Data strategy

2022 - 2025

Building Capabilities
Creating Opportunities
Serving the Kingdom

الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties

Draft 6.6, Jul 2022

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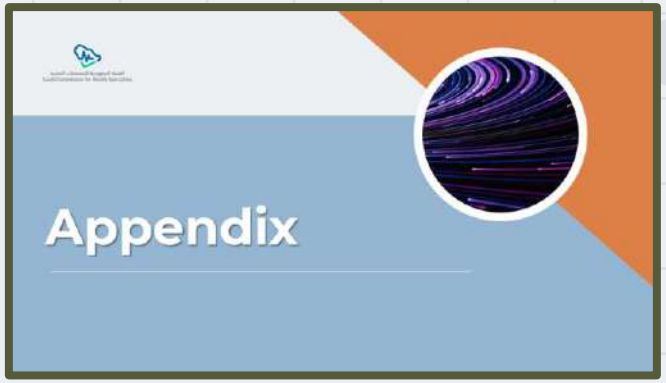

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Data Strategy
Background

Status & Situation

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رؤية VISION 2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

SDAIA
الهيئة السعودية للبيانات والذكاء الاصطناعي
Saudi Data & AI Authority

Vision 2030 is going in full swing and digital transformation is top of agenda.

Data is now becoming the main objective of the SDAIA and NDMO and is now intertwined with digital transformation.

NDMO strategy and policies are now the national standard.

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As the SCFHS strategy is being refreshed, the mandate is not changing for the commission yet there are many changes happening around us.

We have already started on our journey, but the efforts need to be elevated and given high urgency and criticality as this gives us both opportunities to grow and optimize current business to always pursue excellence..

Data Strategy

A strategy that focuses on compliance with the overarching mandate of the national transformation requires that we must invest in key strategic initiatives that will also cascade benefits.

However, we also must leverage our unique position in the sector by offering new services and create value through building the organizational capabilities and embed data in the efforts of enlightening and supporting the decision-making for the SCFHS and its customers and beneficiaries.

Vision & Mission

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Data Vision

Value creation in healthcare training and professional practice through trusted data

Data Mission

Ensuring the highest standards for data management and governance and enabling data-driven decision making for the Saudi Commission for Health Specialties and its customers and beneficiaries.

Vision & Objectives

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Data Leverage

What data and insights is unique to us and can add value?

- Build the foundation
- Secure & Protect
- Exchange & Innovate

Intelligent Operations

Can we reduce costs and improve efficiencies?

- Provide Insights for Decisions
- Integrate & Harmonize
- Automate

Customer Impact

Can we create impact for the customer in time?

- Simplify Journeys & Processes
- Improve service quality
- Inform & Enlighten

Data Principles

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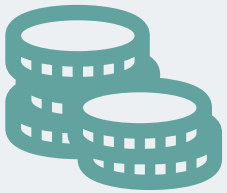

Data as Asset

Privacy by Design

Open Data by Default

Ethical use of Data

Principles to guide our decisions throughout the journey

Efficient Design

Data-Driven Transformation

Data Culture

Trust in Data

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Principle 1 Data as Asset

Description

Data and information are strategic national assets that must be protected with clear accountability to generate value out of it.

Rationale

To be a truly 'data-driven' organization the Commission would not view Data Management as an IT concern. Although the daily technical work related to data operations would be done by the technical team (i.e. DBAs, data custodians, etc.). Nevertheless, policies, business rules, and controls, decision rights must be defined, sustained, and evolved by people with full business understanding and proper organizational authorities.

Implications

1. Develop a portfolio of **data/information assets** with clear definition of the term "asset" when it comes to Data/Information.
2. Data shares many characteristics with other governed assets, but there are also some important distinctions. In contrast with material assets, data is **not depleted** when used, and it is often **of a sensitive/private character**. These should be taken into account when designing data governance and strategy.
3. Data Governance must be established and regarded as a full-blown function that manage all aspects of data/information management:
   - The Data Management organization, including roles and responsibilities, and decision rights.
   - Lead all aspects related to Data Quality. Ensuring that data is fit for purpose is a primary goal of data management. To manage quality, the Commission must ensure they understand stakeholders' requirements for quality and measure data against these requirements.
   - Define and enforce data policies.
   - Establish and maintain metadata management practice to understand what the data is and how to use. It requires definition and knowledge in the form of Metadata.
   - Manage concerns pertinent to data privacy, security, and protection. (See Principle #4. Ethical Use of Data)
   - Foster data-driven innovation and culture.
   - Justify and drive data monetization initiatives. This might include Infonomics-related tasks (e.g. the value of data can be expressed in economic terms by developing consistent ways to quantify that value. Also measure both the costs of low quality data and the benefits of high quality data.)
4. **Data policies must be derived from the data** guiding principles, and must includes: data standards, data controls, and data management processes.
5. Managing data includes **managing the risks** associated with data: In addition to being an asset, data also represents risk to an organization. Data can be lost, stolen, or misused. Organizations must consider the ethical implications of their uses of data. Data-related risks must be managed as part of the data lifecycle.

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Principle 2 Privacy by Design

Description	Privacy by design enables privacy to be 'built in' to the design and architecture of information systems, business processes and infrastructure. It aims to ensure that privacy is considered before, at the start of, and throughout the development and implementation of initiatives that involve the collection and handling of personal information.
Rationale	Privacy by design enables the Commission policy-makers, IT/Data professionals and those responsible for delivering services to the beneficiaries to approach privacy as a 'design feature' of the processes and activities rather than as a compliance burden. It shifts the privacy focus to prevention rather than compliance, using innovative approaches that are anchored in genuine respect for individuals' personal information.
Implications	1. Data Protection framework and policies to be aligned with the 7 foundational principles of the privacy by design: 2. Proactive not reactive, preventative not remedial (Do not wait for privacy risks to kick off, nor just to offer remedies for resolving privacy breaches once they have occurred – rather, it aims to prevent them from occurring). 3. Privacy as the default setting (ensuring that personal information is automatically protected in any given system, business practice or process). 4. Privacy embedded into design (data privacy becomes an essential component of the core functionality being delivered) 5. Full functionality: positive-sum, not zero-sum (to accommodate all legitimate interests and objectives in a positive sum "win-win" manner). 6. End–to–end security – full lifecycle protection (all personal information is kept securely across its lifecycle from collection through to destruction.) 7. Visibility and transparency – keep it open (All of the collection and handling steps along the way are visible and transparent, to users and providers alike) 8. Respect for user privacy – keep it user centric (to keep the interests of the individual at the forefront by offering such measures as strong privacy defaults, appropriate notice, and empowering user-friendly options)

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Principle 3 Open Data by Default

Description	By default, data must be considered available and open unless there are legit reasons to protect it for data privacy, national security, and any other justifiable reasons.
Rationale	Open data is a key driver put forth my the NDMO to speed up the adoption of data-driven thinking kingdom-wide.
Implications	1. Embed “Open Data” and “Freedom of Information” practices within the data management capability. 2. Ensure the application of the Open Data as stipulated in NDMO - Open Data Policy during the design and the development of the data policies and standards. 3. Platform for streamlining “Open Data” functionalities.

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Principle 4 Ethical use of Data

Description	Data to be utilized and governed with integrity based on predefined ethical practices and rules in congruence with the public interest and the Saudi cultural values.
Rationale	Handling data in an ethical manner is necessary for the long-term success of the Commission to get value from the data. Unethical data handling can result in the loss of reputation and public image, because it puts at risk people whose data is exposed. Therefore, data ethics are a matter of social responsibility.
Implications	1. Avoiding collecting any PII form the data providers if it not justified or required. 2. Avoid any scenarios that entail unethical information practices (e.g. lie through omission or inclusion of certain data points; misleading visualizations; unclear definitions or invalid comparisons; bias, obfuscation / redaction of data) . 3. Establishing an Ethical Data Culture is an imperative. 4. Manage the risks related to the ethical aspects of data usage. Handling data ethically requires enterprise-wide recognition of the risks associated with misuse of data and organizational commitment to handling data based on principles that protect individuals and respect the imperatives related to data ownership. 5. Although GDPR is not applied in Saudi Arabia, adopting some of its principles can boost the ethical use and trustworthiness of the Commission.

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Principle 5 Optimal Design

Description

Use the available data, deduplicate the data, and ensure the effectiveness on how to manage, process, share, and use the data in such a way to serve the national needs.

Rationale

End-to-End Data Management as a cost-effective practice is the main enabler to provide the data for all beneficiaries.

Implications

1. Although each department or team might have their own applications, data should not be viewed from project-centric or application-centric or department-centric or process-centric perspective, but from an enterprise perspective as shared assets. The Commission might end up having complex technical and business process landscapes. But Data is created in many places and is moved between places for use. To coordinate work and keep the end results aligned requires planning from an architectural perspective.
2. Data management must be cross-functional activity, utilizing Agile/DevOps/DataOps approaches or any relevant New Ways of Working.
3. Data Architecture is a must to maintain holistic view about the data and to be used as a reference for all the processes, products, and projects that touch the data.
4. Foster lifecycle thinking about the data. Data has a lifecycle and managing the data requires managing its lifecycle. Data management requirements must drive Information Technology decisions: Data and data management are deeply intertwined with information technology and information technology management. Managing data requires an approach that ensures technology serves, rather than drives, an organization's strategic data needs.
5. Data Governance and Data Management activities must be integrated smoothly with the internal operating model with as minimum friction as possible.

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Principle 6

Data-Driven Transformation

Description

Data Provisioning and analysis for operational and strategic decisions and develop the policies.

Rationale

The key driver for data usage is to utilize it for decision-making at various levels, otherwise the decisions would be based on inaccurate gut feelings, subjective opinions, or hasty hunches. The ultimate goal is to adopt evidence-based management for all types of decisions: operational, tactical, strategic, and national.

Implications

1. Data use cases management must be a main practice in order to foster this principle inside the Commission. This must include data use cases discovery, prioritization, analysis, testing, implementation, deployment, and revision.
2. Business Decisions (including operational business rules) must be documented, modelled, and externalized.
3. Establish the practice of “After Action Review” AAR and support this with the relevant data and evidence.
4. Establish the Practice of data-driven policy-testing and simulation.
5. Establish the practice of Scenario Planning.

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Principle 7

Data Culture

Description

Empowering people with the mindset and skills to both consume & produce data and to influence change by using data & insights as a foundation for communication & collaboration.

Rationale

Influential change requires personal development in both mindset and skills. A principle of establishing a data culture focuses on both improving the literacy to consume and produce data and the mindset of making decisions informed by data especially in a collaborative way where the data is at the center of all communication and story telling to influence change, establish consensus and reduce the over-reliance of past experiences and prior beliefs.

Implications

1. Develop foundation skills to consume data, produce insights and use data for decision making.
2. Establish communities of practice to apply data skills and improve understanding by group interactions for 'situational learning'.
3. Create a data career path on data management, data governance, data engineering and data science by creating curriculums and certification roadmaps
4. Conduct workshops and trainings on decision making, executive data leadership, data business models, process and change management through data, data storytelling and communicating with data, data product development & design thinking.
5. Coach and mentor non data-professionals to self-serve using existing data tools and approaches
6. Coach and mentor data professionals to continuously improve and add value to the organization.
7. Create and execute an assessment framework for measuring and benchmarking the data culture of the organization.

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Principle 8

Trust in Data

Description	Cultivate trust in the data by all stakeholders through ensuring high quality data, and data transparency when it comes to the quality characteristics of the data.
Rationale	Data Quality transparency is main pillar for the ethical usage of the data. Driving decisions by using questionable or impaired quality can lead to extremely negative ramifications that incur PR scandal or public image loss.
Implications	1. Establish end-to-end data quality process. 2. Embed data quality controls in the business processes. 3. Establish a solid master data and reference data management practice. 4. Share the Data quality health index with all internal employees to make it as visible as possible. 5. Promote the culture of the data quality inside the Commission. 6. Hold any party who internationally impairs the data quality accountable with clear consequences. 7. Digitize the data capture, collection, and generation as much as possible to eliminate or reduce the likelihood of human errors.

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Framework & **Data Use Cases**

Framework & Approach

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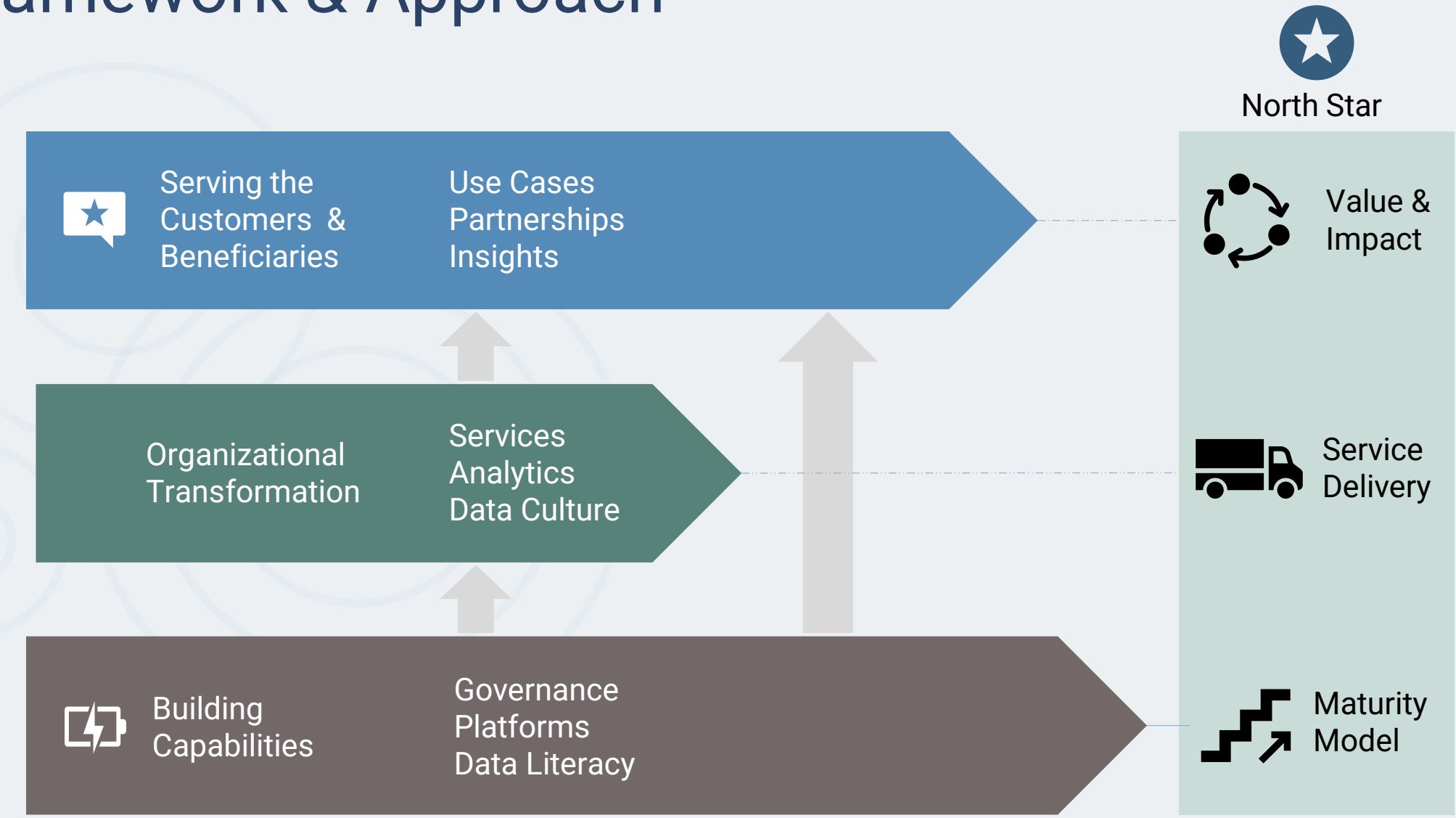

Building Capabilities

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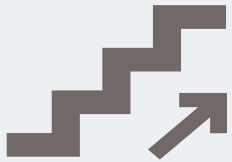
Capabilities enable possibilities for both operations and implementing new use cases



Our (data) capabilities are periodically assessed and are planned for continuous improvement.

Governance

- Operating Model (SDAIA - NDMO)
- Data Security, Privacy & Protection
- Data Architecture
- Data Quality Management
- Master & Metadata Management
- Policies, Practices & Standards
- Assessment & Performance Framework
- Data Governance & Process Framework

Platforms

- Enterprise Data Catalog
- BI & Analytics Platform
- Datawarehouse & Data Lake
- Data Integration Platform
- Cloud & DevOps Platform
- Data Science Platform
- Data Portal & Exchange Gateway

Literacy

- Foundations
- Data Governance
- Data Management
- Data Engineering
- Insights & Analytics
- Data Product Development
- Sourcing & Capability Development

Core Focus: Horizon 1 | Horizon 2 | Horizon 3

Organizational Transformation

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Continued support for ongoing services and support to the commission while improving capabilities.

Focus on service delivery and efficiencies enhanced though capability development

Ongoing Services

- Analytics & Adhoc Reporting
- Business Optimization & Automation

Data Culture

- Communities, Tribes & Guilds
- Team Development Practices

New Services

- Integrated Services
- ML & AI Services

Leadership, Risk & Performance

Communication & Change Management

SCFHS Knowledgebase

Data Use Cases & Ideation Model

Serving the Customers & Beneficiaries

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Implementing use cases that improves customer experience and the value & image of the organization

Impact the customers and the commission through value added offerings and quality improvement of existing mandate.

