaran

Pengelolaan Penelitian
dan Pengabdian kepada
Masyarakat

Pengelolaan Kerjasama,
Alumni, dan Hilirisasi
Produk

Pengelolaan Administrasi
dan Layanan Organisasi

Pengawasan Internal

Operasional

Institusi



Enterprise Architecture Politeknik Negeri Batam

Architecture Vision

<p>Architecture Principles</p>	<p>Architecture Goals</p>	<p>Vision, Mission and Strategy</p>	<p>Value Chain Diagram</p>	<p>Business Model Canvas</p>	<p>Organization Decomposition Diagram</p>	<p>Solution Concept Diagram</p>
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Business Architecture

<p>Business Principles</p>	<p>Organizational Actor Catalog</p>
<p>Risk</p>	<p>KPI</p>
<p>Business Process</p>	<p>Functional Decomposition Diagram</p>

Data Architecture

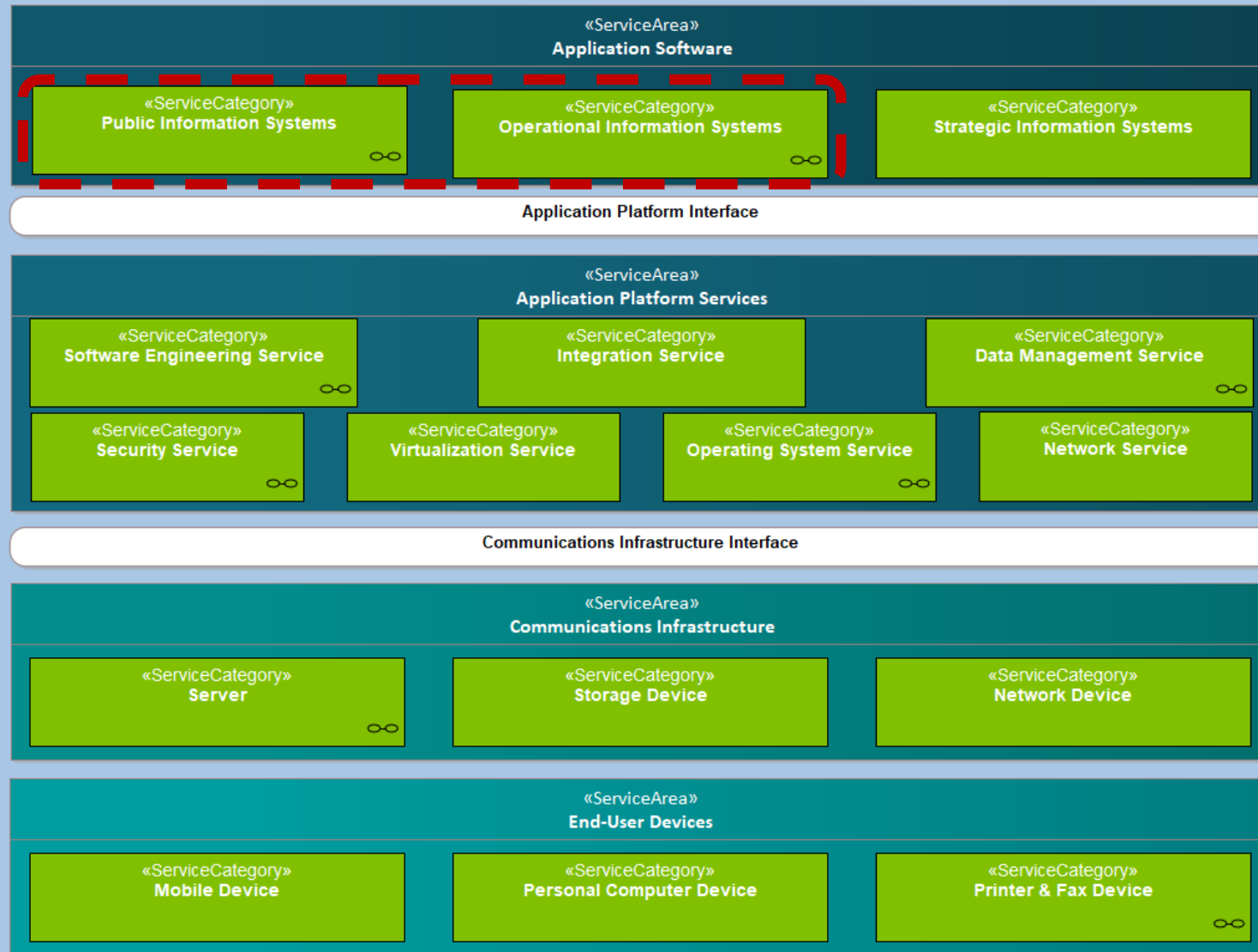
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Application Architecture

