

Enterprise Architecture Advisory Board (EAAB) Enterprise Workflow Automation Platform (iBPMS) (Logical Architecture Design - LAD)

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24 April 2023



Submission History



Architecture Stage Gate	Meeting Date	Meeting	Rev.	Status
AGA/ SOAW	29/03/2021	ADR	1	SoAW Supported AGA Approved
SOAW	06/04/2021	EARC	1	Approved
LAD	24/04/2023	EAAB	1	This Submission

- 01 Executive Summary
- 02 Project Overview
- 03 Business Architecture
- 04 Data / Information Architecture
- 05 Application Architecture
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- 07 Integration Architecture
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Executive Summary



REQUIRED DECISION(S) / APPROVAL(S)

Approval of the LAD

RISKS, ISSUES AND DEPENDENCIES

- Potential capability overlap with Enterprise Integration platform (Middleware), Document Management System and .
- End of support.

ARCHITECTURE PRINCIPLES TO BE EXCEMPTED, IF ANY

SUMMARY (High level context and value proposition)

Due to the current K2 contract ending and the need to test the market this project will be submitting the RFP in order to evaluate the products in the market and to select the product. This project also needs to contextualize iBPMS relative to the Hyperautomation trend in support of digital transformation and to assess existing toolsets.

Strategic Alignment:

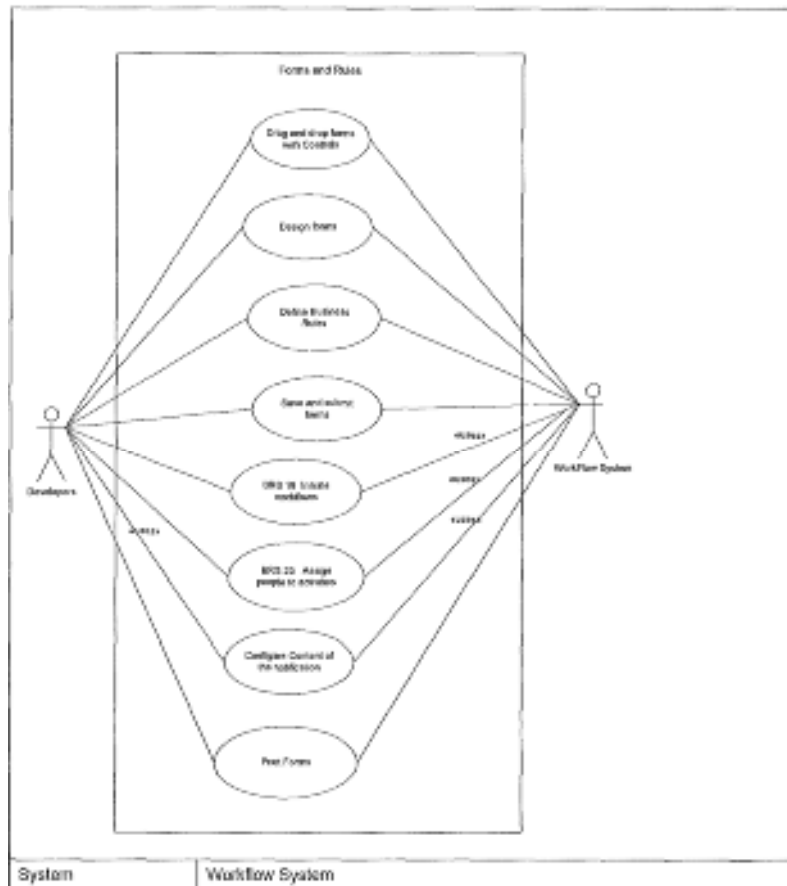
- Digital Transformation
- Adopt Cloud Services

Benefits

- Improved development times due to Low Code / No Code platform
- Operational Efficiency due to Automated processes
- Enablement of process orchestration thus linking disparate systems within a process context

Project Overview





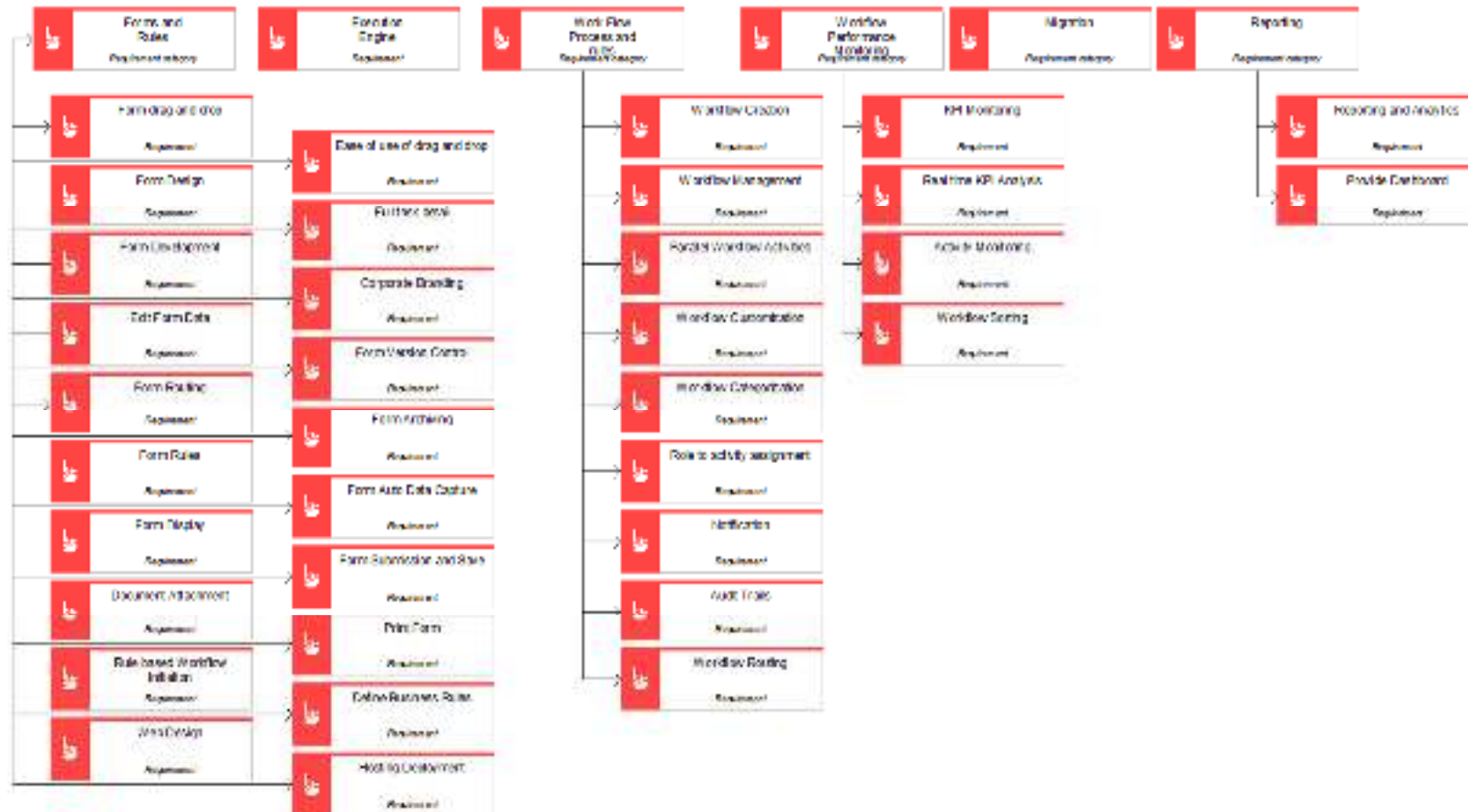
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Phase A Architecture Vision