Customer & Beneficiary Services

- Practitioner Registry & 360 View
- Value Added Services
- Data Portal & Knowledgebase
- Customer Experience Services

Partnerships & Models

- Data Augmentation & Exchange
- Analytics as a Service
- Business Models
- Compliance, Licensing & Certifications

Participation & Insights

- Sector Insights & Publications
- Citizen Participation & Forums
- Data stories & Data Journalism
- Workforce Planning Tool

Data Use Cases & Ideation Model

Data Strategy Map

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Vision Value creation in healthcare training and professional practice through trusted data

Mission Ensuring the highest standards for data management and governance and enabling data-driven decision making for the Saudi Commission for Health Specialties and its customers and beneficiaries.

Pillars

Ecosystem	Internal Processes	Clients
Data Leverage	Intelligent Operations	Customer Impact

Goals

Build the foundation	Secure & Protect	Exchange & Innovate	Insights for Decisions	Integrate & Harmonize	Automate	Simplify Journeys & Processes	Improve service quality	Inform & Enlighten

Process

Building Capabilities	Organizational Transformation	Serving the Customers & Beneficiaries
Literacy	Data Culture	Participation & Insights
Platforms and Stack	Ongoing Services	Partnerships & Models
Data Mgmt and Governance	New Services	Customer & Beneficiary Services

Enablers

Agile Strategy and Execution

- Competent data staff
- Active Stewardship Program
- Organizational data culture
- Innovation / ideation
- Infrastructure Capability

Principles

- Data as Asset
- Privacy by Design
- Open Data by Default
- Ethical use of Data
- Efficient Design
- Data-Driven Transformation
- Data Culture
- Trust in Data

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Strategic **Planning**

Data Use Cases & Ideation Model

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A systematic process and approach to capture ideas for data use cases and enabling the business case and implementation of data use cases

Ideation	Preparation	Implementation	Operationalization
Ongoing Ideation	Business case preparation	Project Management	Service Planning & Launch
Data Use Cases Proposals	Data Project planning	Design & Development	Performance Monitoring
Data Use Cases Approval	Budgets & Procurement	Pilot	Maximize Utilization
Data Use Case Register *See Appendix	Program Portfolio	Charters & Contracts	Service Catalog

Integrated Efforts: Innovation | SCFHS Business Units | Strategy & Risk | Finance | Organizational Excellence | PMO | Business Analysis | IT | Support Departments

Data Use Cases Lifecycle

A systematic process and approach to capture ideas for data use cases and enabling the business case and implementation of data use cases.

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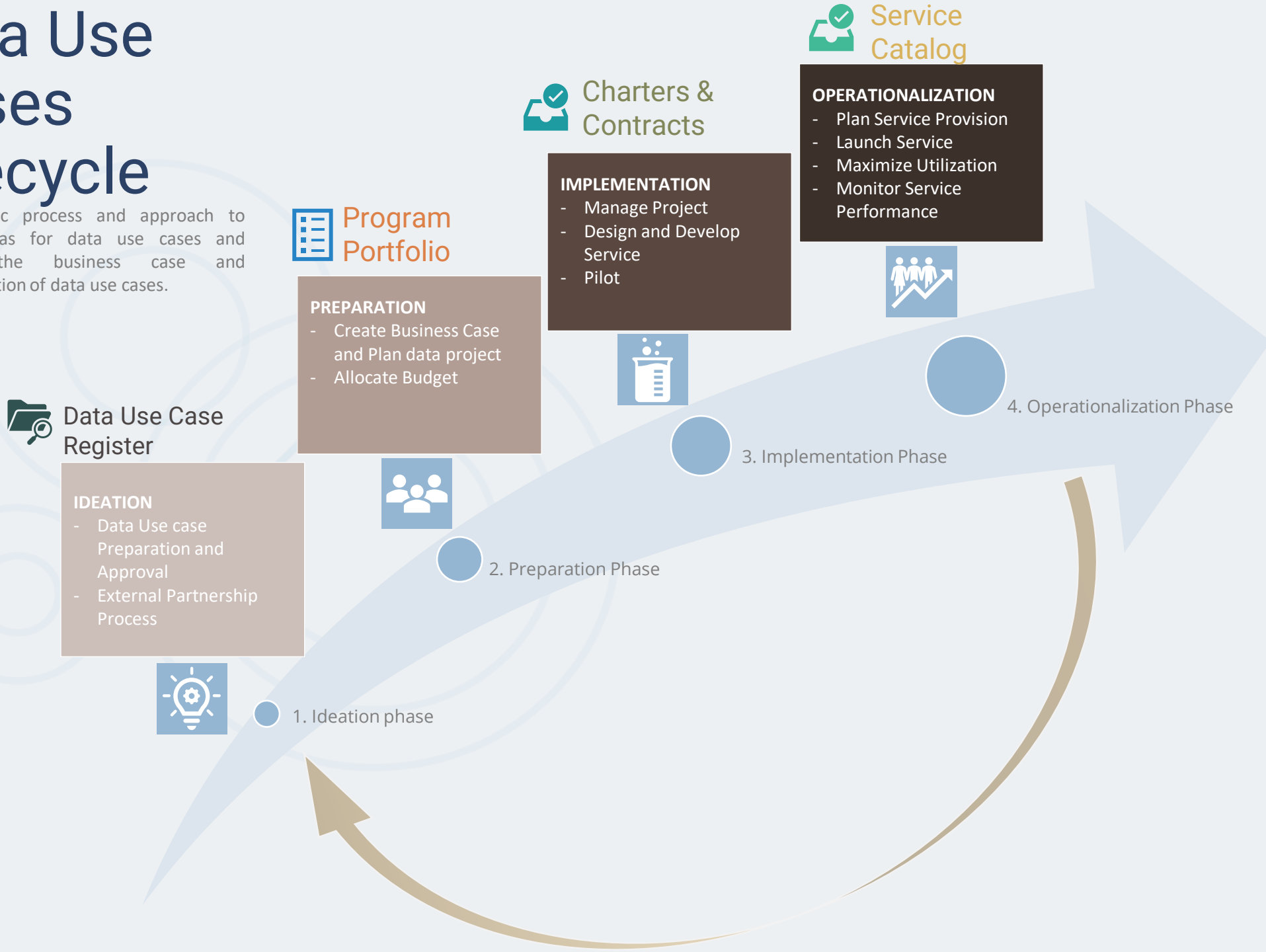
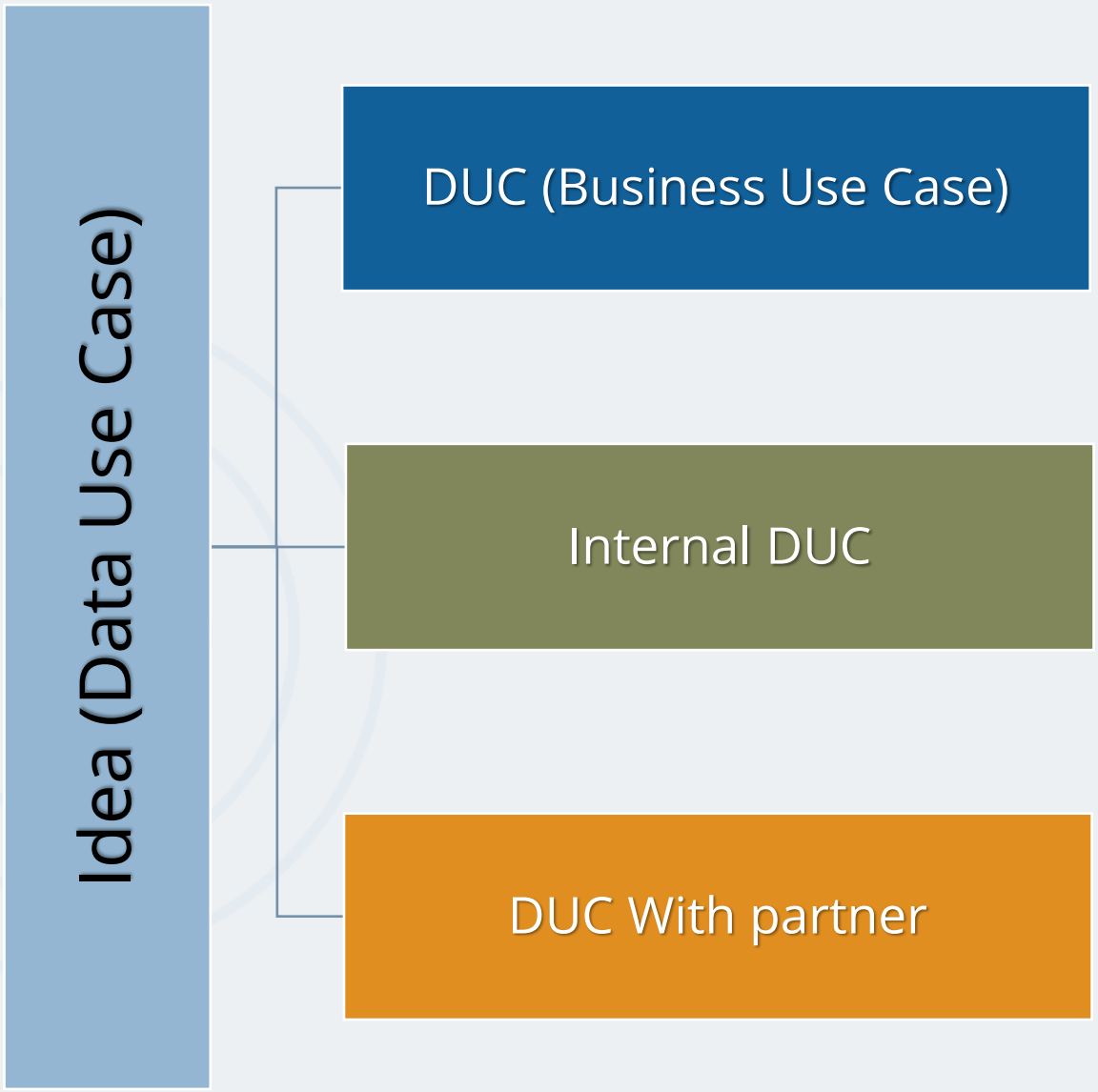


- Innovation
- Strategy & Risk
- SCFHS Business Units
- Finance
- Organizational Excellence
- PMO
- Business Analysis
- IT
- Support Departments

Integrated Efforts


Idea (Data Use Case)
DUC (Business Use Case)
Internal DUC
DUC With partner

Scenario 1: Data Business Case Lifecycle

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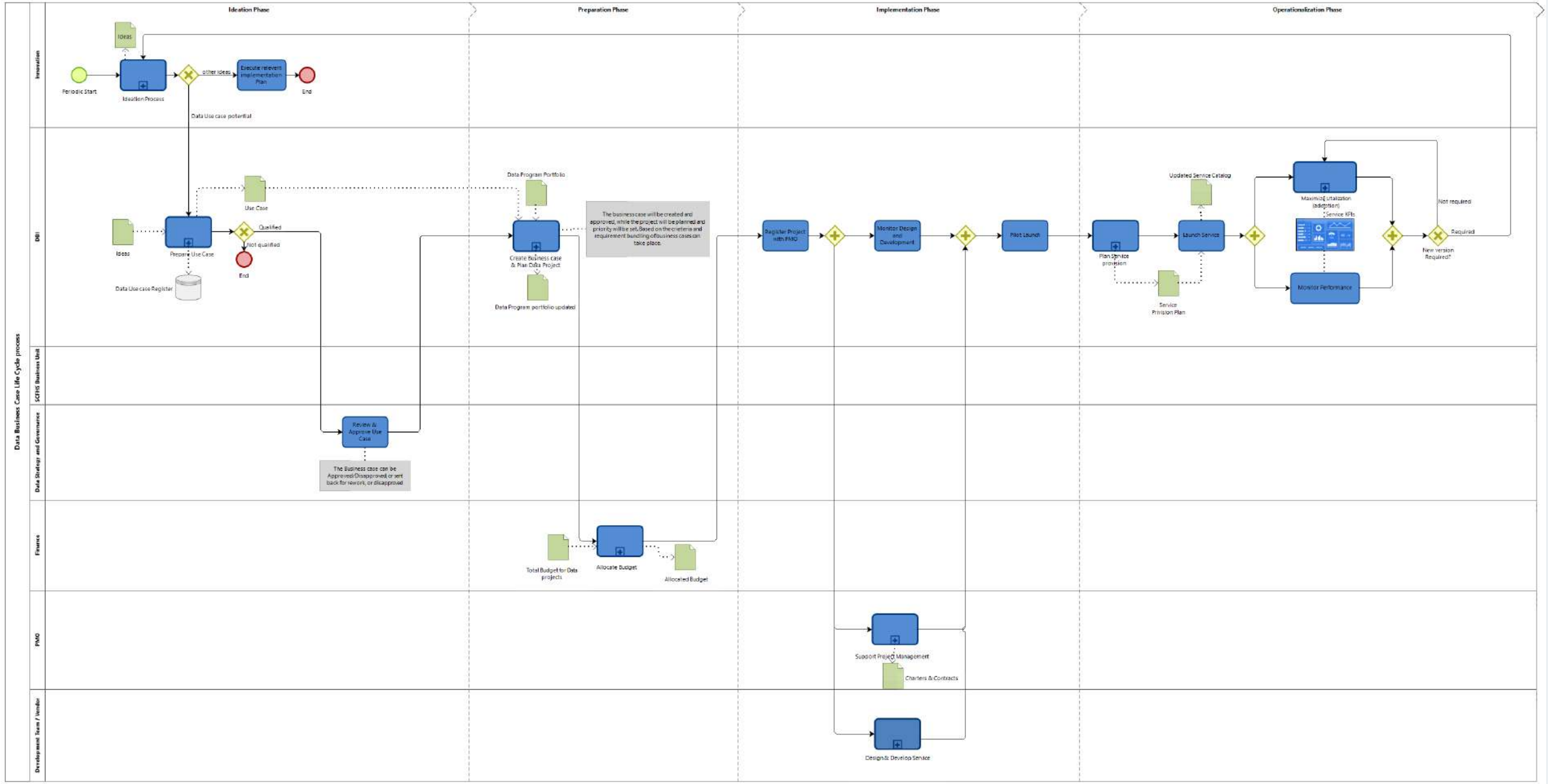

Use Case Process

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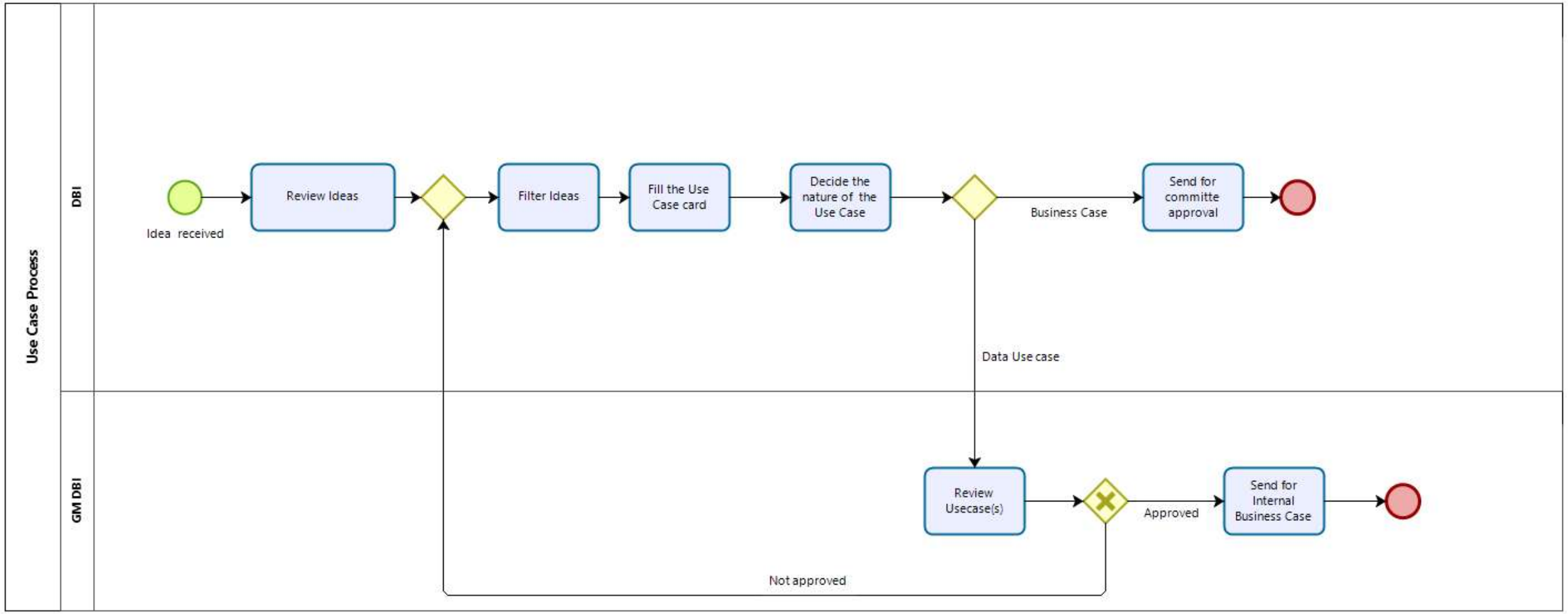