<p>Application Principles</p>	<p>Application Portfolio Catalog</p>
<p>Application Use Case Diagram</p>	<p>Application User and Location Diagram</p>
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Technology Architecture

<p>Technology Principles</p>	<p>Technology Standard Catalog</p>
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<p>Technology-Application Matrix</p>	

**Technology Standard Catalog**

Operational Information System



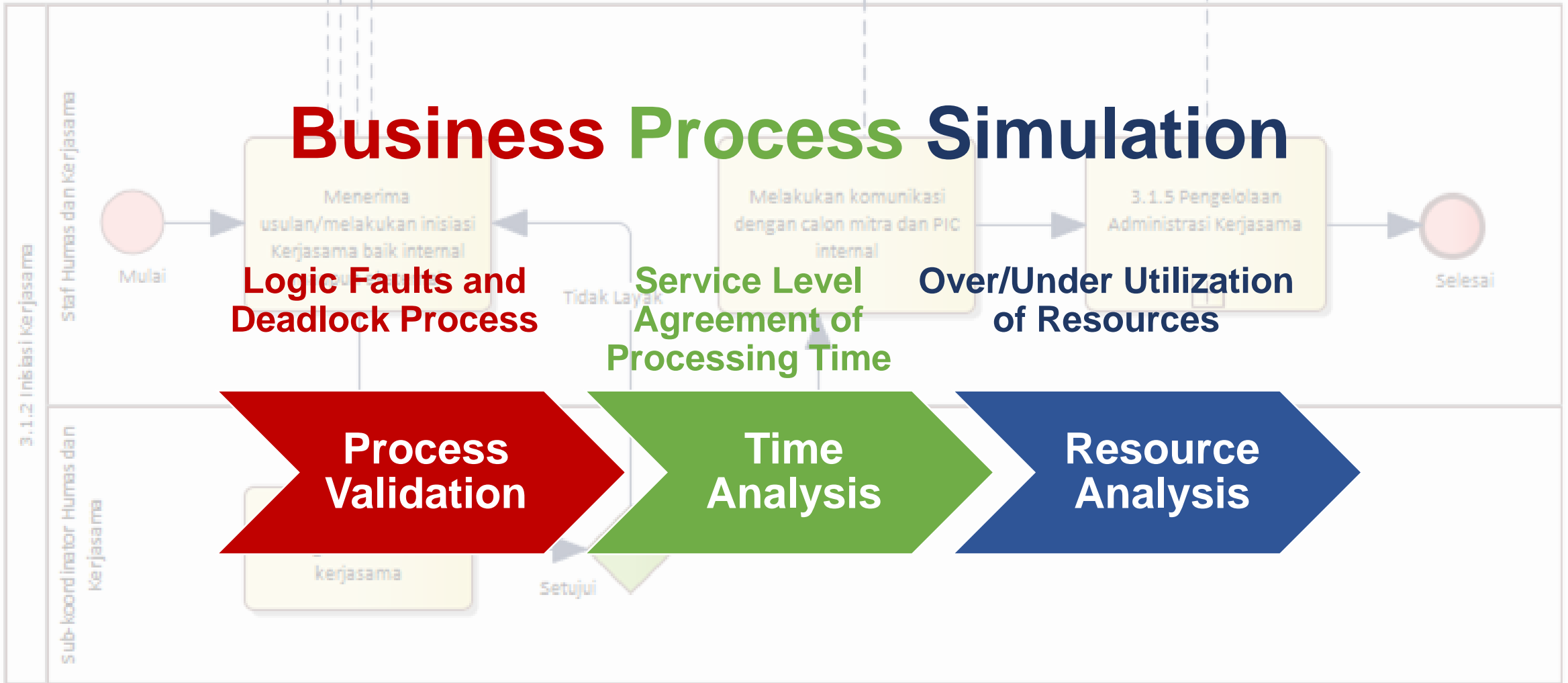
Public Information System



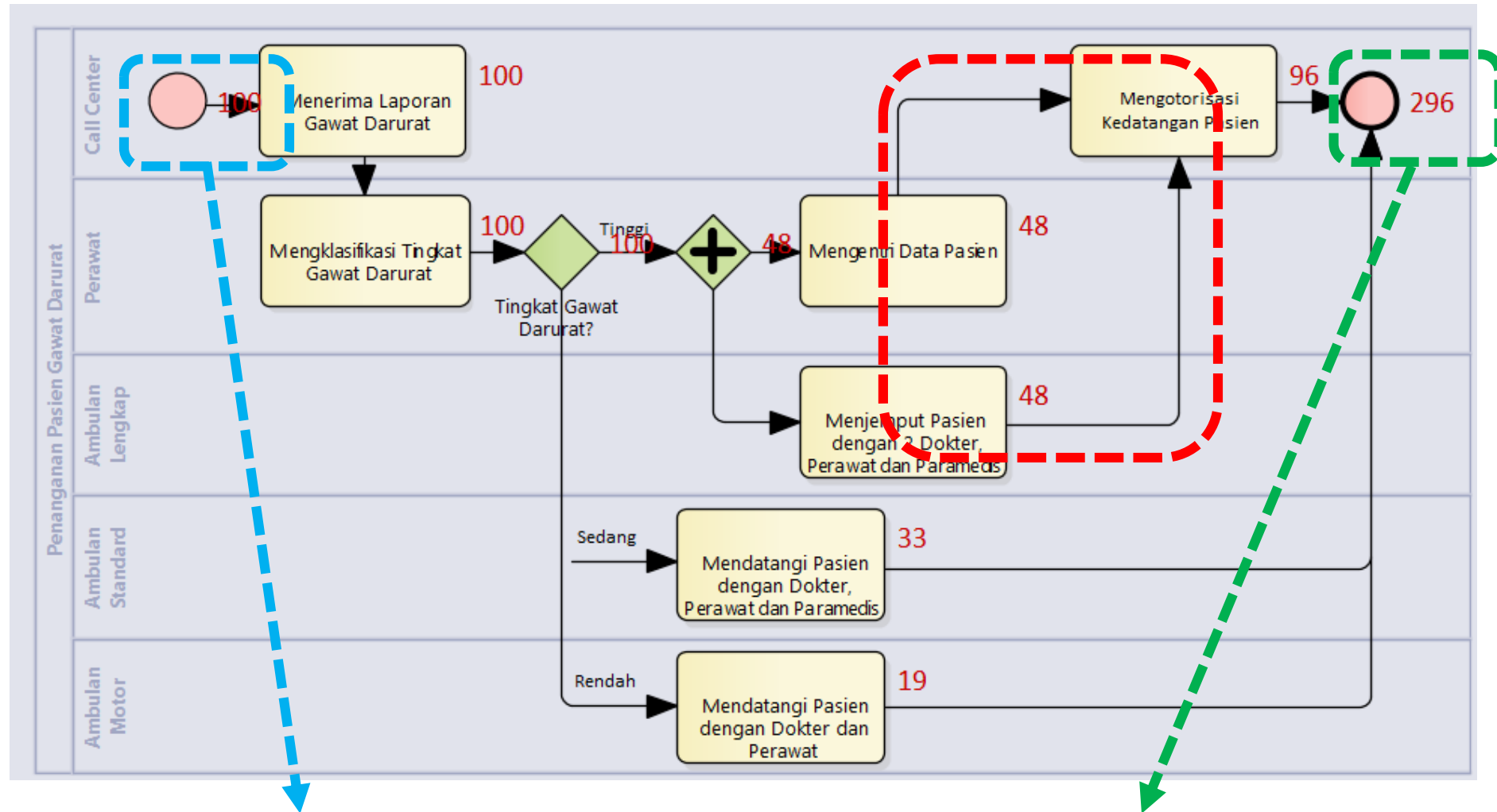
Langkah selanjutnya...