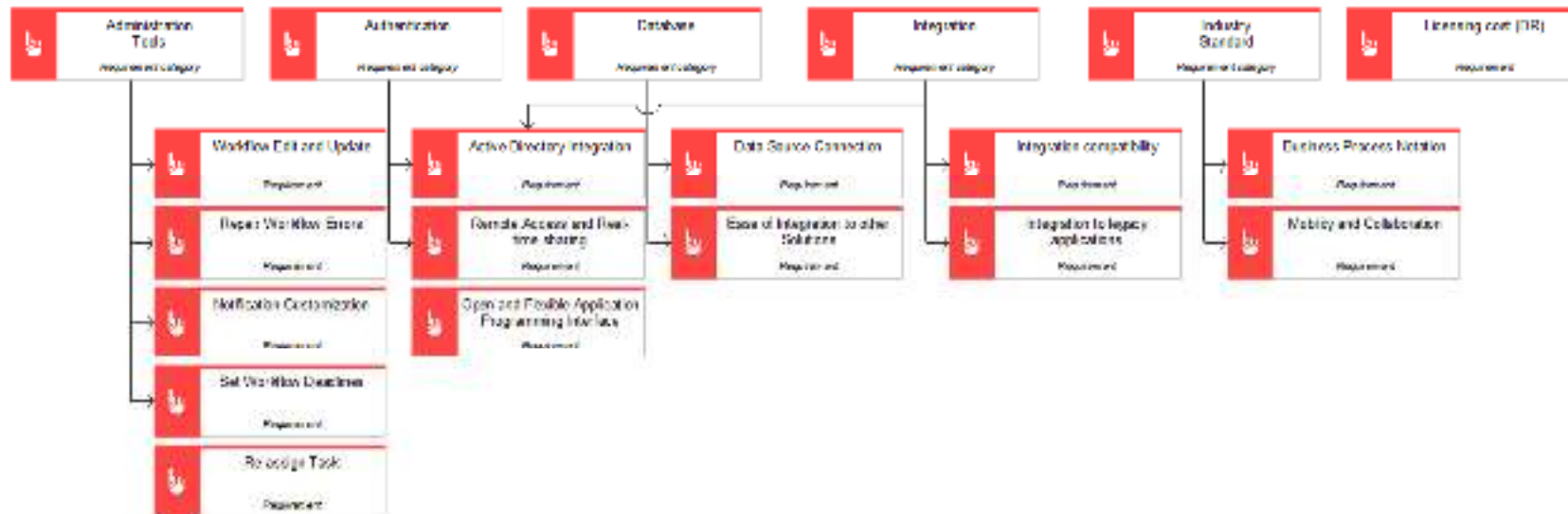
A1	Requirements
A2	Project Stakeholders
A3	EA Principles
A4	IT Objectives vs Business Objectives
A5	Driver / Objective & Business Function
A6	Driver / Objective & Technology Service
A7	Risk & Benefits