Scenario 2: Data Use Case Lifecycle

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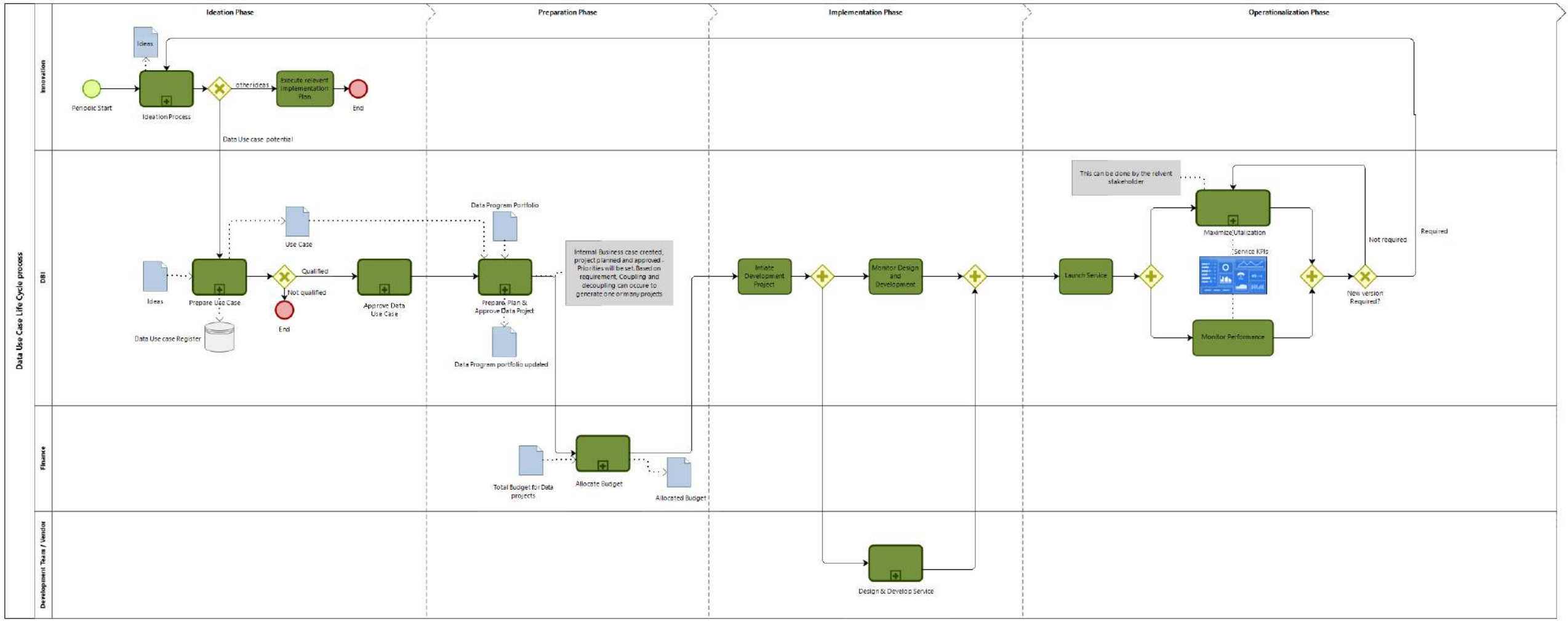
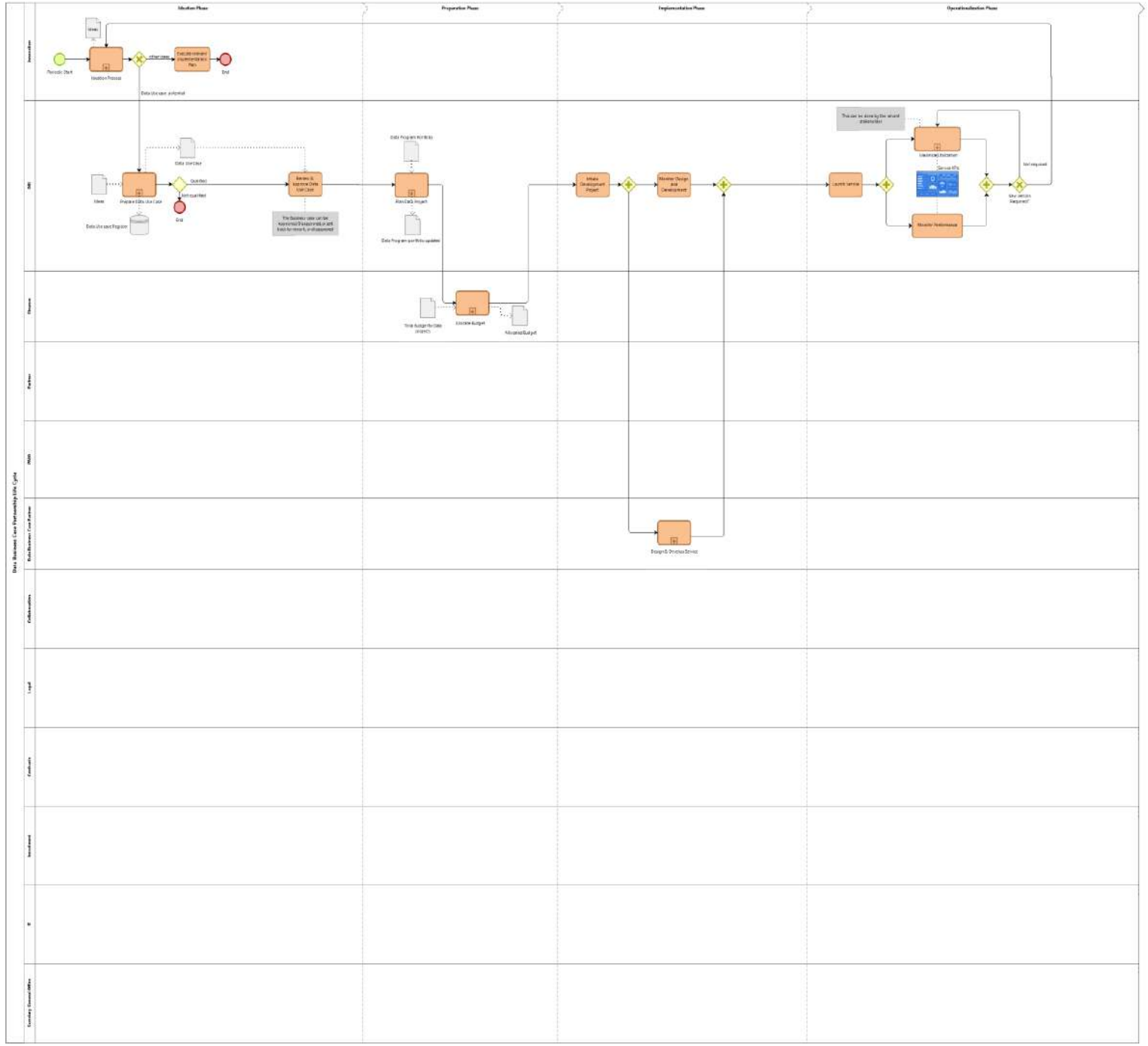


Scenario 3: Partnership



Prioritization Framework

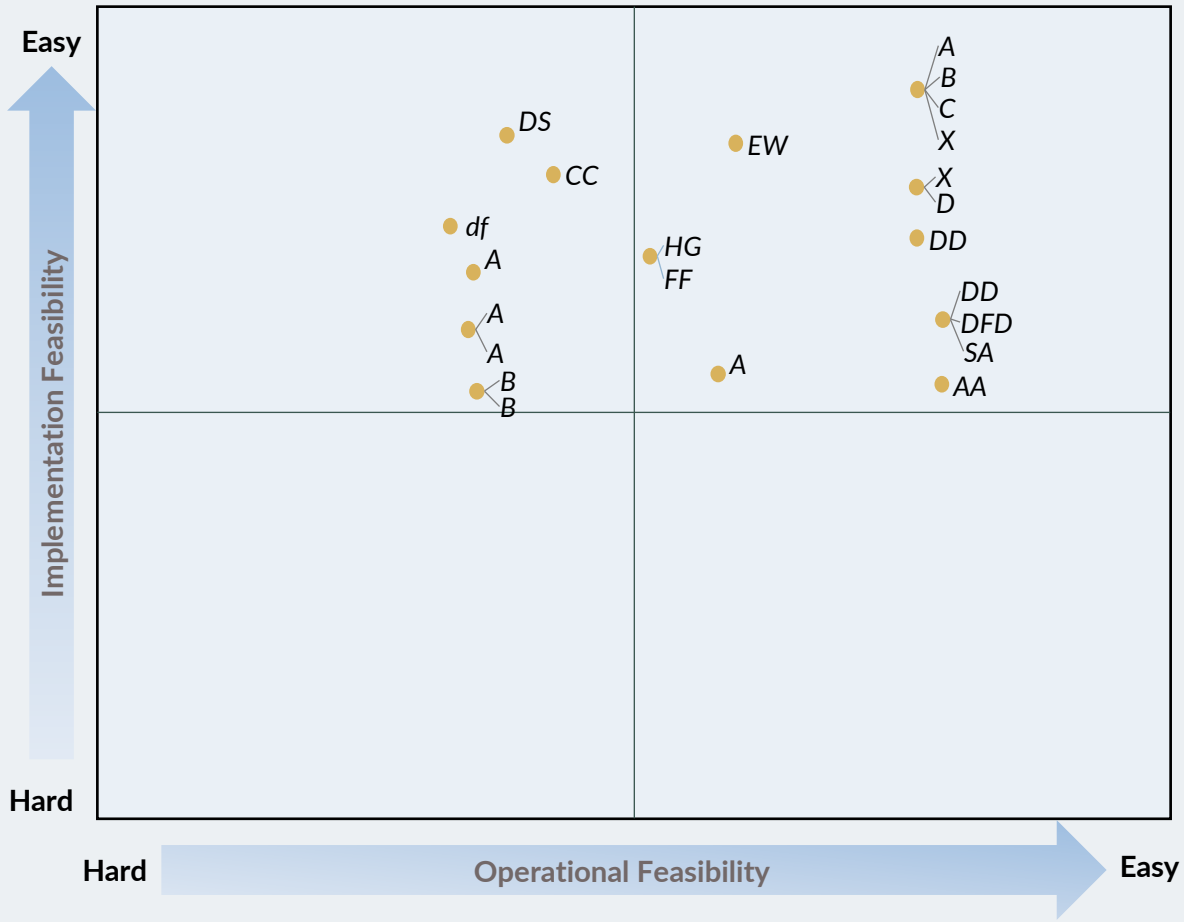
Step 1: Score the use cases according to **potential value**

Potential Value	
Strategic Value	**Customer Value**
• Scoring the level of **alignment** of the use case with the Commission's strategic mandate (e.g., vision, mission and strategic objective)	• Scoring the **uptake and current and potential usage** of the use cases to the customers and beneficiaries.

Prioritization Framework

Step 2: Score the use cases according to **ease of delivery**

Ease of Delivery	
Implementation Feasibility	**Operational Feasibility**
• Scoring the complexity of the **effort required for implementing** the capability (pre-launch - e.g., effort required to research, develop, and launch the capability)	• Scoring the complexity of the **effort required for operating and maintaining** the capability (post-launch)



Prioritization Framework

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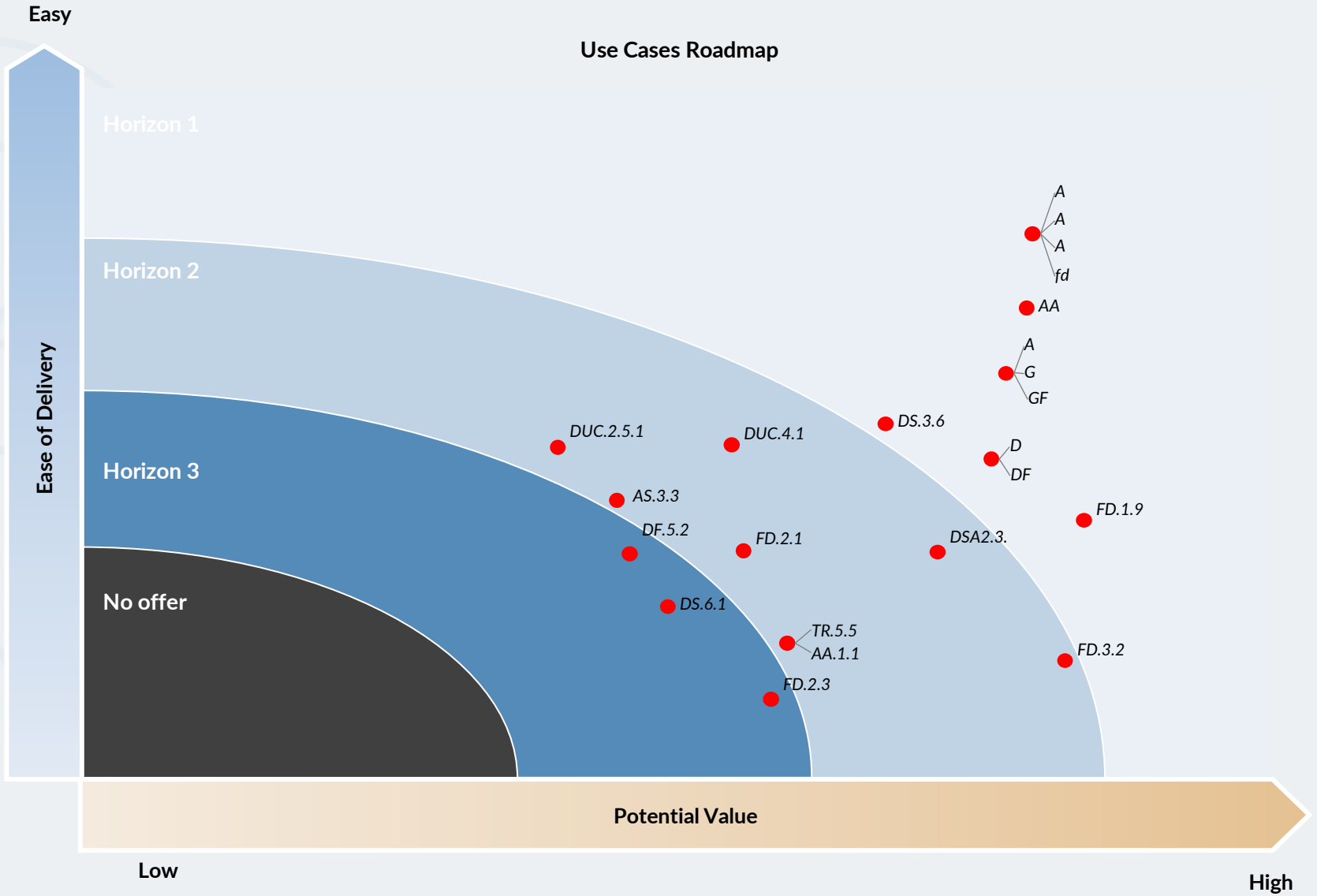
Prioritization Tool: Score the use cases according to **potential value** and **ease of delivery**

Data Use Case	Total Score	Potential Impact			Feasibility (Ease of Delivery)		
		Potential Impact	Strategic Value	Customer Value	Delivery Feasibility	Implementation Feasibility	Operational Feasibility
			3	3		3	3
- Set up and maintain Employee Master Data	3	3	3	3	3	3	3
- Log and analyze data sharing requests	2.25	3	3	3	1.5	2	1
- Store, track and visualize Corporate Performance KPI's	2.25	3	3	3	1.5	2	1
- Analyze efficiency of SCFHS expenses and staff in terms by departments and business line	2	2.5	2	3	1.5	2	1
- Perform analysis of the applicants' assessment	2.25	2.5	2	3	2	2	2
- Estimate clinical exposure of residents	2.25	3	3	3	1.5	2	1
- Evaluate Tests Results against required Skill	2.5	3	3	3	2	2	2
- Embed Verification steps into the practitioner analysis stream	2.25	3	3	3	1.5	2	1
- Monitor request processing performance	2.75	3	3	3	2.5	2	3