Business Process Simulation



Validasi Proses Bisnis

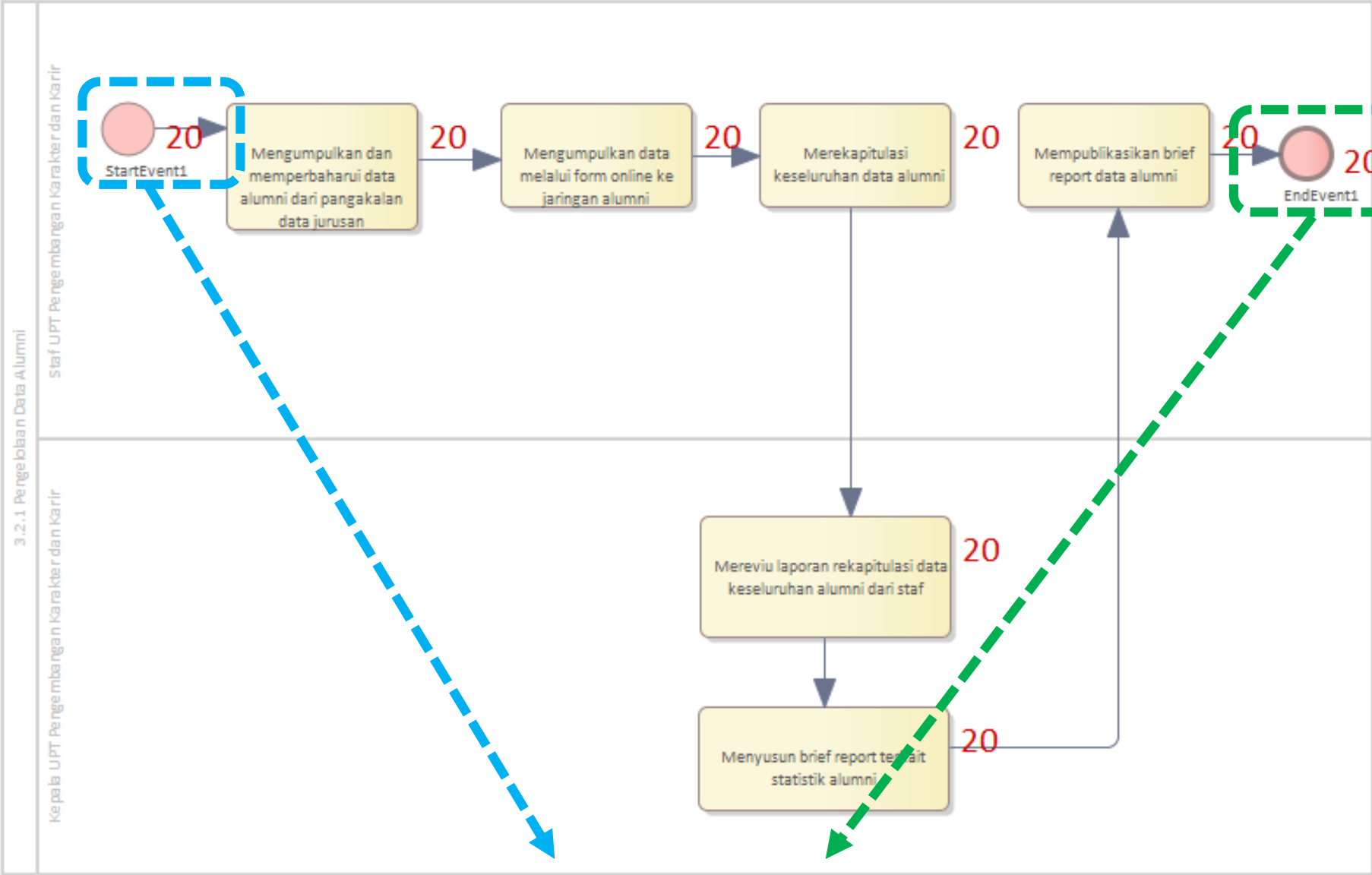


Menangani **100** Orang Pasien

Seperti Menangani **296** Orang Pasien

PROSES BISNIS INI TIDAK EFISIEN!

Proses Bisnis 3.2.1 Pengelolaan Data Alumni

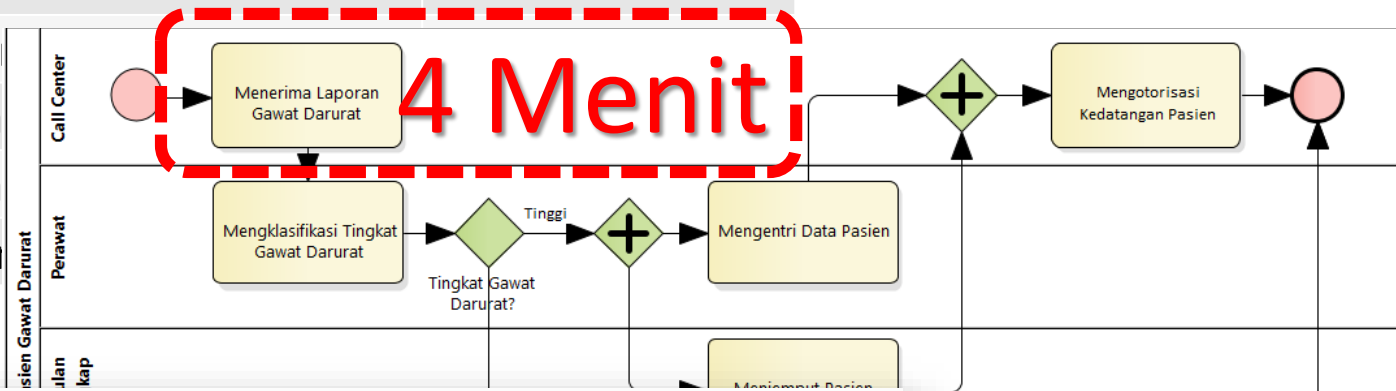


Proses Bisnis Terbukti Valid

Analisis Waktu

Aktifitas	Waktu (Menit)
Menerima Laporan Gawat Darurat	4
Mengklasifikasi Tingkat Gawat Darurat	5
Mengentri Data Pasien	11

Menjemput Pasien dengan
Mendatangi Pasien dengan
Mendatangi Pasien dengan
Mengotorisasi Kedatangan