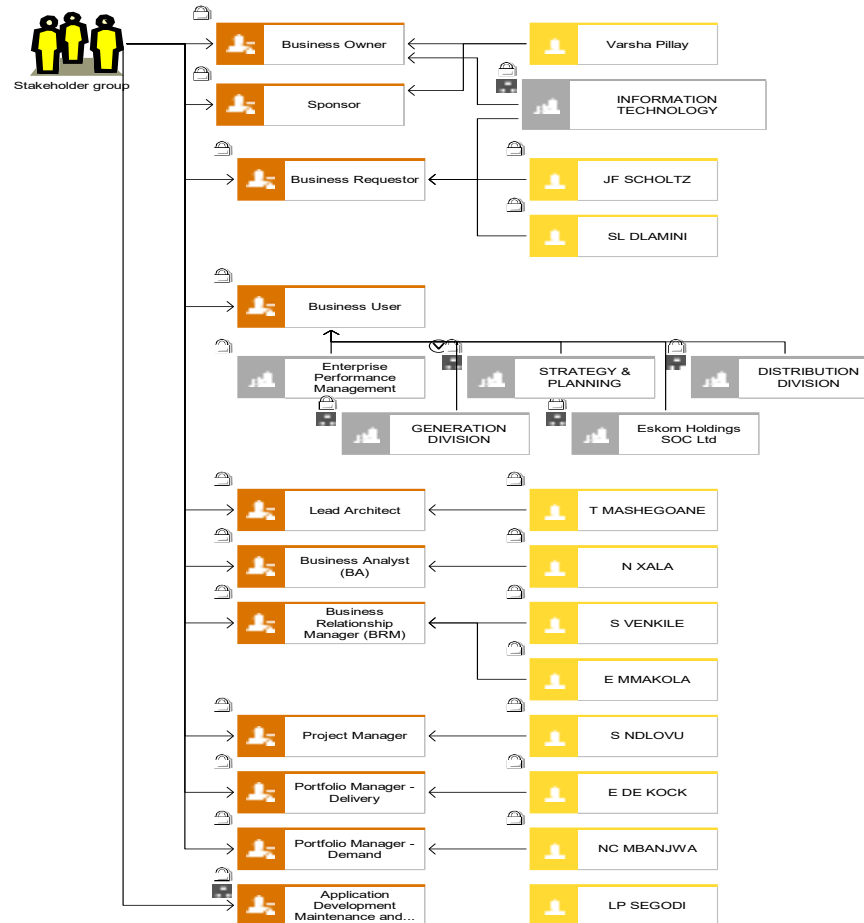
A1 Requirements



A1 Requirements



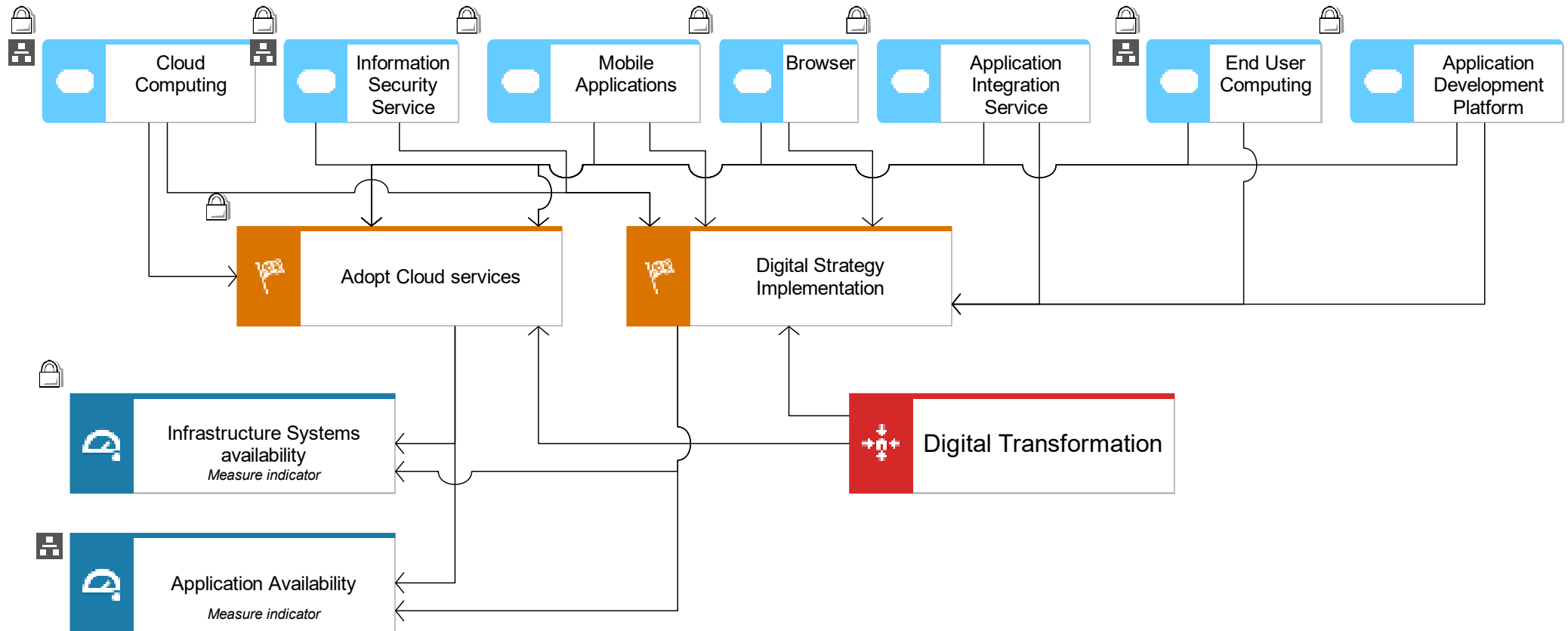
A2 Project Stakeholders



- List of principles to be exempted from (Only)

Principle Name	Reason(s) for Exemption
1. Common Use Capability	We note that there's been convergence of technologies in the advent of Hyperautomation where certain toolsets such as RPA, ML/AI, Integration, OCR etc. could provide similar capabilities as iBPM but at a reduced level. Hence to exploit the full capability of iBPM we need to note such overlaps.

A6 Driver / Objective & Technology Service



A7 Risk & Benefits



Name	Description
Improved Development Turnaround	Improved Development time due to low code / no code platform.
Integration of disparate systems	Enablement of process orchestration thus linking disparate systems within a process context.
Operational Efficiency	Operational efficiency due to automated processes.

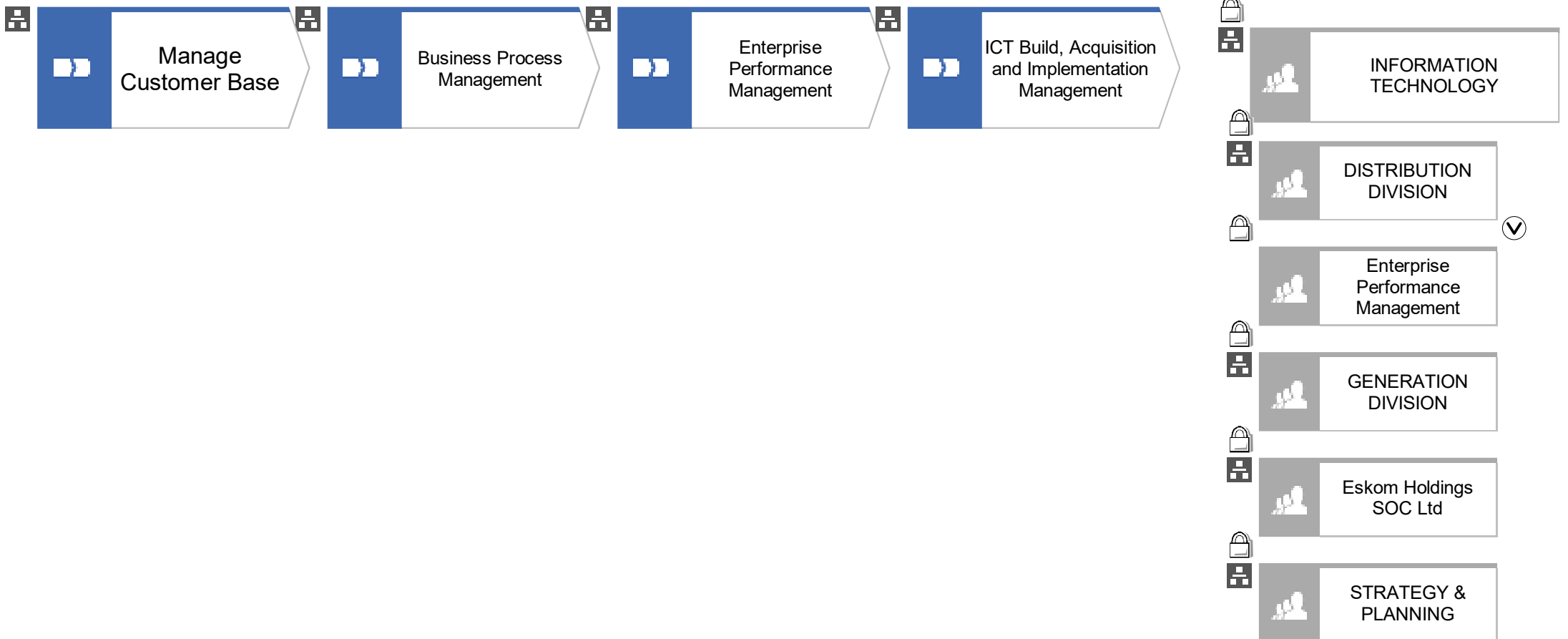


Name	Description	Risk Rating
End of Support	The K2 support has come to an end and Eskom is at risk if problems are experienced.	High
Potential capability overlap	There's potential capability overlap with Hybrid integration platform as one central functionality is on process orchestration. The Enterprise Architecture toolset especially BPM aspects also could overlap.	Medium