Prioritization Framework



The Data Projects Roadmap

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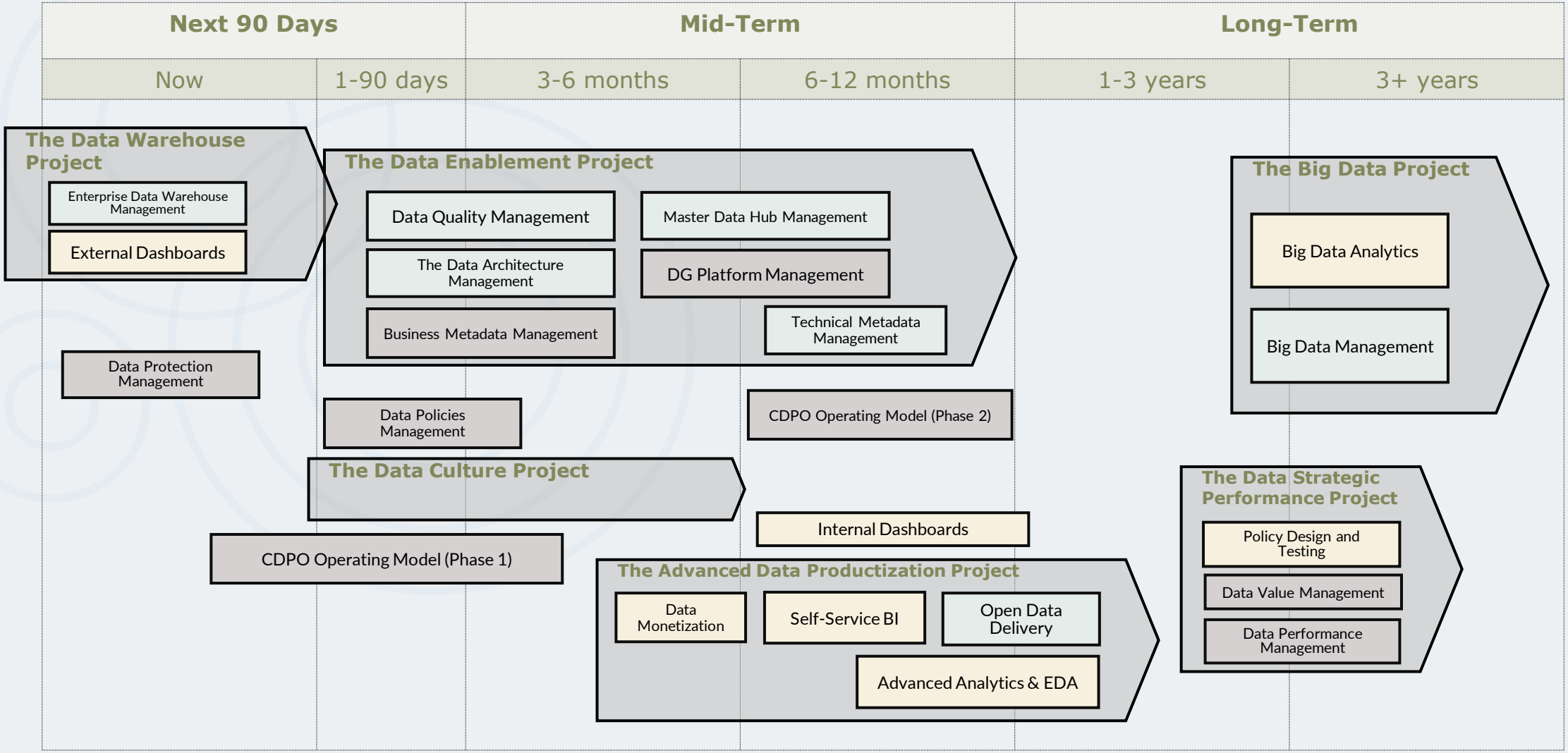
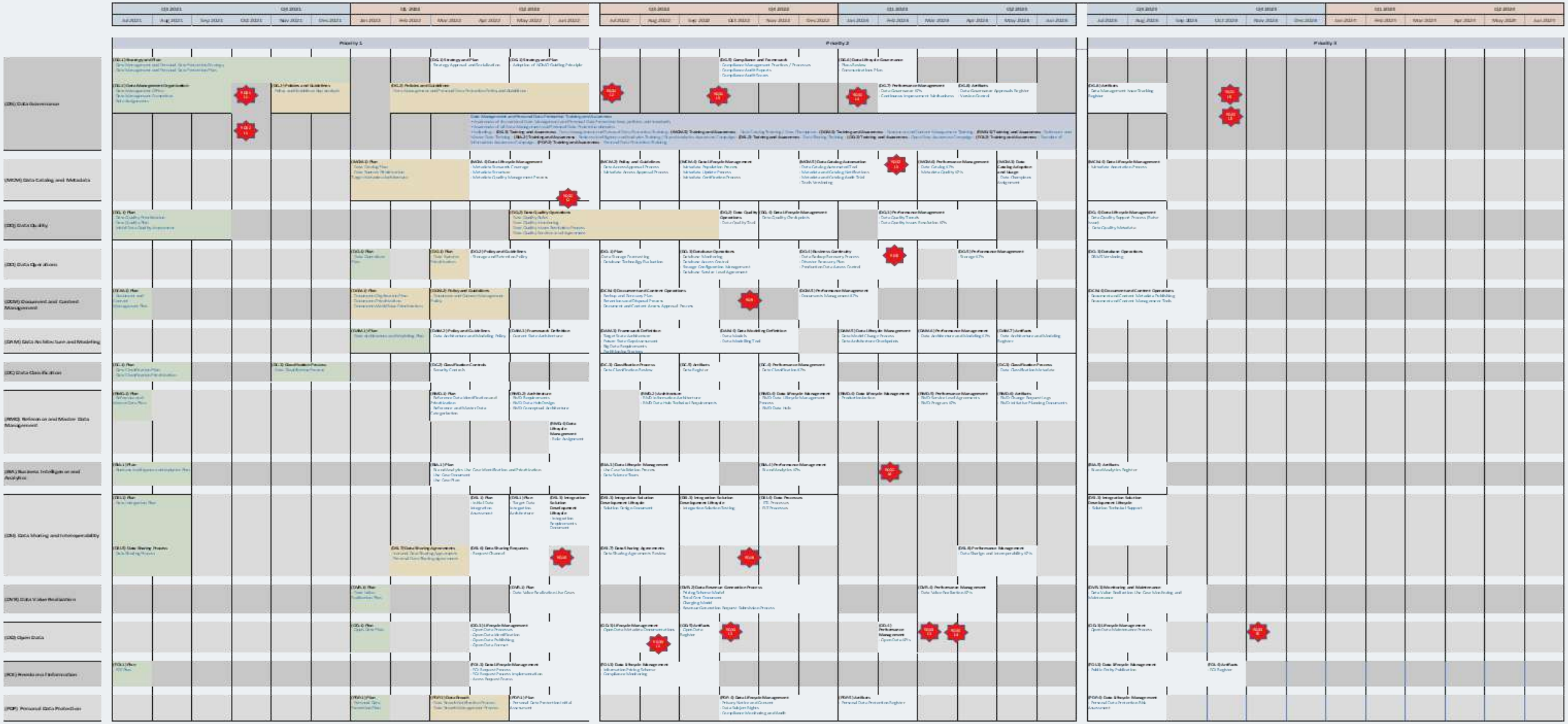
The capabilities and use cases then would be delivered through projects or internally (each project would deliver one or many data capabilities and/or use case)



Data Management and Governance Roadmap



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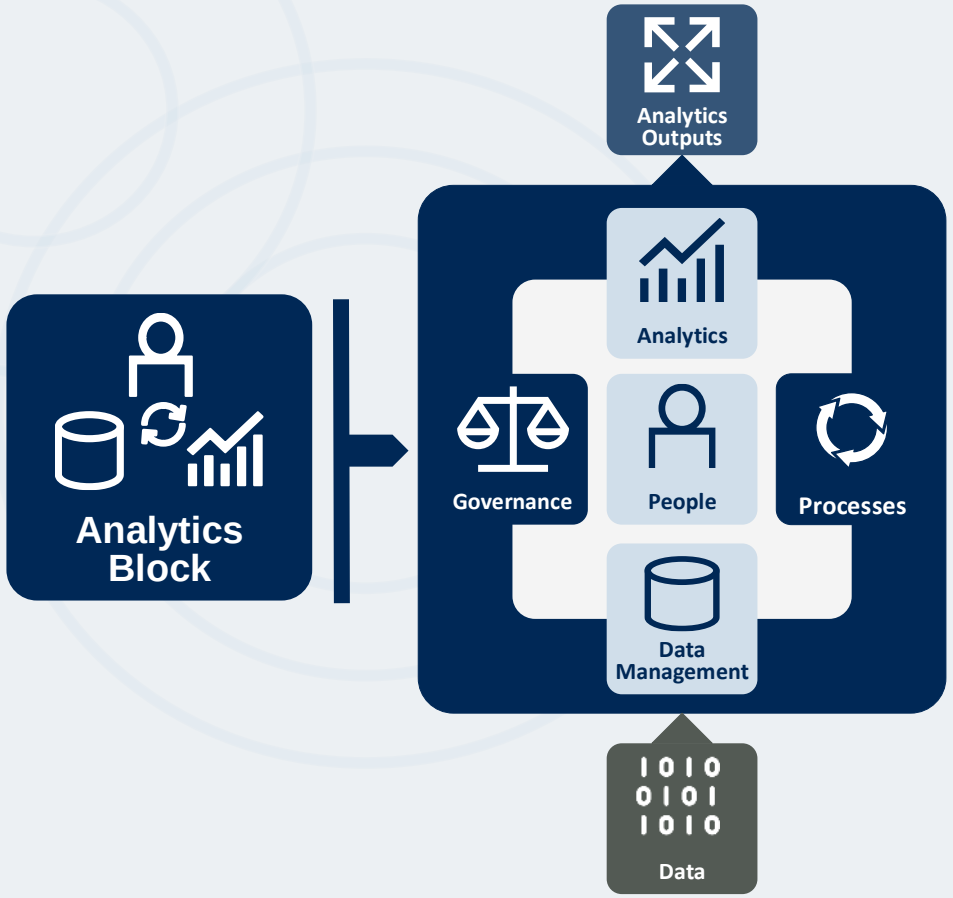
Business Domains’ Analytics and Prioritization

Analytics Blocks Components

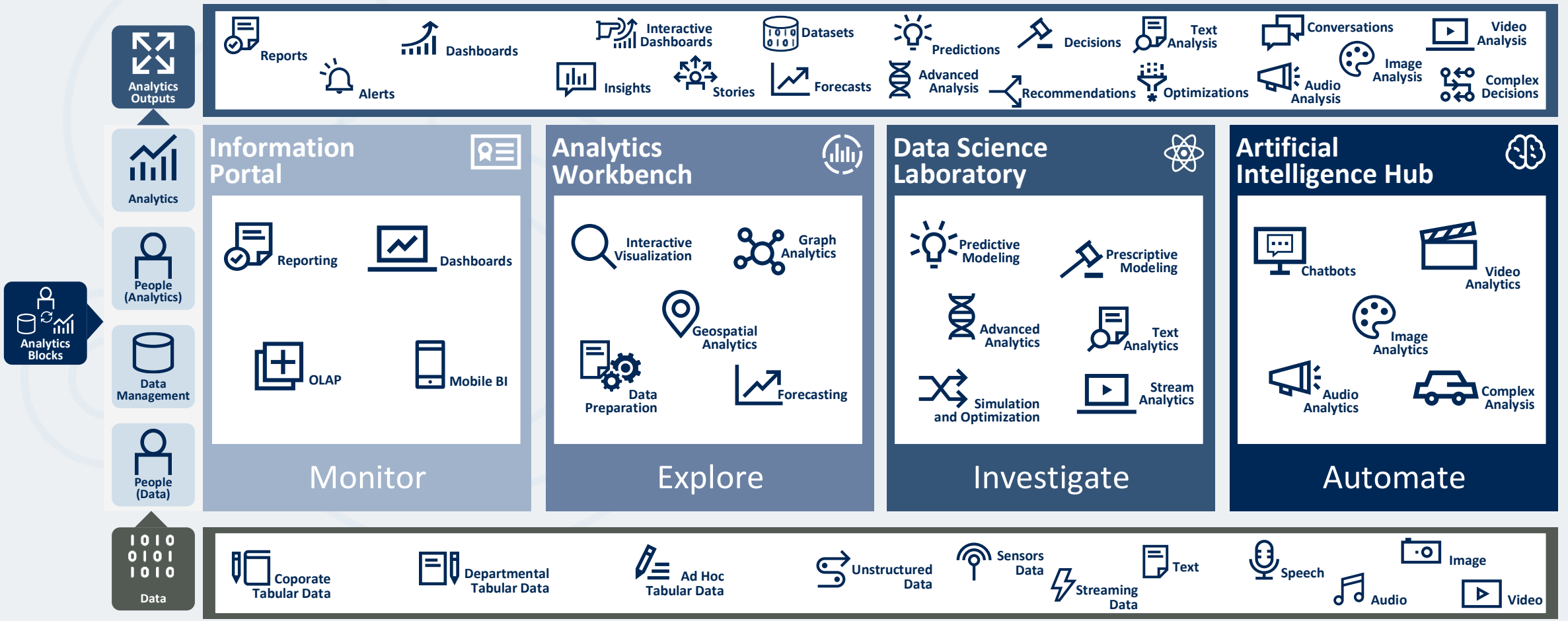
Analytics blocks are composed of several components that are required for their deployment and operation. Misuse, lack of alignment or gaps in these components will usually lead to the failure or suboptimized use of analytics blocks

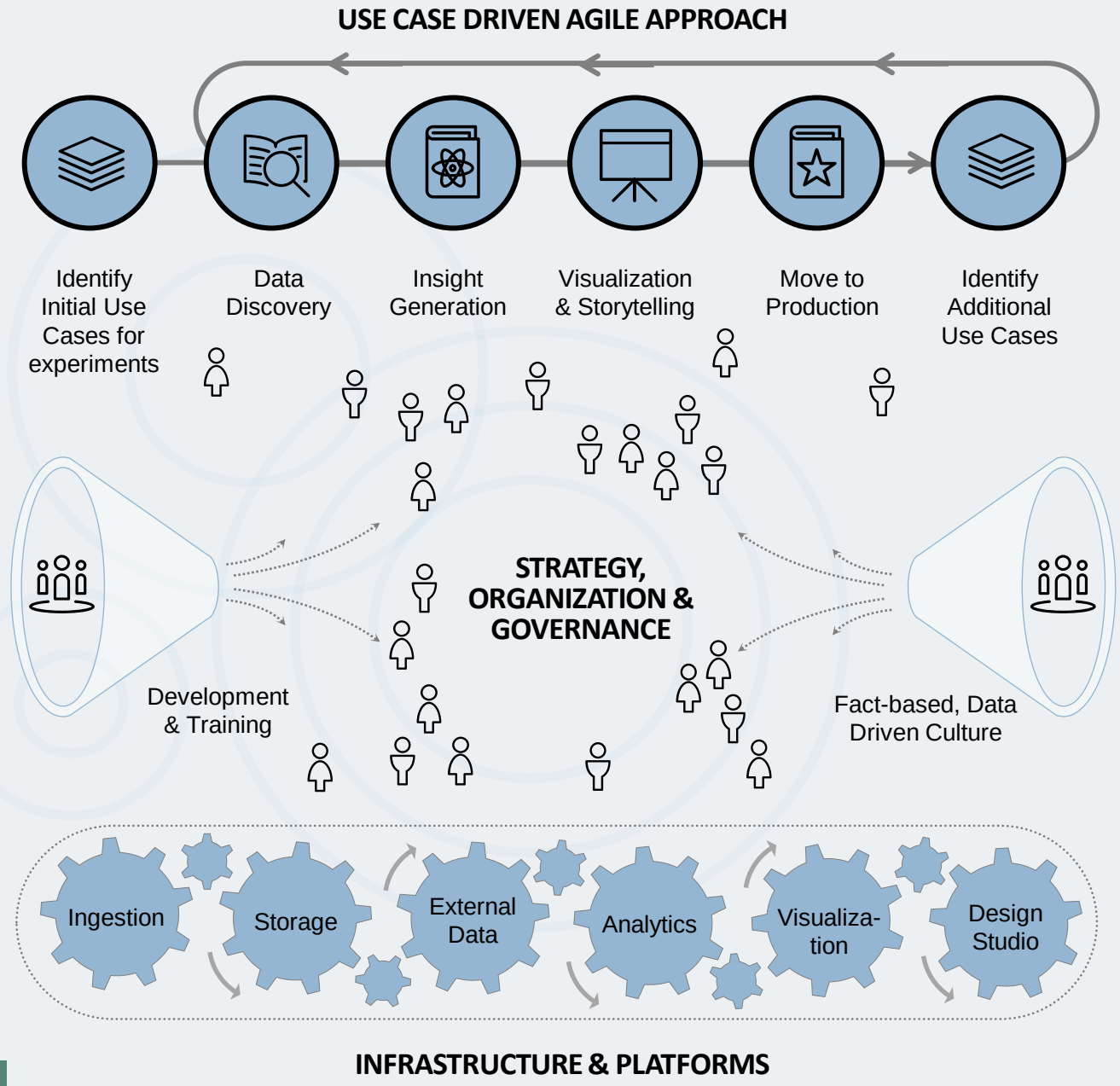


Analytics Outputs	Results generated by analytics processes. Can interface directly with users, be operationalized through integration into systems or used as inputs for other analytics processes.
Processes	Series of steps or actions required to deploy and operate the components on the analytics block and generate the expected analytics outputs.
Analytics	Analytics technologies and techniques used to transform data into insights or decisions.
People	Set of data and analytics roles needed to support or execute the processes on the analytics block. Can also be called “people capabilities” or “skills.”
Data Management	Technologies to collect, process, organize and make data available to analytics processes and users. The main components are often data repositories.
Governance	Set of rules that guarantee the integrity, security, privacy, availability and usability of data for the analytics processes.
Data	Diverse types of inputs for the analytics blocks operation, generated by entities such as internal business applications, external ecosystems, connected “things,” customers or users.

Analytics Domain Components

The analytics capabilities of each domain (the analytics blocks) need to be detailed at a granular level to be able to architect the analytics platform. The depictions below represent a sample of possible analytics block components but are not an exhaustive list or represented throughout each profile.





Use – Case Factory: ideation model and experimentation sandbox.

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Understanding Use Case Prisms to Optimize Analytics Investments

Gartner Use Case Prism

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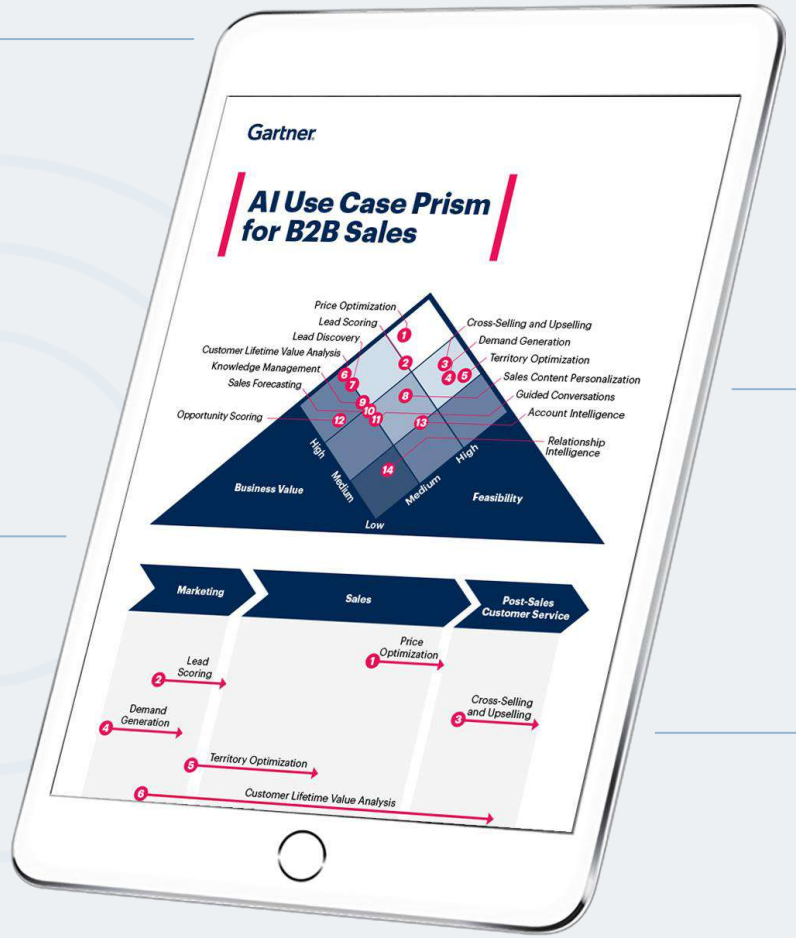
Simple

enough to be consumed by **business** and **technical** audiences **on the go.**

Prioritize

projects and functions that need **urgent** attention.