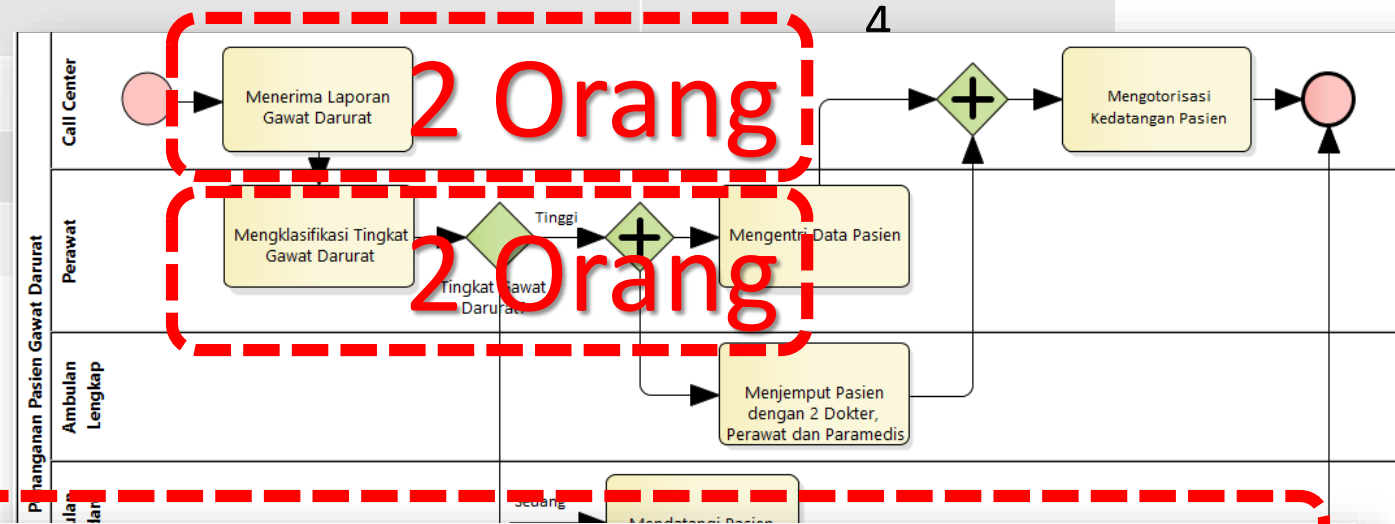


Penanganan Pasien Gawat Darurat	Average Time	249.63
Penanganan Pasien Gawat Darurat	Mean Of Processing Time	17.73
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat	Number Of Processes Started	100
Penanganan Pasien Gawat Darurat	Standard Deviation Time	131.97

Perlu Waktu 17.73 Menit untuk Menangani 1 Pasien

Analisis Sumber Daya Manusia

Sumber Daya	Kuantitas
Call center	2
Perawat	2
Ambulan Lengkap	4
Ambulan Standar	
Ambulan Motor	
Resepsionis	



Perawat	Degree Of Utilisation	99%
Paramedis	Degree Of Utilisation	98.34%
Call Center	Degree Of Utilisation	65.56%
Dokter	Degree Of Utilisation	50.28%
Supir	Degree Of Utilisation	33.22%
Ambulan Standard	Degree Of Utilisation	33.22%
Ambulan Motor	Degree Of Utilisation	17.05%

Overutilization

Underutilization

Business Process Simulation

Aktifitas	Waktu (Menit)
Menerima Laporan Gawat Darurat	4
Mengklasifikasi Tingkat Gawat Darurat	5
Mengentri Data Pasien	11



Penanganan Pasien Gawat Darurat	Average Time	249.63
Penanganan Pasien Gawat Darurat	Mean Of Processing Time	17.73
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat	Number Of Processes Started	100
Penanganan Pasien Gawat Darurat	Standard Deviation Time	131.97

Perlu Waktu 17.73 Menit
 untuk Menangani 1 Pasien

Business Process Automation

Aktifitas	Waktu (Menit)
Menerima Laporan Gawat Darurat	4
Mengklasifikasi Tingkat Gawat Darurat	1
Mengentri Data Pasien	11



Penanganan Pasien Gawat Darurat	Average Time	249.63
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat		
Penanganan Pasien Gawat Darurat	Number Of Processes Completed	52
Penanganan Pasien Gawat Darurat	Number Of Processes Started	100
Penanganan Pasien Gawat Darurat	Standard Deviation Time	131.97

Hanya Perlu Waktu 8 Menit untuk Menangani 1 Pasien