Phase B Business Architecture



B Business Architecture



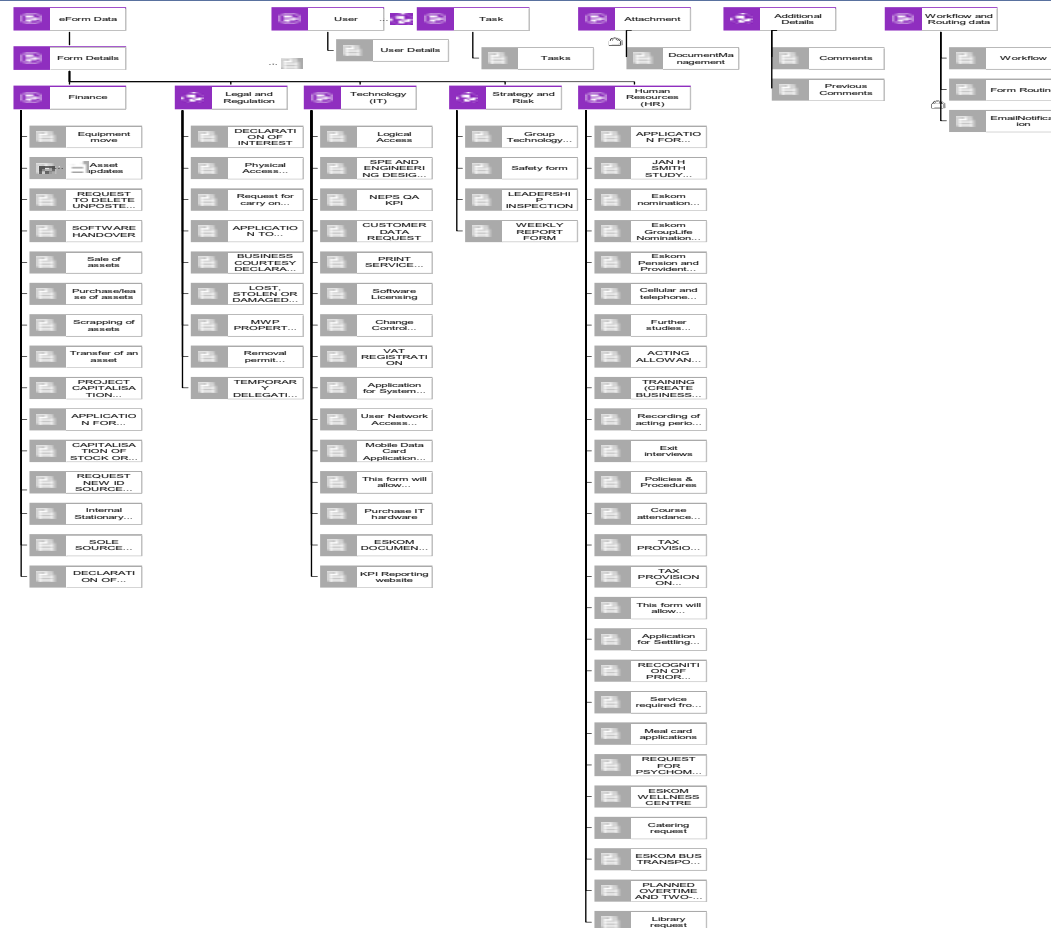
Phase C1

Data / Information Architecture

C1.1 Data Catalog



C1.1 Data Catalog

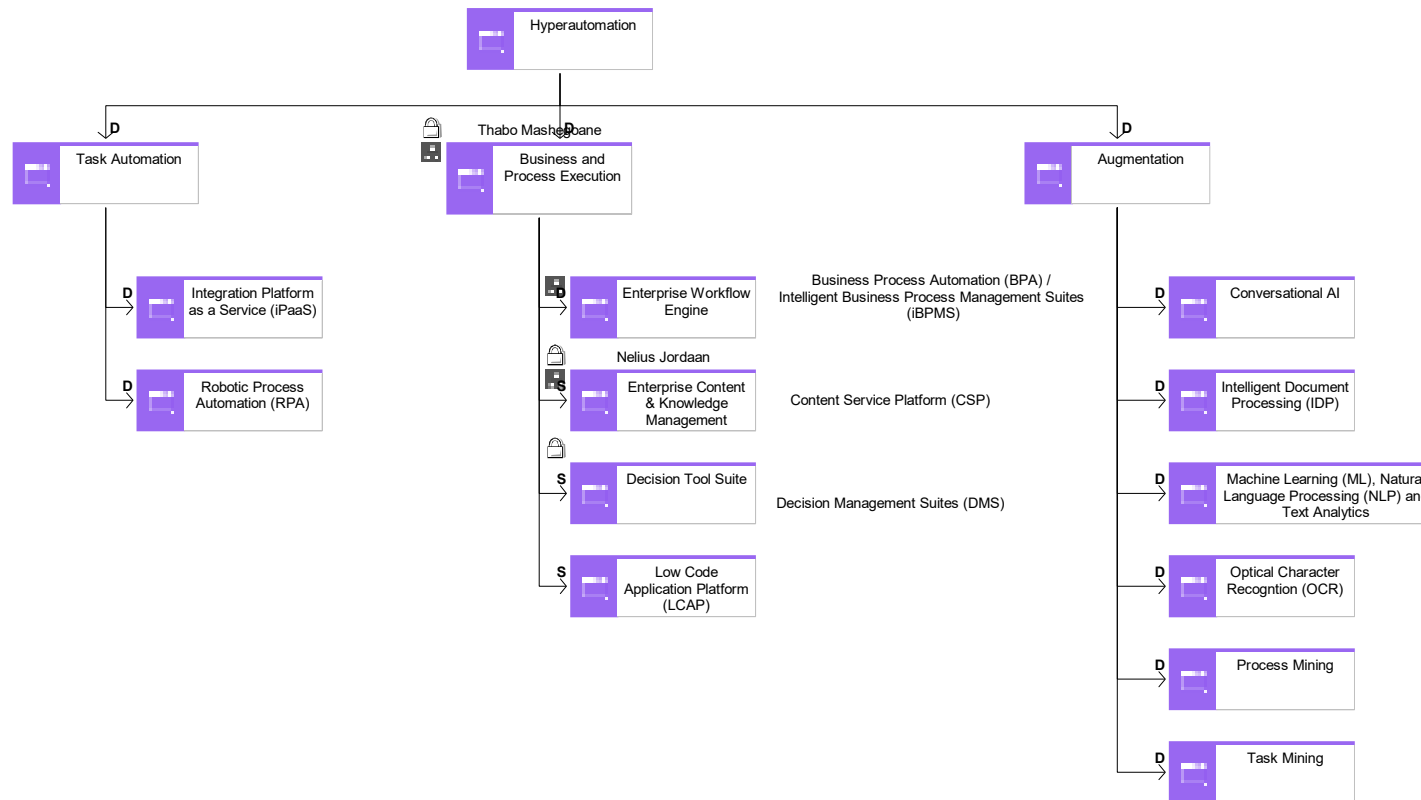


Phase C2 Application Architecture

C2.1	Application Portfolio Catalog
C2.2	Application Function Decomposition
C2.3	Application User Location Diagram
C2.4	Application Communication Diagram
C2.5	Etc



C2.1 Application Portfolio Catalog



What Technologies?