Drive

your data tech strategy with score-based storytelling.

Collaborate

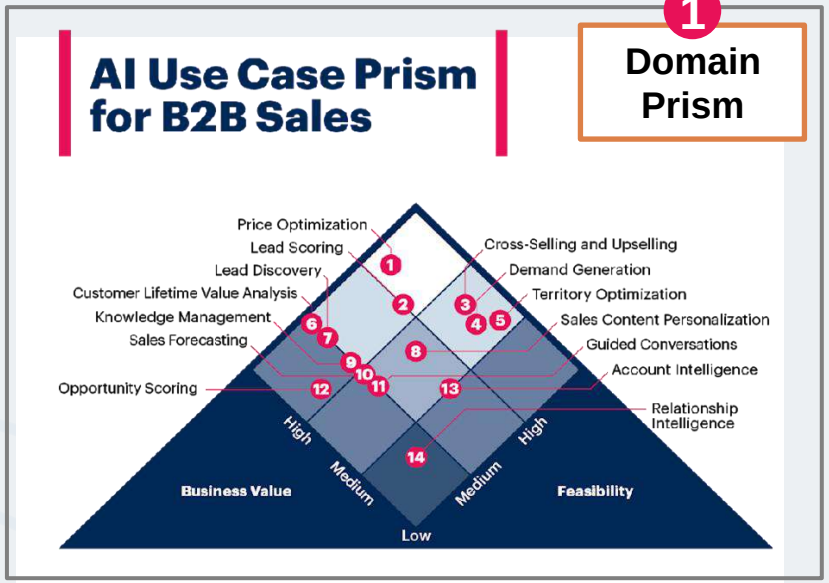
to **unite** and draw **consensus** between various **stakeholders.**

Flexible

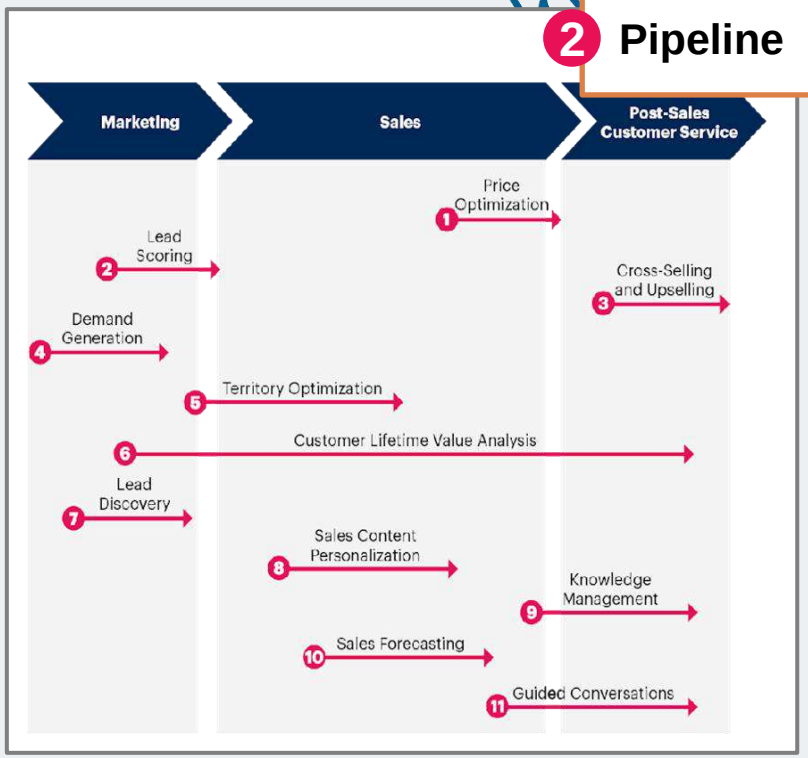
methodology can be applied to other areas than analytics.

The 5 Components of a Use Case Prism

1 Domain Prism



2 Pipeline



3 Scorecard

4 Evaluation Criteria

		Business Value			Feasibility	
		Cost Efficiency[1]	Revenue Growth[2]	Business Viability[3]	Technology Maturity[4]	External/ Organizational Factors[5]
1	Price Optimization	●	●	●	◕	◕
2	Lead Scoring	◕	◕	◕	◕	◕
3	Cross-Selling and Upselling	◕	◕	◑	◕	◕
4	Demand Generation	◑	◕	◑	◕	◕
5	Territory Optimization	◑	◑	◕	◕	◕
6	Customer Lifetime Value Analysis	●	●	●	◑	◑
7	Lead Discovery	◕	◕	●	◑	◑
8	Sales Content Personalization	◕	◑	◑	◑	◑
9	Knowledge Management	◕	◕	◕	◑	◑
10	Sales Forecasting	◕	◑	◕	◑	◑
11	Guided Conversations	◕	◕	◑	◑	◑
12	Opportunity Scoring	◕	◕	●	◔	◑
13	Account Intelligence	◑	◑	◕	◑	◕
14	Relationship Intelligence	◔	◑	◕	◔	◔

[1] Includes operational efficiency
[2] Includes additional revenue streams
[3] Includes investments for sustainable business transformation
[4] Includes requirements for acquiring data of sufficient quality and quantity
[5] Includes legal and ethical considerations, stakeholder adoption, available skills and infrastructure readiness

○ None
◔ Low
◑ Medium
◕ High
● Very High

5 Glossary

In the above infographic, we described the following business cases:

- **Account Intelligence:** Uses AI to recommend curated content about the prospects/clients based on current news feeds.
- **Cross-Selling and Upselling:** Uses ML to identify new business opportunities for existing customers.
- **Customer Lifetime Value Analysis:** Provides customer health scores for all kinds of activities (e.g., churn, upselling).
- **Demand Generation:** Identifies new prospect segments from known characteristics of known segments.
- **Guided Conversations:** Uses NLP to uncover customer sentiments and helps in guiding customer conversations.

...

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The Prism Scorecard Is the Heart of the Prism

(Example Academic Affairs)

		Strategic Value	Customer Impact	Technical Feasibiity	Inernal / External Feasibility
1	Sector Level Performance Analysis	High	Very High	Very High	Very High
2	360-degree view of Trainees	High	Very High	Very High	Medium
3	Self-Service Analytics	High	High	High	High
4	Nibras	High	High	High	High
5	Withdrwal Cases	Low	Very High	Very High	Very High
6	Burnout Cases	High	High	Medium	High
7	Trainees at risk of failing	High	High	High	High
8	Recommendation System - Failed Trainees	High	High	High	High
9	OCR	High	High	High	High
	Data Enrichment	Low	High	High	High
	Dedicated Tableau Server	High	High	High	High
	Personalized Analytics	High	High	High	Low
	MDM - Academic Affairs	Medium	Medium	Medium	High
	Data Catalogue - Academic Affairs	High	High	High	High
	Business Glossary - Academic Affairs	High	High	High	High
	Stewards training	High	High	High	High
	Activating Alerts - academic affairs operations	High	High	High	High
	Blockchain	High	High	High	High
	Mobile Apps	High	High	High	High
	Privacy Standards	Low	Medium	High	Very High
	Open data	High	High	High	High
	Saudi Board	High	High	High	High
	NEHT Program Dashboard	Medium	High	High	High
	Strategic Initiatives Dashboards	Low	Low	Low	Low

None
Low
Medium
High
Very High

Interpreting the Scores

Grade of Contribution

0	None	These use cases have zero contribution to a defined business value dimension(s); for instance, fraud detection has zero contribution to market growth.
1	Low	
2	Medium	
3	High	
4	Outstanding	A use case with outstanding contribution and easy feasibility is either a breakthrough, or the market is missing a great opportunity. A use case may have outstanding contribution and still be impossible, which may be the case quite often.

Interpreting Feasibility Scores

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	Technology	Internal/Organizational	External
Impossible	Cannot be accomplished with available technologies and data.	• In violation of internal principles • Complete lack of skills/org. structure • Fully inappropriate infrastructure • Zero stakeholder acceptance	• In violation of current regulation • External stakeholders (e.g., clients or partners) unwilling or unready to participate • Essential external infrastructure does not exist
Challenging	Satisfactory solutions have not been consistently achieved, even with top-notch staff.		
Complicated	High project risks and complexity require highly specialized skills.		
Doable	Packaged app solutions exist, which still may require configuration work by trained staff.		
Easy	State-of-the-art, turnkey solutions exist, which require little or no configuration.	State-of-the-art, turnkey solutions exist, which require little or no configuration.	• Compliant to regulation • External stakeholders ready and willing to adapt • External infrastructure exists

Feasibility Scoring Scale

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Zero Feasibility Will Outweigh All Other Factors

Use Case Example	Technological Feasibility	Internal Feasibility	External Feasibility	Overall Score	
Artificial-General-Intelligence-Enabled Combat Robots					Impossible to achieve with current technology
Fully Autonomous Patient Diagnosis and Treatment					No hospital or even doctors would want that
AI Government					No government would like to replaced with AI

Explaining the Logic Behind the Scoring

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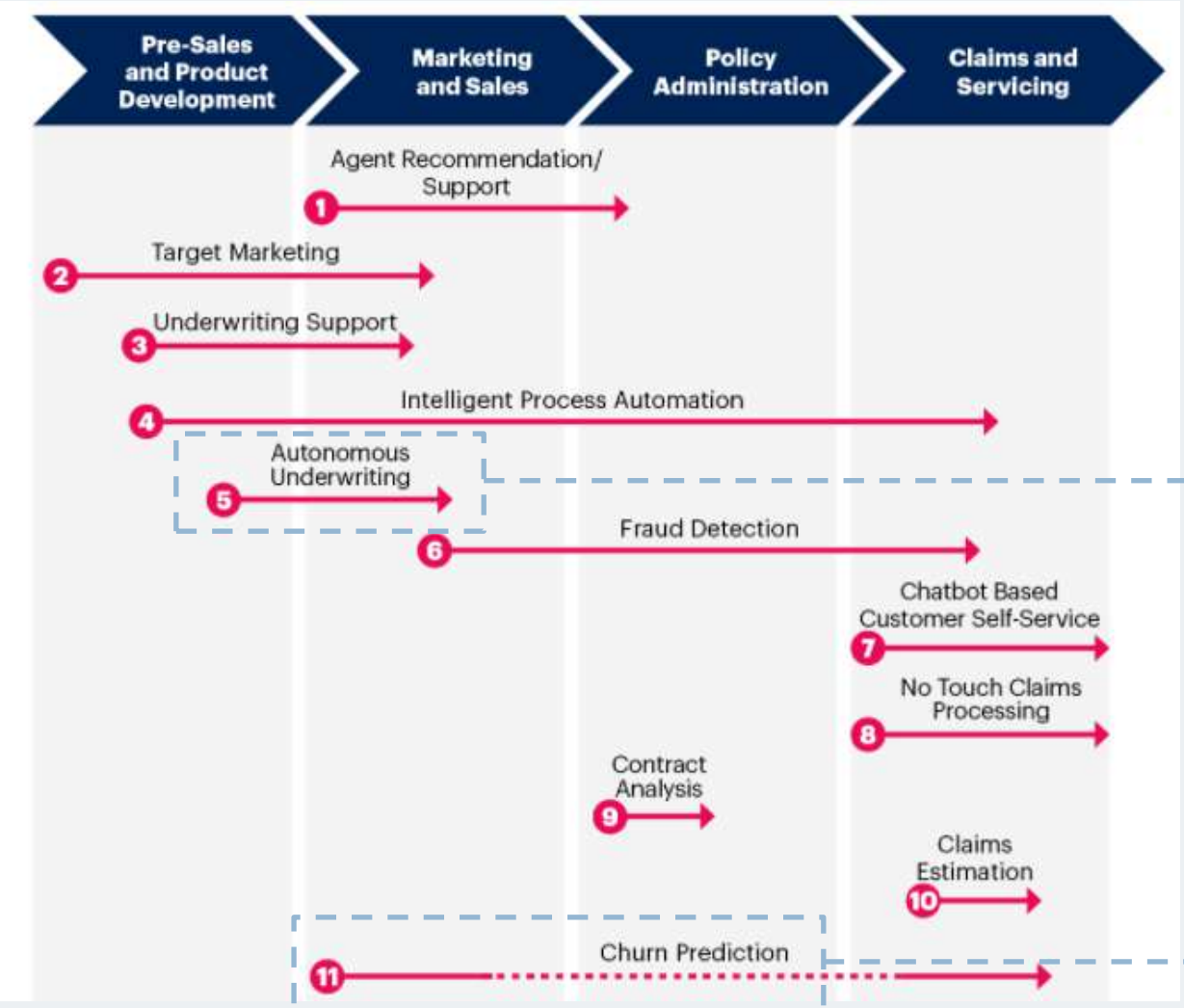
Cross-Selling and Upselling (B2B Sales)

Uses ML to identify new business opportunities for existing customers

Business Value		Feasibility	
Strategic Value	**Customer Impact**	**Technology**	**External/ Organizational Factors**
			
Often allows additional sales, with little additional effort and to skip an entire sales cycle.	Can drive longer-lasting customer relationships.	Prepackaged solutions exist, with modest additional configuration and skill requirements.	Solutions are often considered uncritical from an adoption and infrastructure perspective.

Pipeline Helps Users With:



- Orientation
- Prioritization
- Stakeholder identification
- Weak spot isolation
- … and even the evaluation

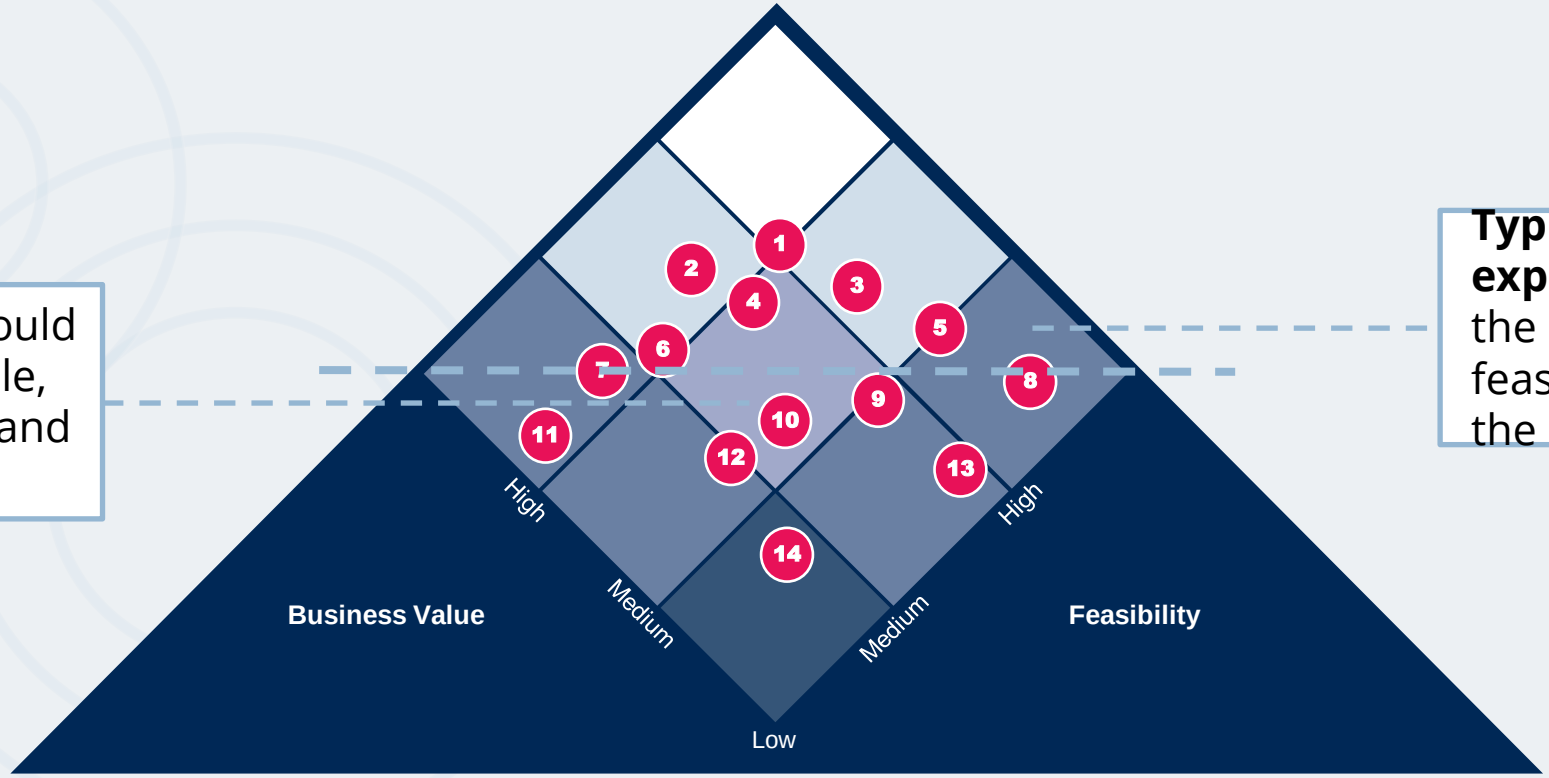
"Autonomous underwriting" is applicable to the late phase of "Presales and Product Development" and the early phase of "Marketing and Sales."

Use cases with a dotted line are intermittent; i.e., not applicable in the entirety of the business process.

Interpretation of Dot Placement

A natural dot placement should follow the financial laws of risk vs. return.

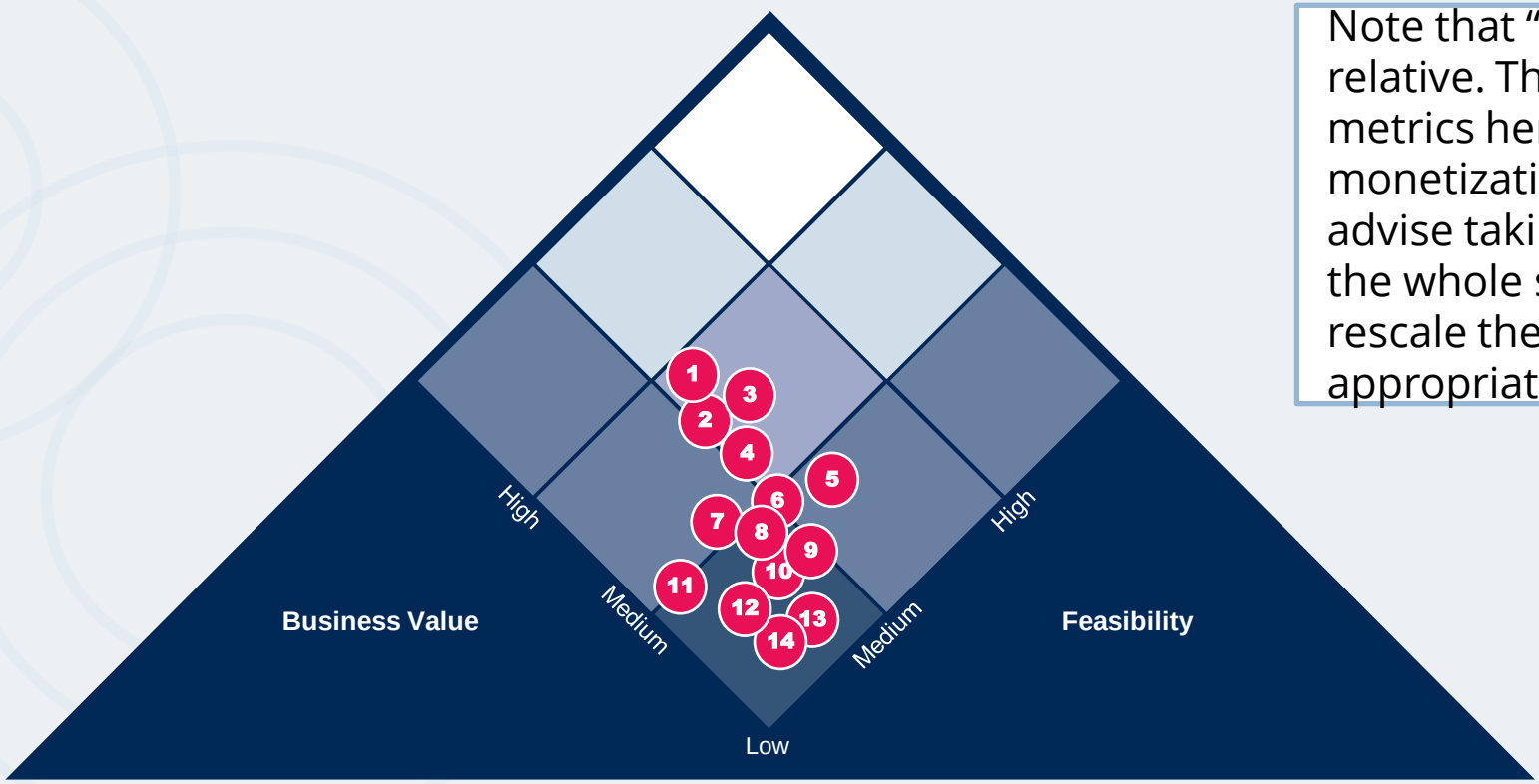
Most use cases should cluster in the middle, with average risks and average returns.



Typically, you'd expect this: The higher the risk (lower the feasibility), the higher the returns.

This Dot Distribution Indicates …

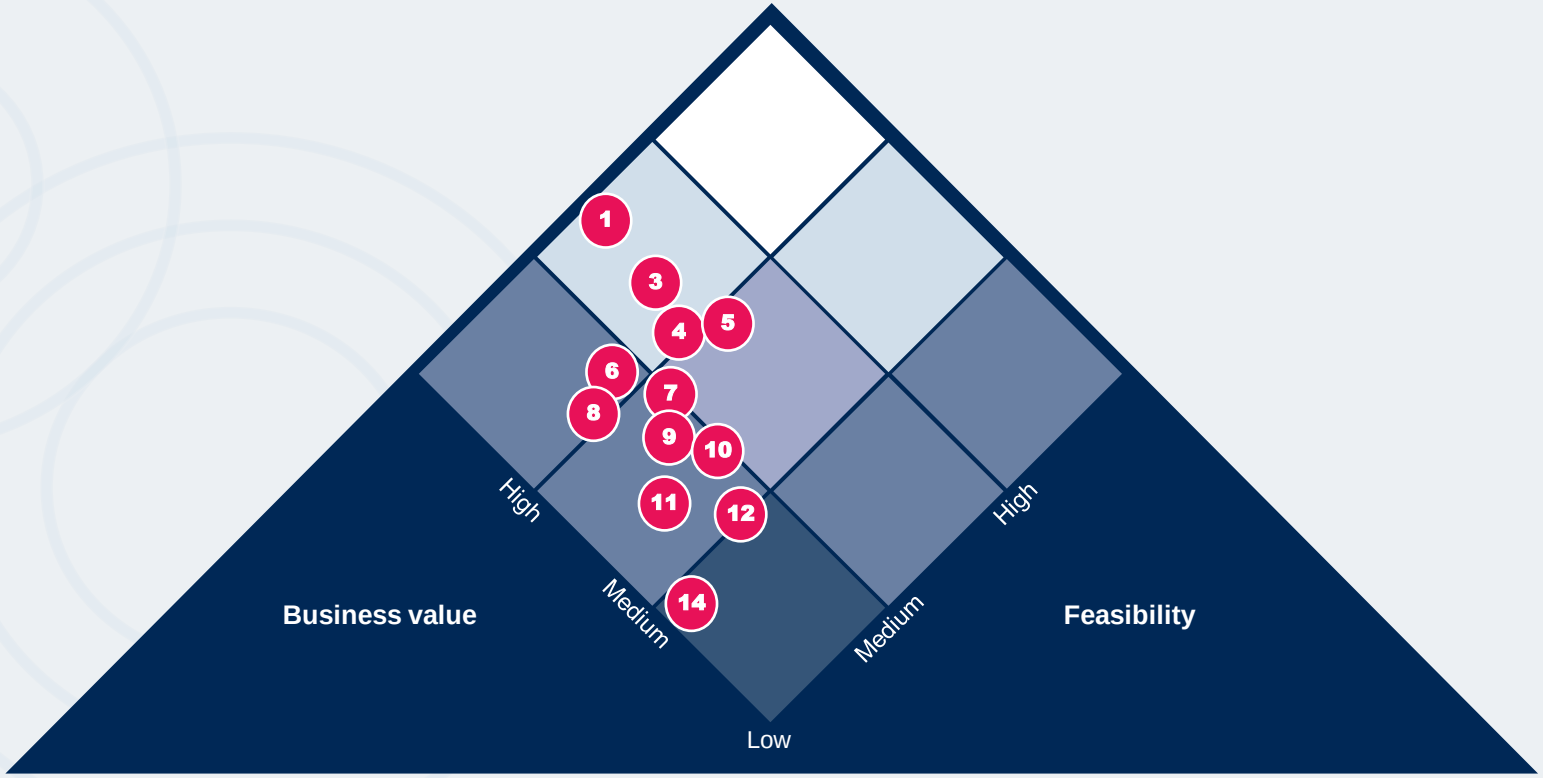
… the domain may represent a new terrain for AI, where everything is still very difficult.



Note that “high” is very relative. There are no absolute metrics here in terms of monetization. Therefore, we advise taking full advantage of the whole space, and to rescale the scoring appropriately.

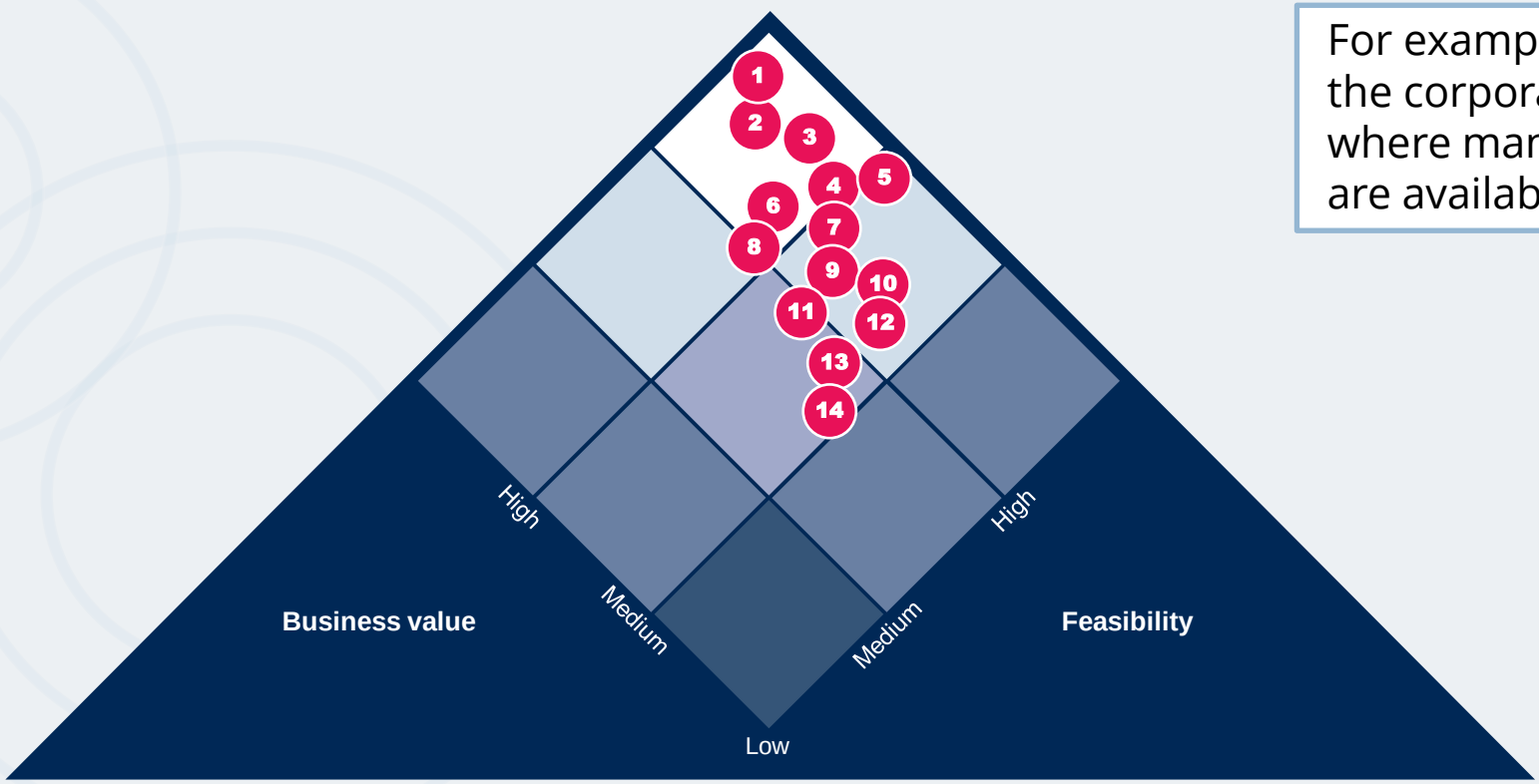
This Dot Distribution Indicates …

… that turnkey solutions are not yet available.



This Dot Distribution Indicates …

… this domain has mostly AI solutions as turnkeys already, and AI is still underrated.



For example: AI applications in the corporate legal space where many turnkey solutions are available for the taking

PRISM Guidelines

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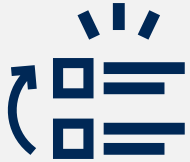
Use the Prism as a starting point for engaging with audiences and stakeholders across the organization.



Leverage the Prism framework to prioritize and demystify use cases and their applications.

Understand that the Prism is an overgeneralization, and some fine-tuning to your situation may be required.

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Operating Model

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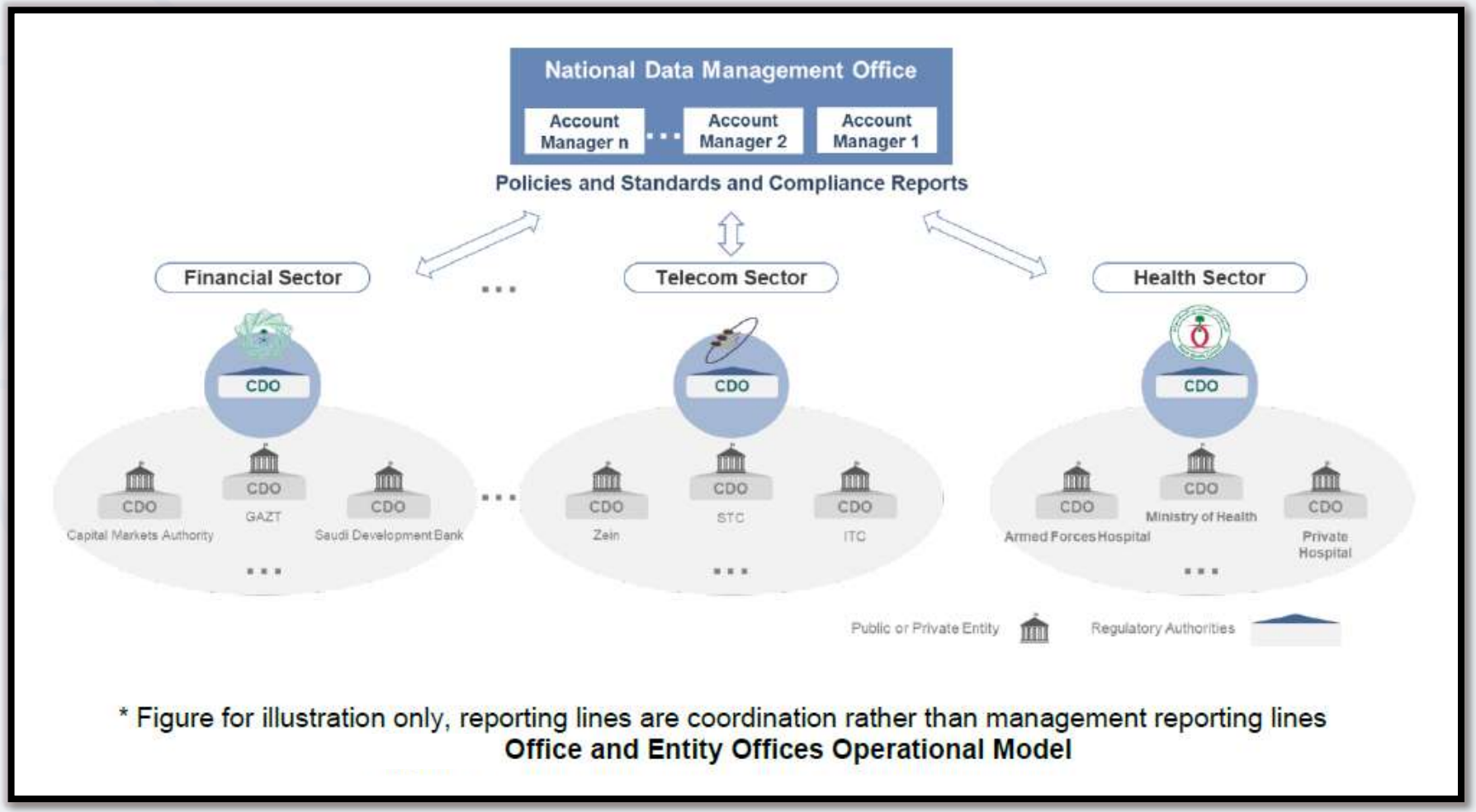
National Operating Model