Task Automation

- Integration Platform as a Service (iPaaS)
- Robotic Process Automation (RPA)

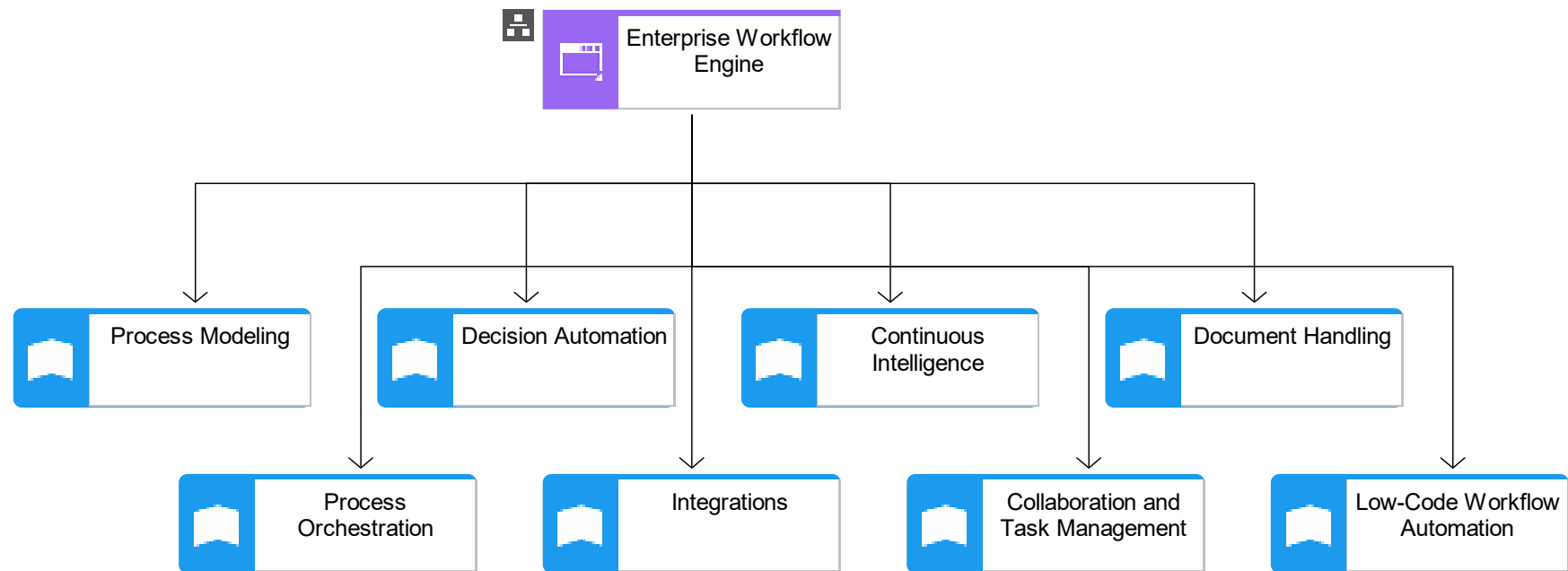
Process Automation

- Business Process Automation (BPA), or Intelligent Business Process Management Suites (iBPMS)
- Content Service Platform (CSP)
- Decision Management Suites (DMS)
- Low Code Application Platform (LCAP)

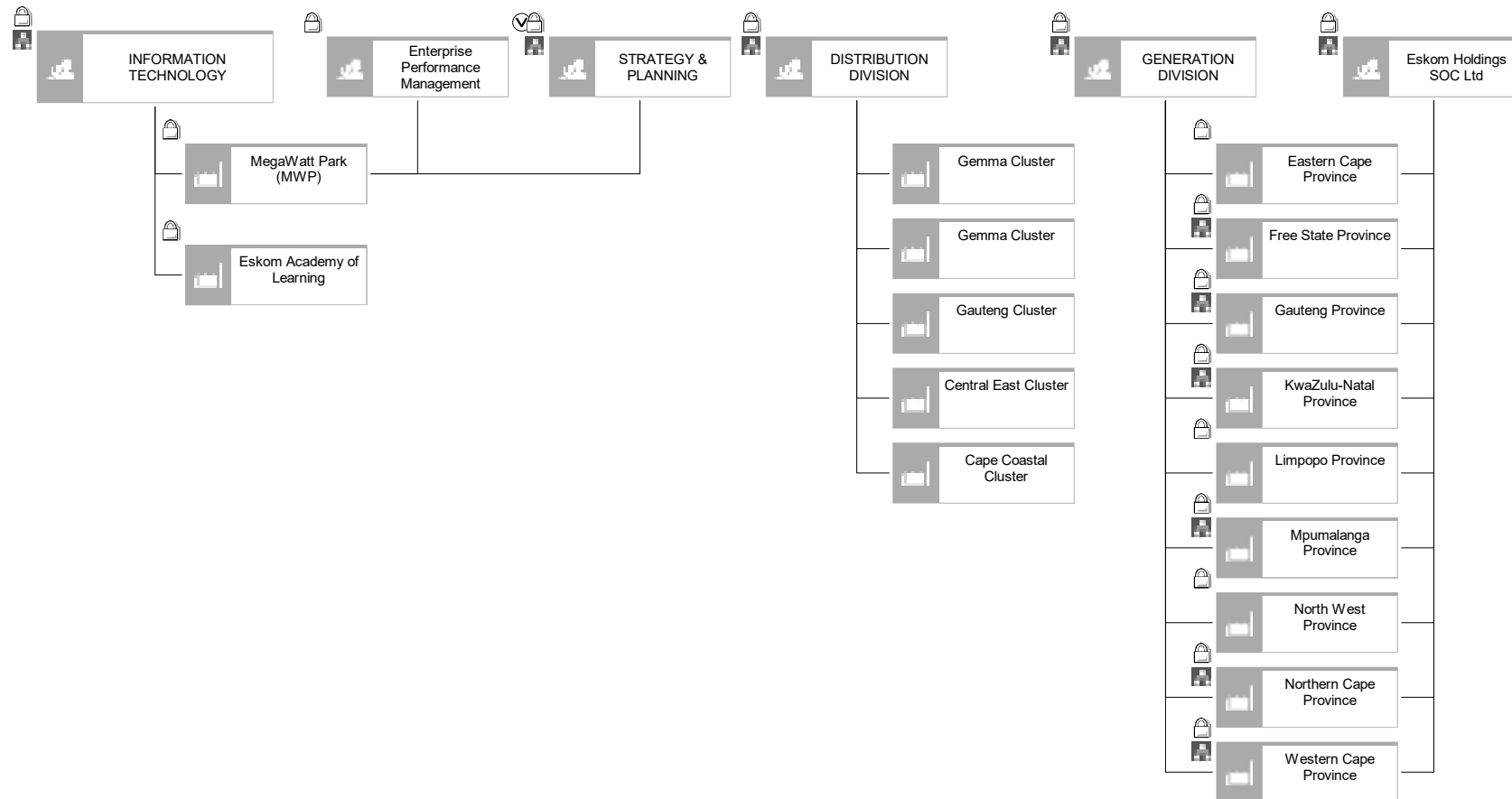
Augmentation

- Conversational AI
- Intelligent Document Processing (IDP)
- Machine Learning (ML), Natural Language Processing (NLP) and Text Analytics
- Optical Character Recognition (OCR)
- Process Mining
- Task Mining