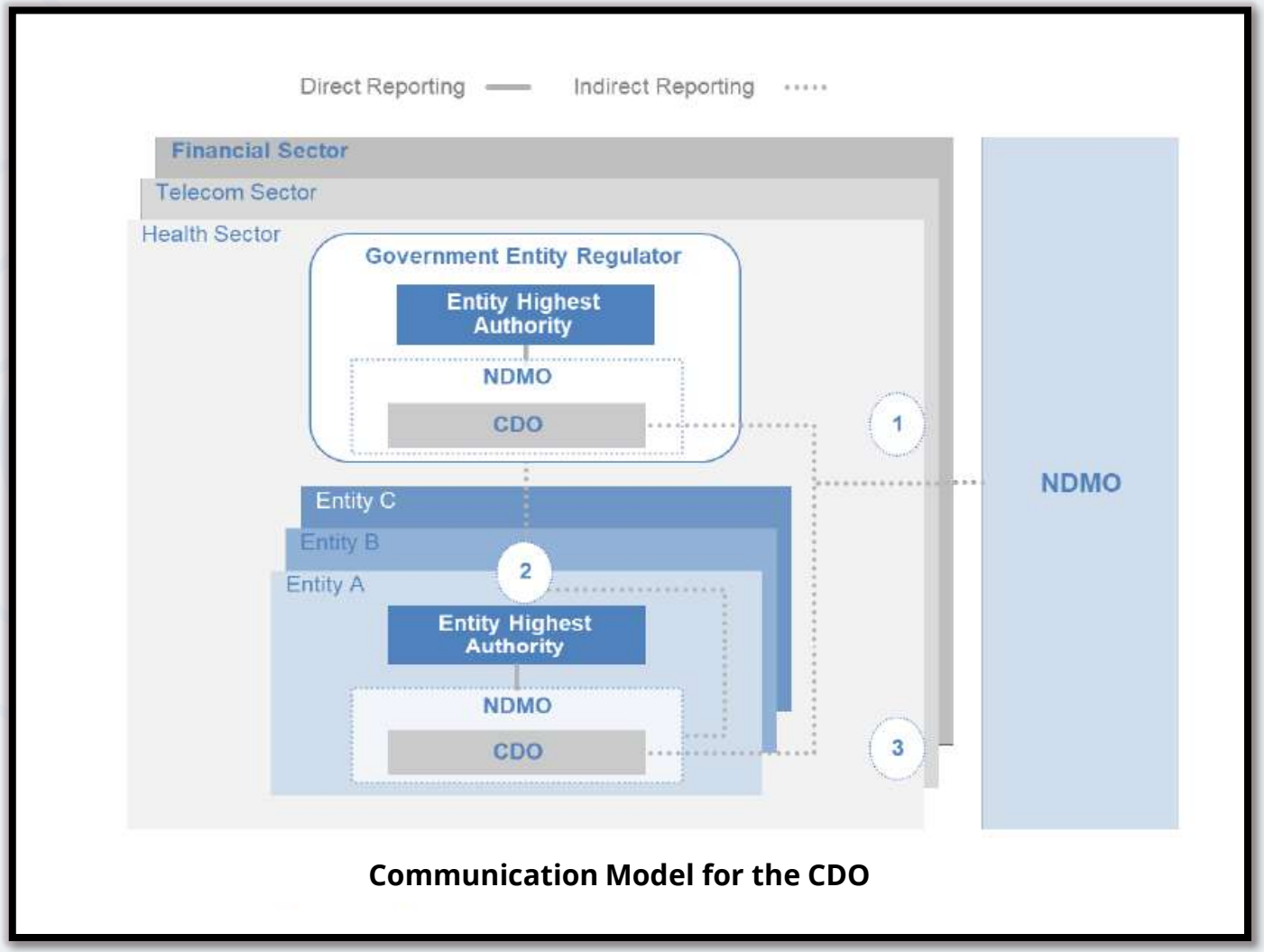
Data Management Mandate & Grouping as per the NDMO Framework



* Figure for illustration only, reporting lines are coordination rather than management reporting lines

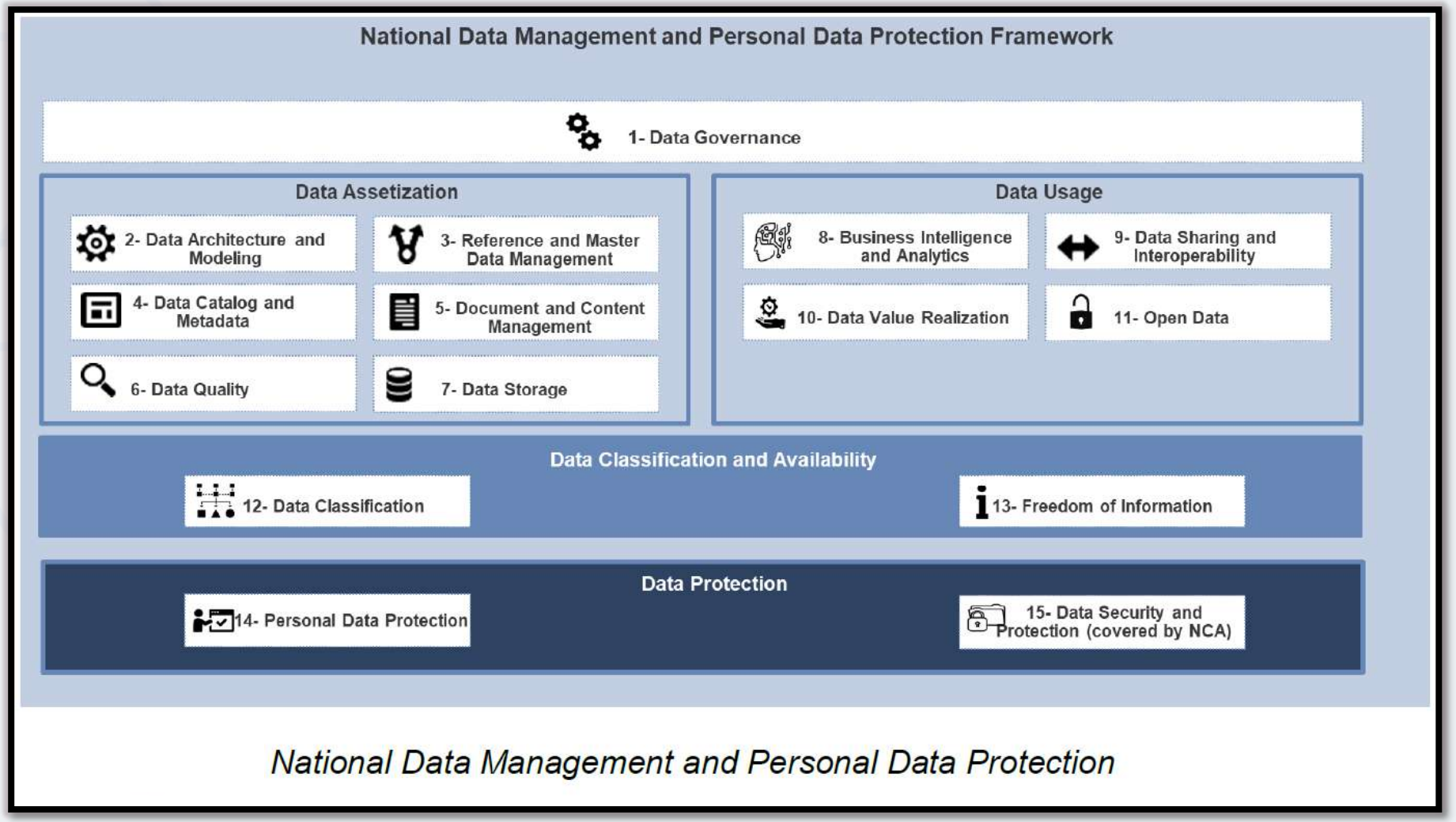
Office and Entity Offices Operational Model

Data Management Mandate & Grouping as per the NDMO Framework



Communication Model for the CDO

Data Management Mandate & Grouping as per the NDMO Framework



Data Management Mandate & Grouping as per the NDMO Framework

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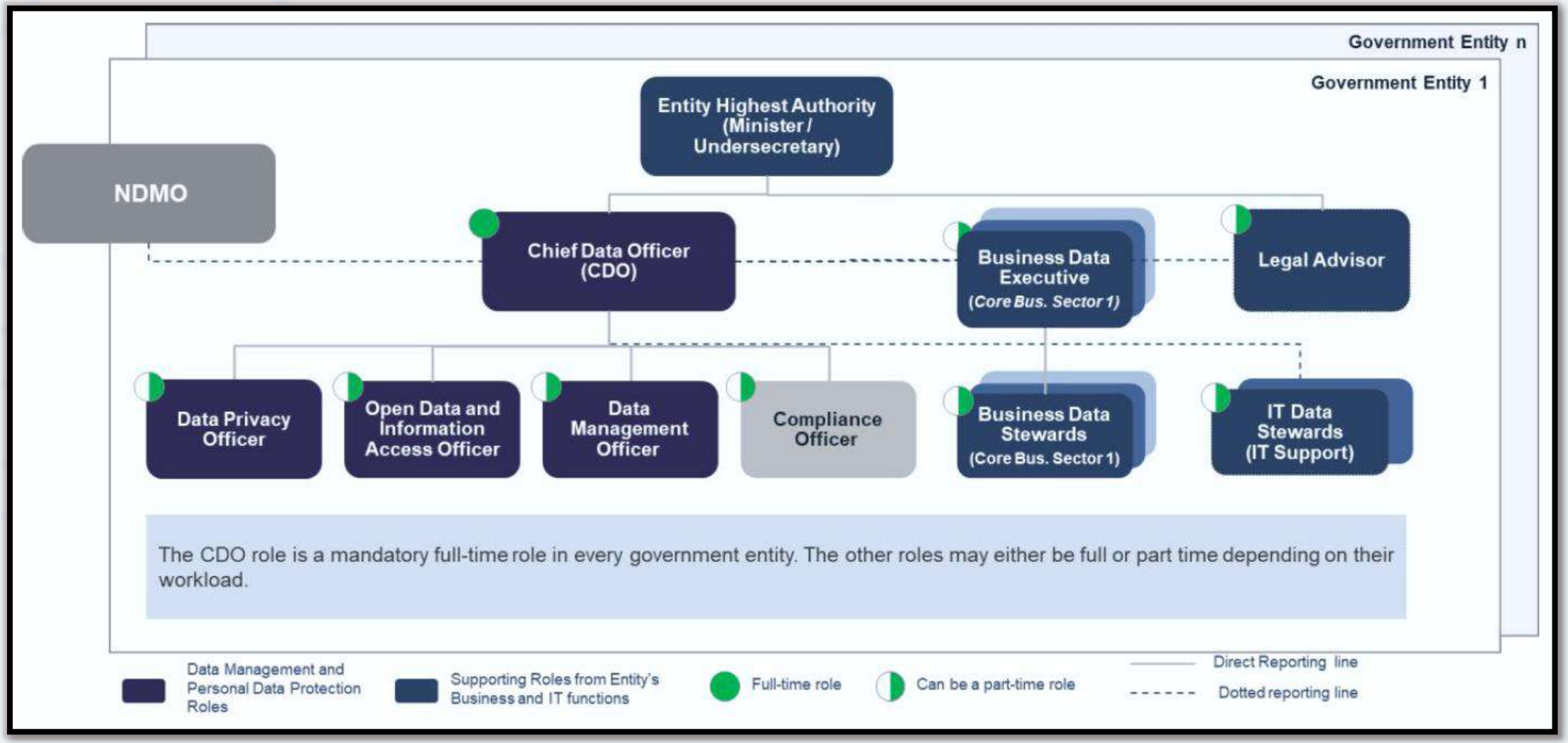

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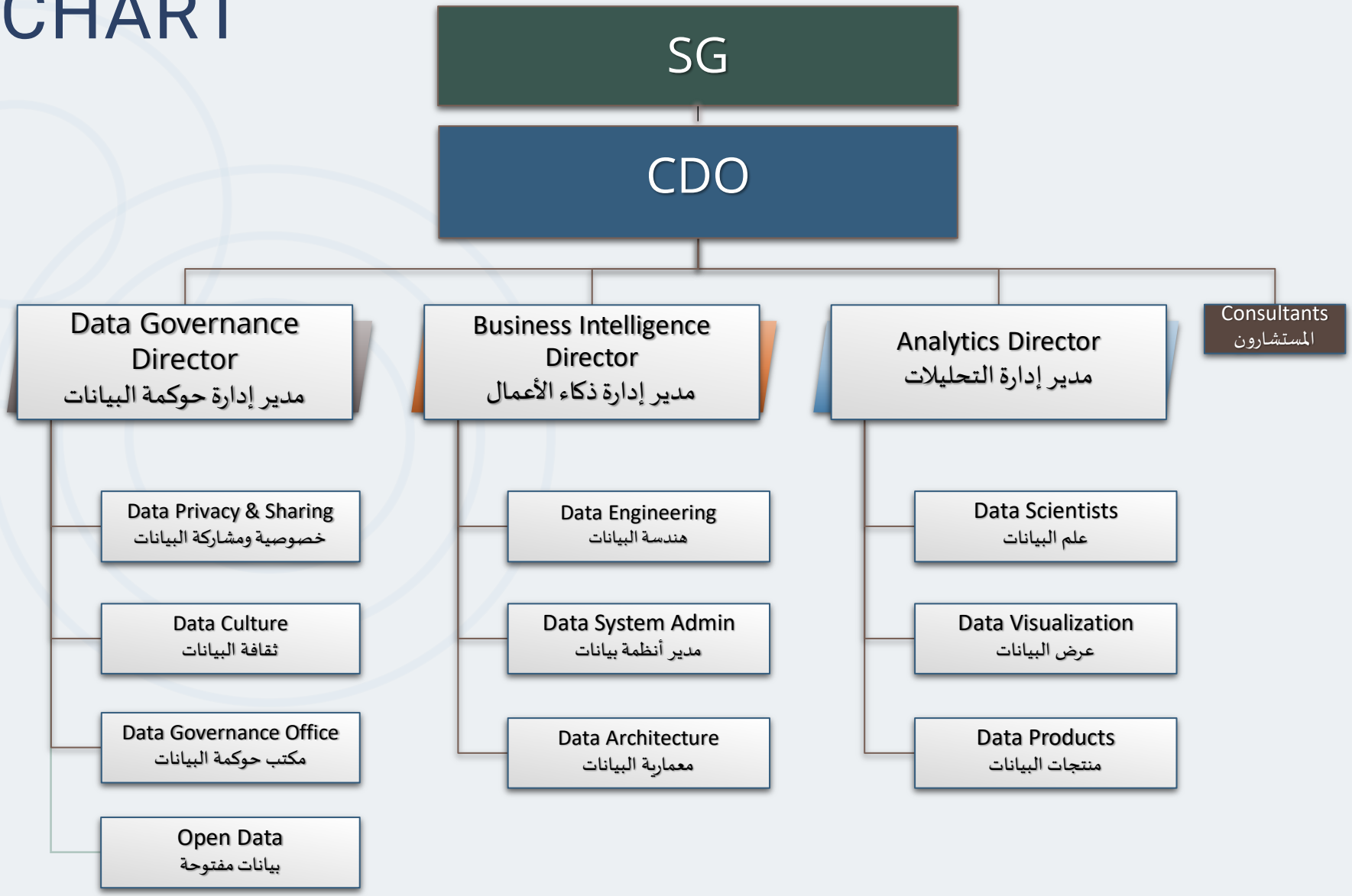
Department Organizational Chart

PROPOSED DEPARTMENT ORG CHART



Alignment of our Data Management capability to the NDMO Framework

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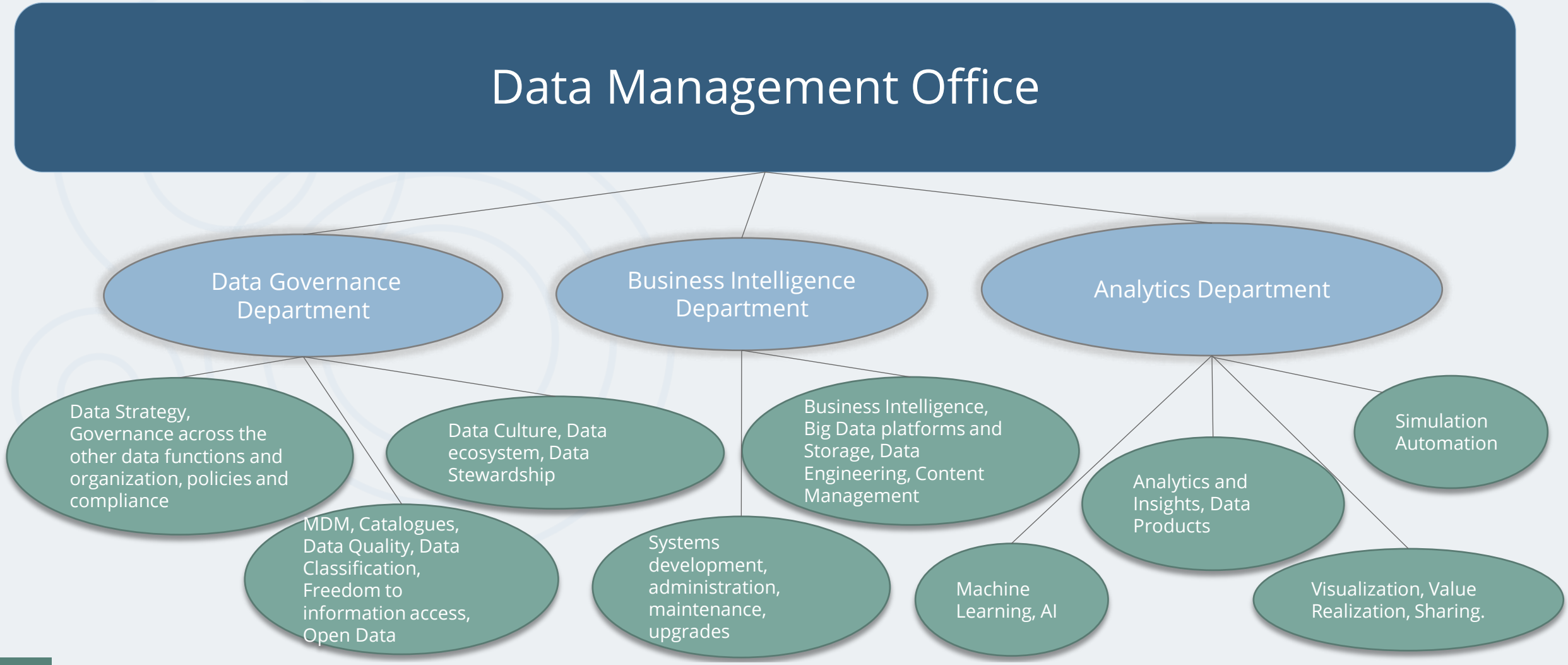