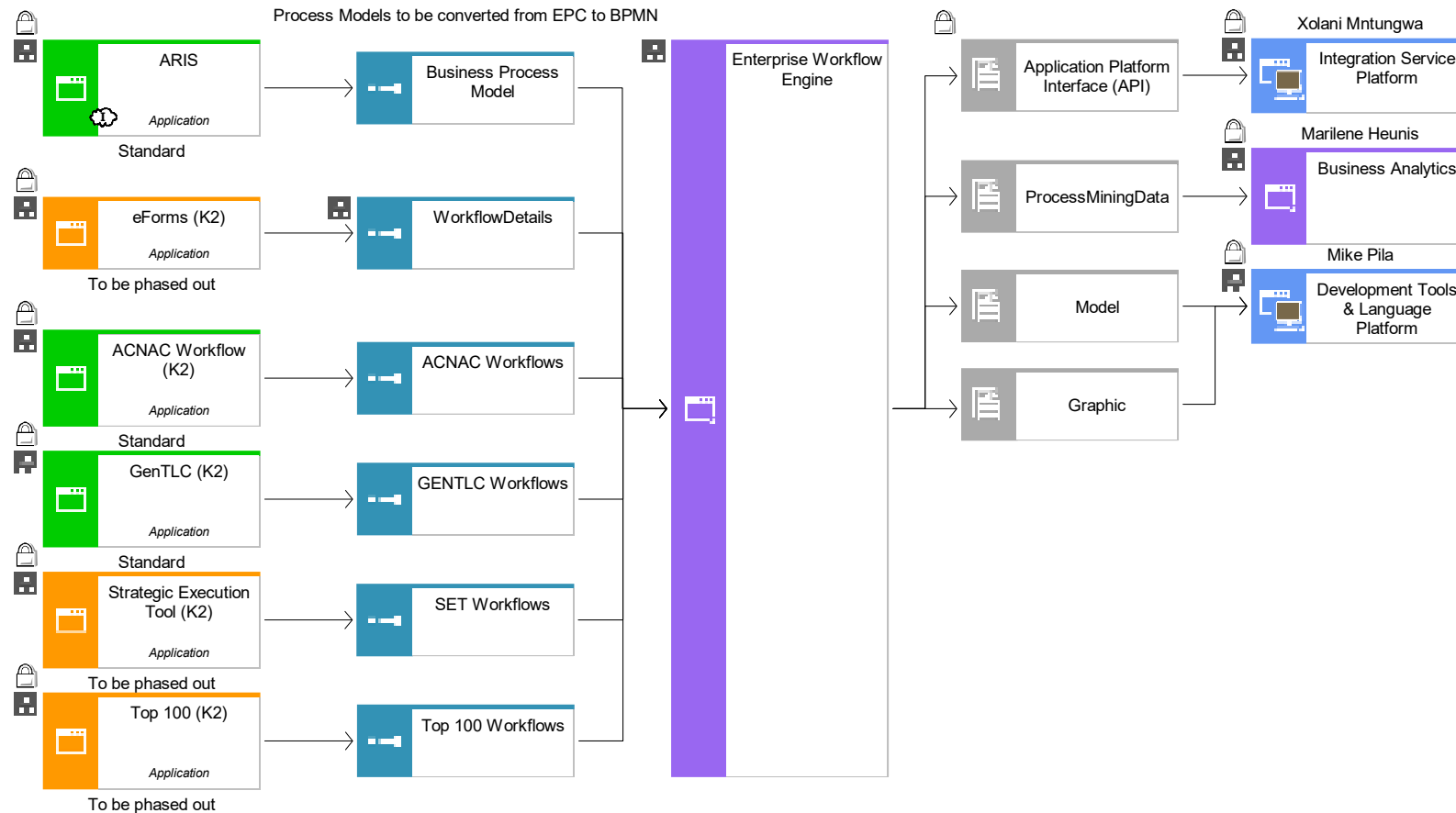
C2.2 Application Function Decomposition



C2.3 Application User Location Diagram



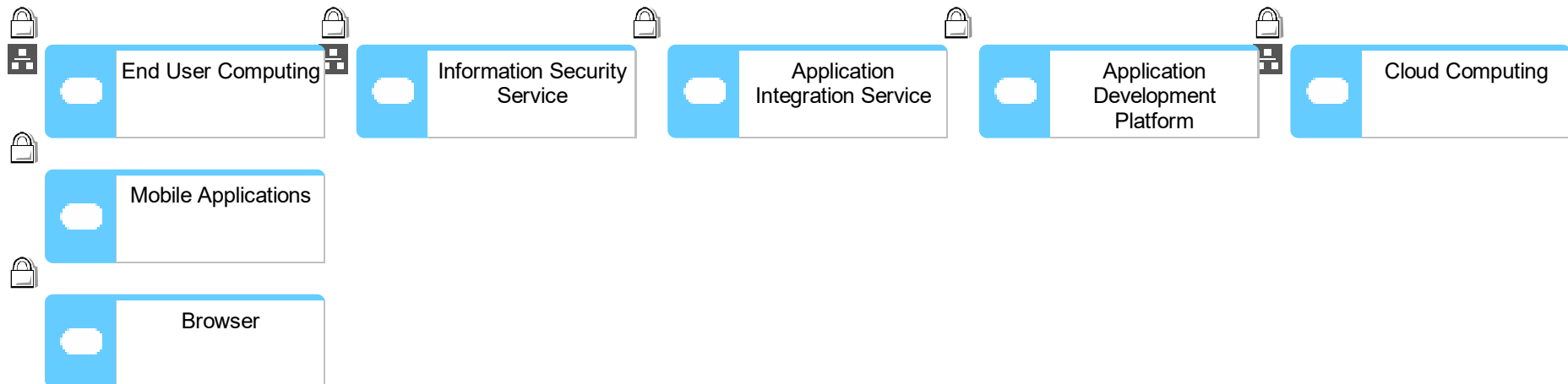
C2.4 Application Communication Diagram



Phase D Technology Architecture

D1	Technology Portfolio Catalog
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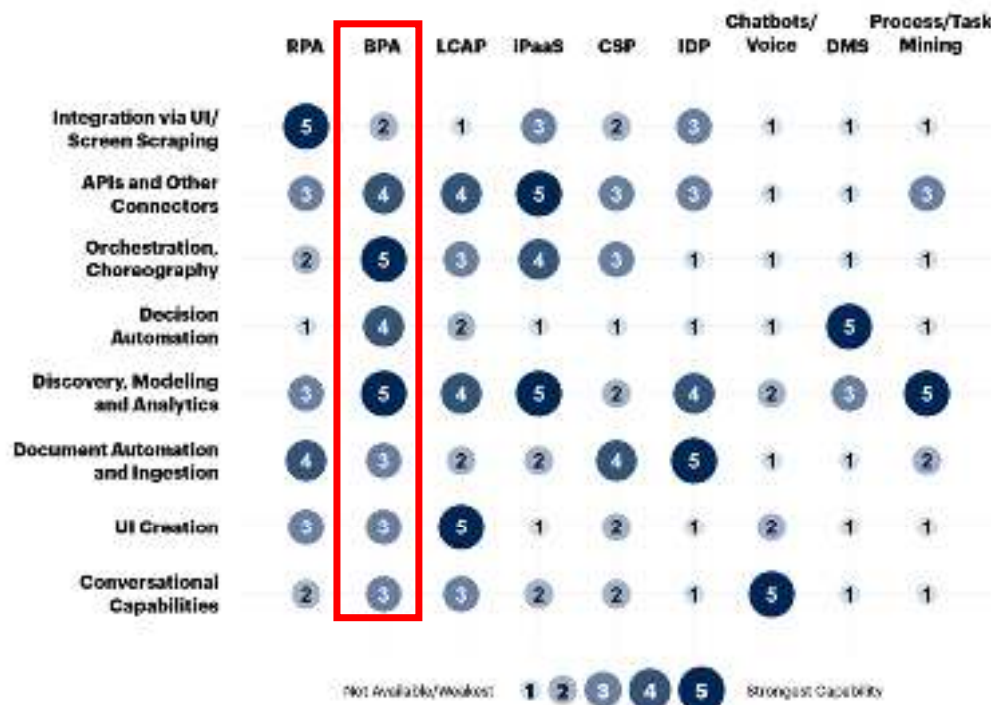




Phase E Opportunities and Solutions



Select Your Technologies Prioritizing Eight Hyperautomation Capabilities



Source: Gartner
754224_01

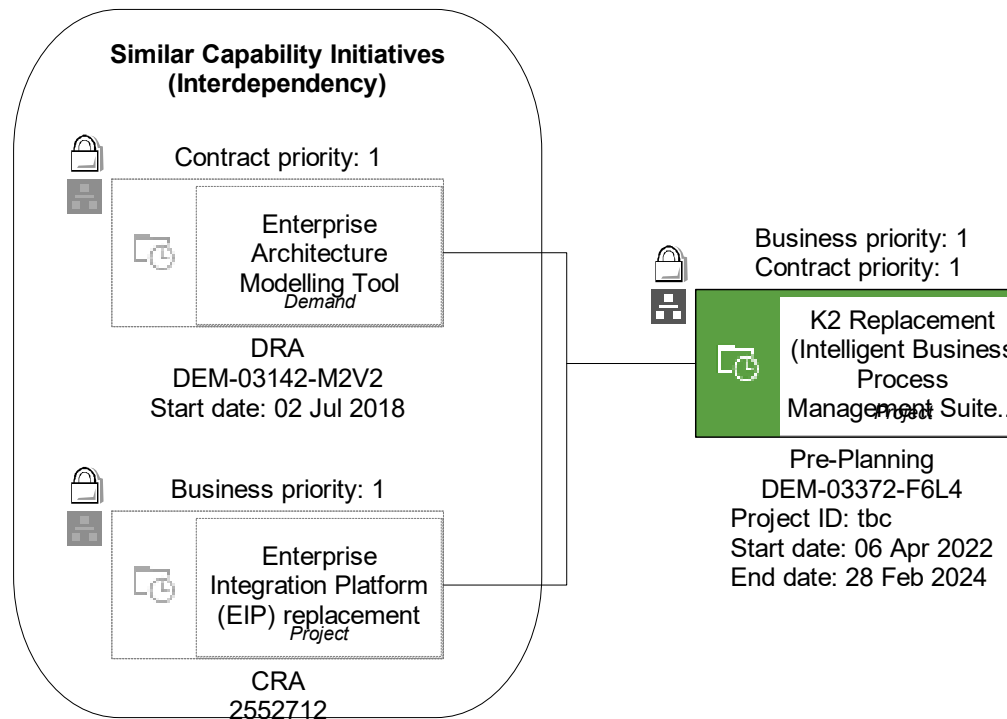
Gartner

- Over and above the internal workflow capabilities that comes with solutions such as SAP ERP, CRM etc. We have an Enterprise grade **Microsoft Power Platform** which will be assessed with regards to implementation of Long and complex process automation requirements.
- Eskom also has both the **Integration platform** (system to system – API and short process automation) and **Document Management systems** for forms and approvals (inclusive of signatures).
- This initiative presents an opportunity to rationalize our application portfolio.

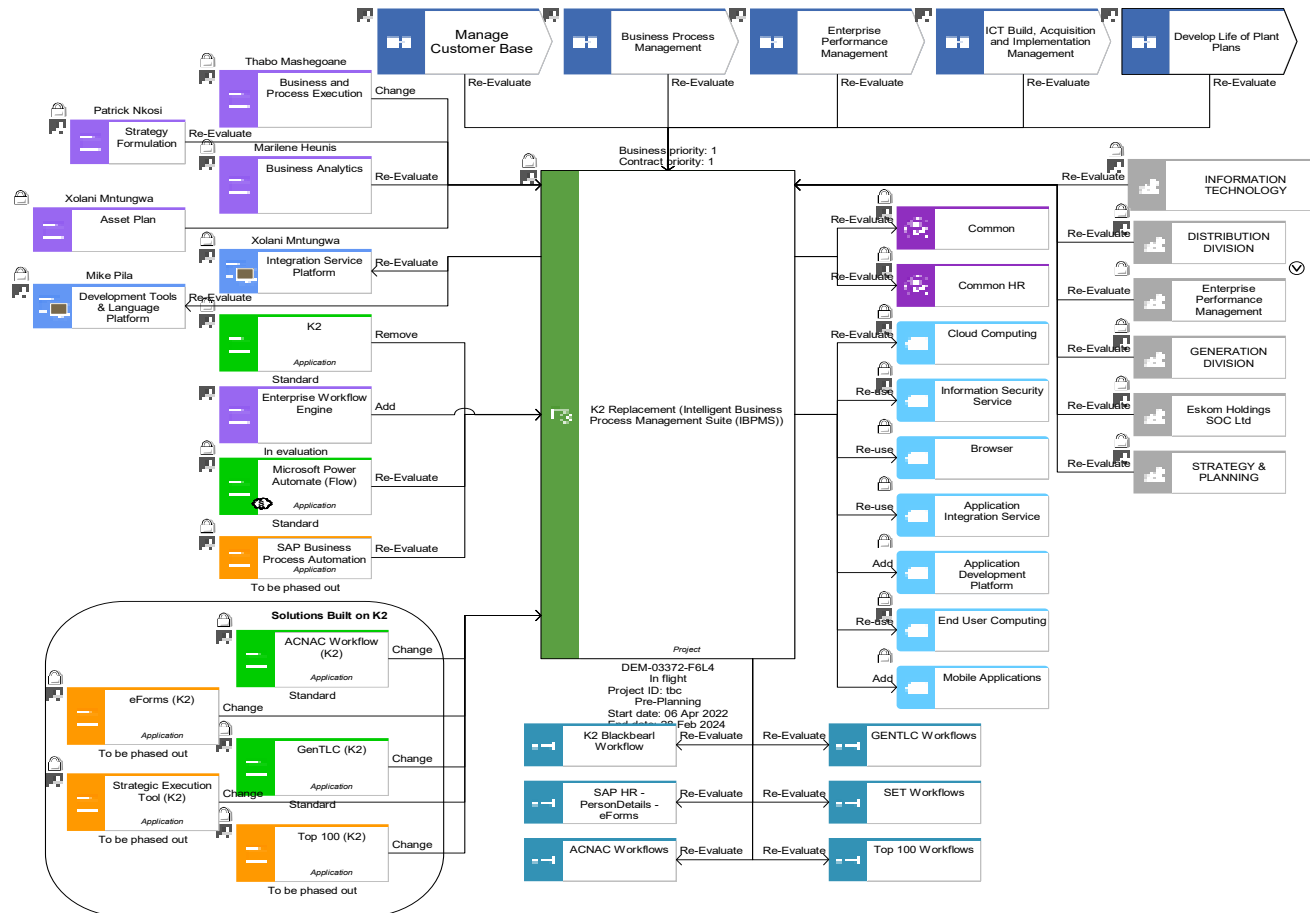
Phase F Migration Planning

F1	Work Package Catalog
F2	Work Package Scope





F2 Work Package Scope

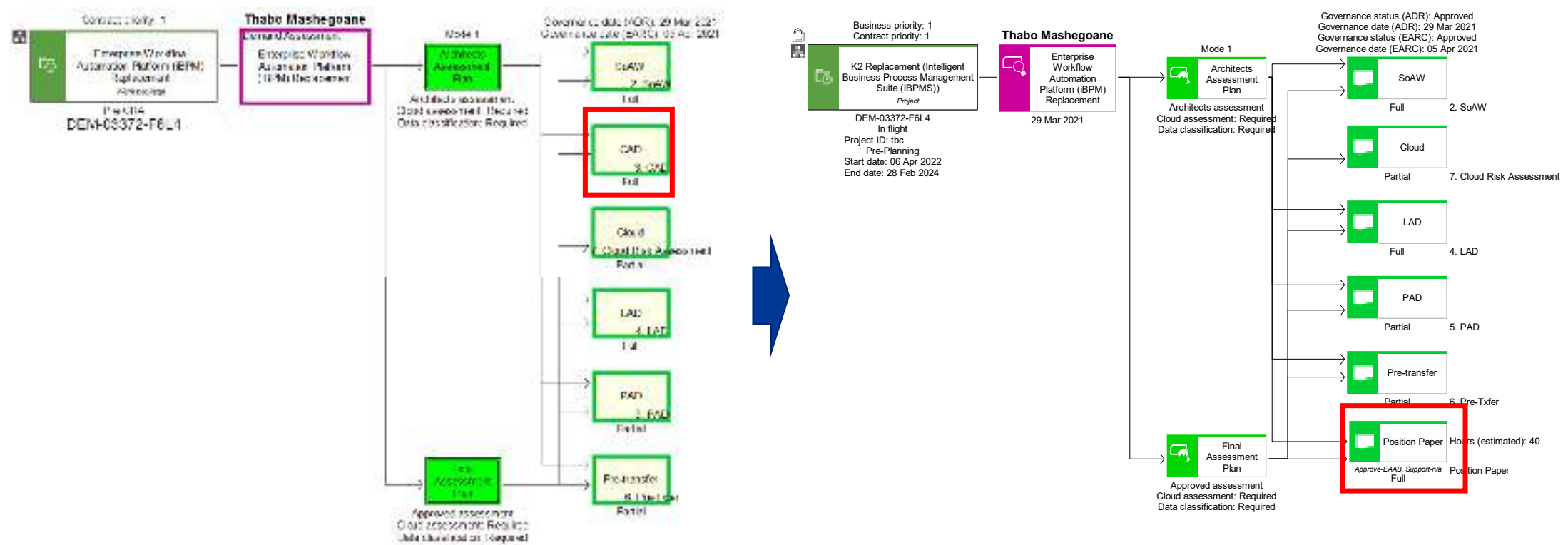


Implementation Governance

G1 Architecture Governance



G1 Architecture Governance



- Add Position Paper / Strategy and remove CAD.



Recommendation(s) and Decision(s)

Project/ Work Package Name



Project ID	DEM-03372-F6L4	Relevant Landscape	Business and Process Execution	Review Stage	LAD
Portfolio/ Project Manager	Sibongile Ndlovu	Division	Group IT	Assessing Architect and Peer Reviewer	Thabo Mashegoane
High Level Overview	<ul style="list-style-type: none"> Due to the current K2 contract ending and the need to test the market this project will be submitting the RFP in order to evaluate the products in the market and to select the product. 				
Business Architecture	<ul style="list-style-type: none"> Processes for BPM, ITSO forms and workflow analysis, design and development will be impacted with potential retraining needed for workers. 				
Business Information Architecture	<ul style="list-style-type: none"> Workflows to be migrated or developed in new platform 				
Data Architecture	<ul style="list-style-type: none"> Forms design, workflow information, and groups to be migrated. Work list items to be closed in old system. 				
Integration Architecture	<ul style="list-style-type: none"> Re-use and migrate the existing integration messages for employee data and workflow information. 				
Application Architecture	Re-platform the following solutions as per Position paper outcomes: - 1. GENTLC, 2. ACNAC, 3. eForm, 4. SET, and 5. Top 100				
Technology Architecture	<ul style="list-style-type: none"> In alignment to Cloud first strategy, a cloud assessment will be conducted. 				
General	<ul style="list-style-type: none"> A position paper will be prepared to ensure that we give direction on how to deal with all solutions that were built on the K2 platform and the potential future capabilities and use cases to be built on the new business process automation platform. The paper will also position business process automation platform relative to the Enterprise Integration platform to highlight both the overlaps and differences. We also have a technology trend called Hyperautomation which we need to contextualize as part of this paper. 				
Recommendations	Approve LAD				