Organisation Mandate & Grouping

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Chief Data Officer

	Data Governance	Business Intelligence	Analytics	Culture & Strategy
Mandate	Exercise of authority and control for the Management of Data Assets and for the compliance to best practice procedures and policies, ensuring the right quality of data.	Design, build and maintain tools and platforms to provide state of the art mechanism to technically support the execution of data strategy and its value realization.	Create & provide valuable insights which can translate into effective decision making for the beneficiaries. Develop effective products.	Provide advise and consultancy across the board.
Team Profile	Data Managers Change Managers Data Quality Experts Privacy professionals	Data Architects & Modelers System Architects & Admins BI & ETL Developers	Data & Business Analysts Data Scientists & Engineers Product Managers	Consultants providing support in different niche
Typical Activities	• Managing & securing data • Designing policies, standards & guidelines • Ensuring Compliance to data policies • Increase adoption and manage change	• Tuning Databases • Modelling & provisioning data • Data Storage • Monitoring & serving (data) assets • Data & systems access	• Problem solving and discovering insights • Storytelling & publishing insights • Designing (data) products & (data) services	Advisory , expert opinion, hands on support
Key Deliverables	• Enterprise Data Catalog • Data Strategy and Operating Road maps • Assessments & Audits • Governed & Secured Data	• Platforms & (Technical) Services • Data Models & Architecture • SLAs and Data Assets	• Insights & Publications • Data Products & Services • Business Recommendations & Engagement	Roadmaps & Management Frameworks

Organisation Structure

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DEPARTMENT FUNCTIONS

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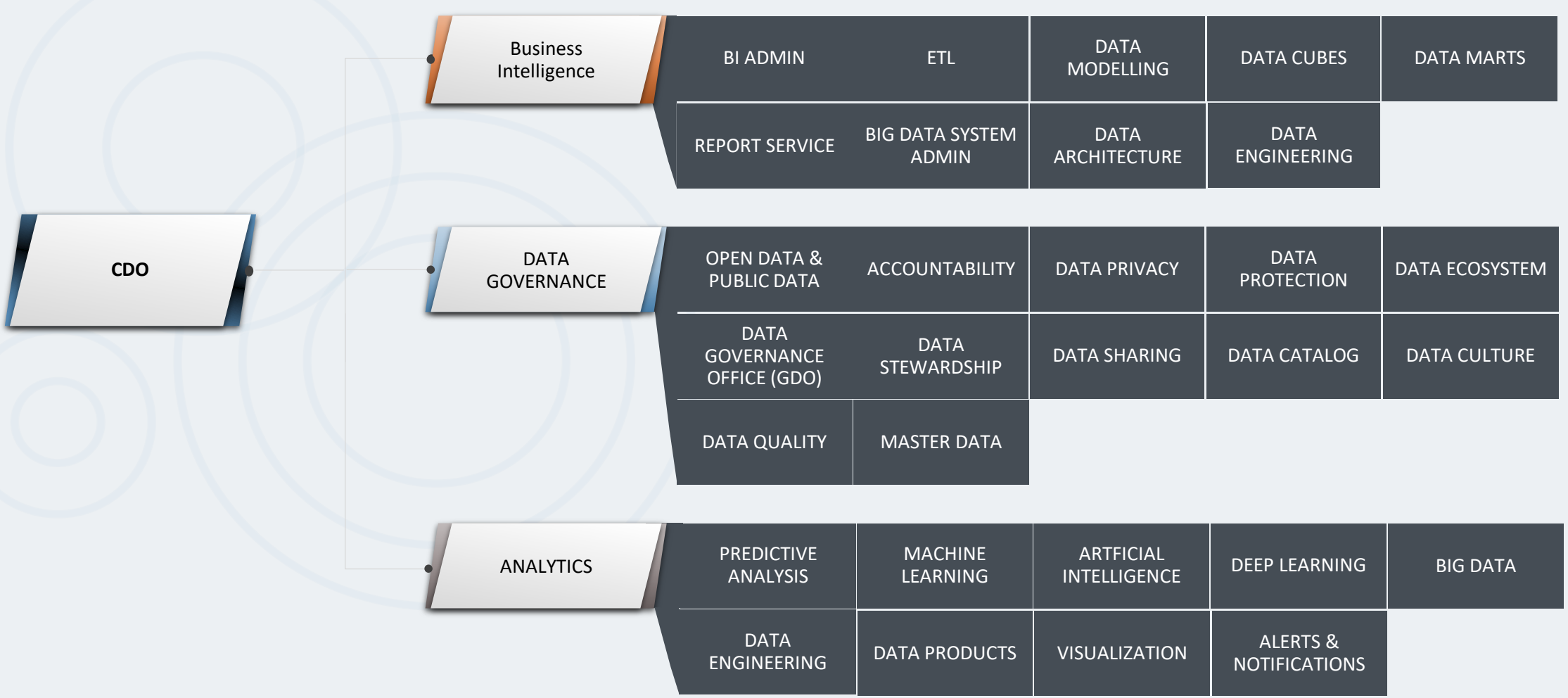

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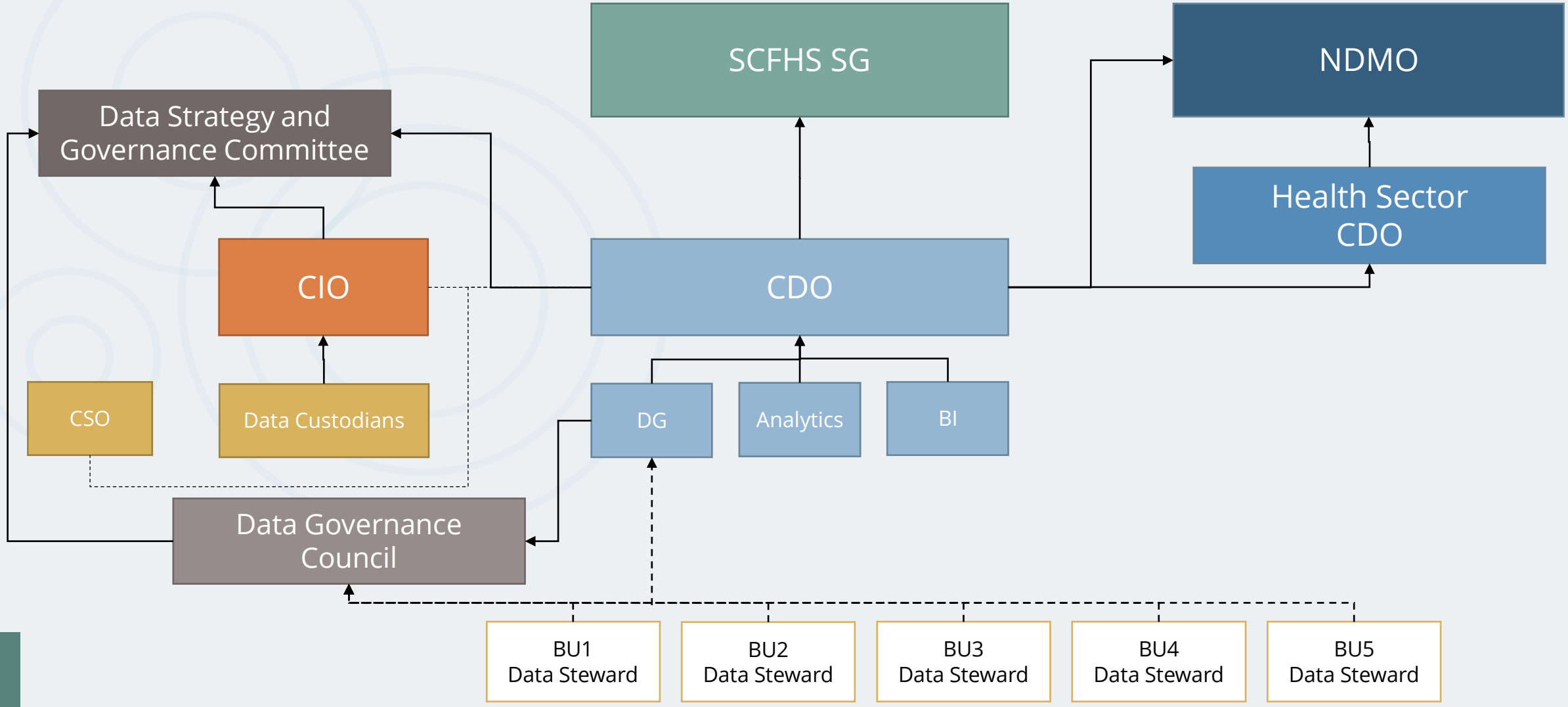
Aligned Operating Model

ALIGNMENT OPERATING MODEL



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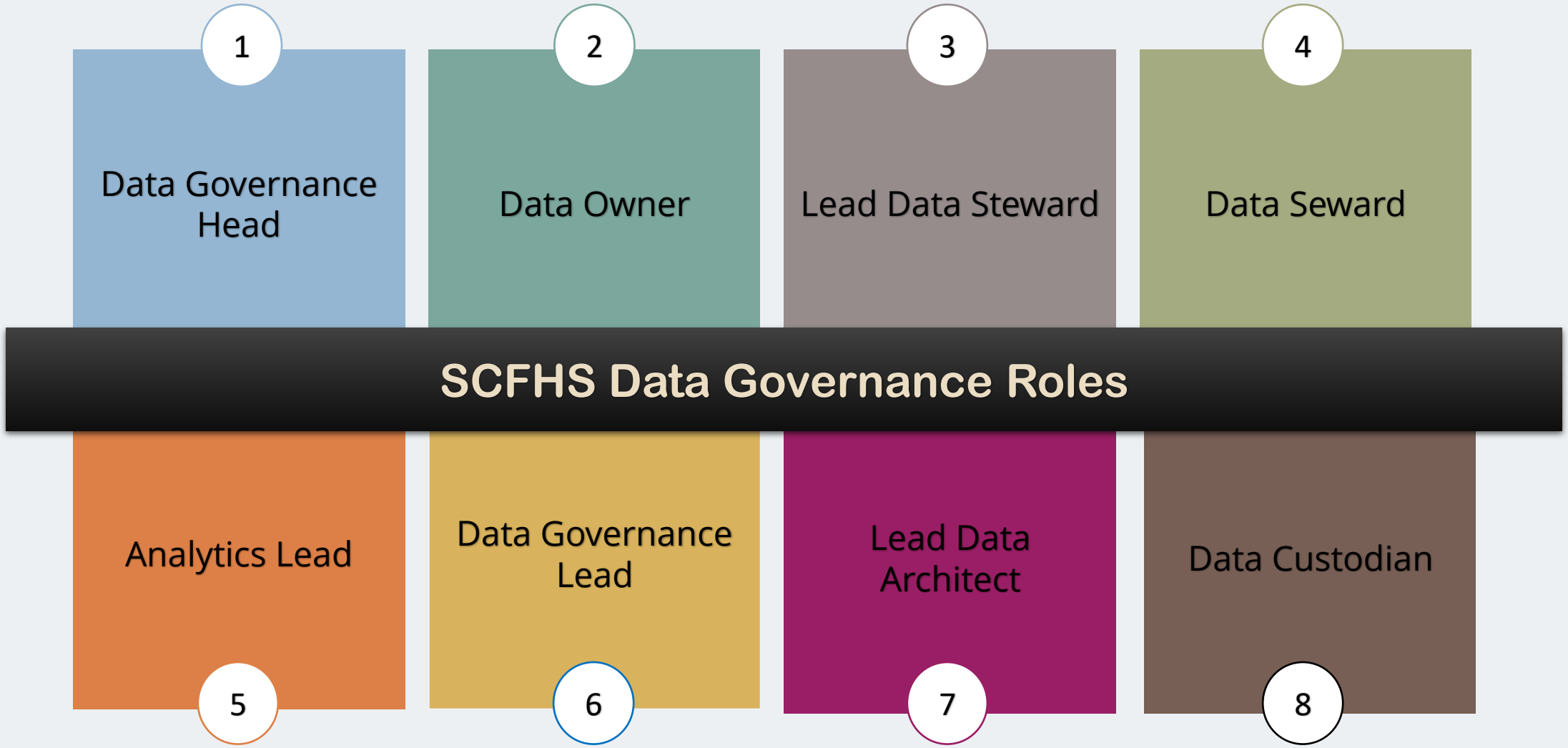
Data Governance Roles & Responsibilities

Main Functional Roles

Data Governance



SCFHS DG Roles

DGH 01 Data Governance Head

The highest executive role related to data in SCFHS. This role chairs the Data Strategy and Governance Committee, appoint members, and defines the general directions related to data in terms of policies and usages in alignment with the SCFHS Strategy.

DO 02 Data Owner

An executive role as the DO is accountable for the data assets within her/his domain area. The Data Owner approves the general data policies related to the owned data assets, and review, approve the business use cases that utilize this data. Data owner is assigned based on the business subject areas.

LDS 03 Lead Data Steward

A business role as the LDS works in one or many specific subject areas. considered the subject matter expert in the business domain. LDS creates the data policies, the detailed data profiling rules, and the detailed Data Quality rules for their area data (with the support of the data stewards),

DS 04 Data Steward

A business or/and technical role who reports to the LDS or to the DGL and works with other data roles daily. DS works in specific subject areas (business domains), understands in-domain data and how it is related to the business details; and responsible for policies, rules, terms, metadata, issues, and other requirements within her/his area of work,

AL 05 Analytics Lead

Leads efforts to unlock the value of the data in practical terms, creates business use cases for all stakeholders, carries out executive reporting, statistics, applies business intelligence, advanced analytics and AI, oversees data monetization, data products discovery, and any activities that turn data into business value.

DGL 06 Data Governance Lead

To promote data-driven culture. DGL ensures the compliance with the national data-related regulations, adopting data management best practices, monitoring data policies with LDSs and DOs, ensure the validity of data standards with DCs and LDAs. DGL ensures the alignment with the strategic directions and data is understandable and trustworthy.

DAL 07 Lead Data Architect

Designs or leads the design technical solutions for the Data. This covers the data models, the data platform architecture design, design the data lifecycles, design data flows, data integration design, data stores design (e.g. operational, data warehouse), data storage design, and the alignment with the dev team.

DQ 08 Data Custodian

A technical role who administers and manages the technical operations of the data such as: data hosting, data storage, applying data protection and security rules, applying data sharing rules, applying data retention and archiving rules, ensure the availability of the data and other technical requirements defined by the LDG and the LDA.

DGH

01

Data Governance Head

The Data Strategy & Governance Committee Head (DGH) is the highest executive role related to data in the Commission. The main responsibilities of this role are to:

- **Approve, endorse and sponsor the data strategy and express the general directions related to data** in terms of policies and usages in alignment with the business strategy.
- **Chair Data Strategy & Governance Committee** during the periodical meetings or urgent meetings related to data.
- **Approve** Data Strategy & Governance Committee **membership**.
- **Approve the organizational data policies and regulations.**
- **Approve** the final ratification on **the Data Policies after the approval of the Data Owners and Analytics Lead**.
- **DGH is the ultimate decision-maker for any unresolved issues** related to data or information between the Data Owners inside the commission.
- **DGH is the ultimate decision-maker for the matters of cooperation with external agencies and funding decisions** related to the strategic data projects.
- DGH is the Executive **Sponsor** of the **data-driven transformation**.

DO

02

Data Owner

Data owner is an executive business-oriented role inside the Commission as the **DO is accountable for the data assets within her/his business domain area (business subject area).** The main responsibilities of this role are to:

- **Approve the general policies related to in-domain data with the support of the Data Governance Lead.** The policies must be defined and formulated, and documented and maintained by the Lead Data Steward, but they should be approved by the Data Owner to be officially effective. This includes **data classification and protection decisions**:
    - The general data access policies such as which users are allowed to see which data.
    - The general data protection policies such as personal data.
    - The general data quality policies such as the policy pertaining to how to handle data quality issues such as missing data or duplicate data.
    - The general data retention policies such as how and when to move the data to different tiers.
- **Approve the business terms (e.g. business glossary)**, classifications, taxonomies, and other knowledge artifacts related to her/his domain.
- **Review and approve the business use cases** (e.g. KPIs, reports, analytical use cases, etc.) that utilize the owned data.
- **Assign the Lead Data Stewards** within her/his domain areas.
- **Approve the appointment of nominated data stewards**.
- **Decide on unresolved data issues within her/his domain** (for the cases unresolved by the Lead Data Steward). **If the unresolved data issue is beyond the boundaries of the relevant domain, then it could be escalated to the Data Strategy & Governance Committee.**

LDS

03

Lead Data Steward

LDS is a **business-oriented role** who reports to the DO and **works closely with the Analytics Lead and the Data Governance Lead**. The LDS **assumed an expert in the respective business domain** who possess full understanding for the in-domain data and how it is related to the business activities and processes. LDS **works in one or more specific business domains**. The main responsibilities of this role are to:

- **Create the data policies** (i.e. Data access policies, data protection policies, data retention policies, and data quality policies) **related to the domain.**
- **Define the detailed data profiling rules, the detailed business rules, the detailed Data Quality rules** (i.e. data cleansing rules) within her/his domain data.
- **Define the relevant data standards** related to the domain.
- **Define the business terms (e.g. business glossary)**, classifications, taxonomies, and other knowledge artifacts related to the domain.
- Assume the role of **managing the communication with all internal or external parties for the matters related to her/his domain data** (in cooperation with Data Governance Lead). This responsibility might be delegated to data stewards.
- **Assign** and lead **data stewards within her/his domain** to manage the daily operational business or technical activities related to the data.
- **Discover and propose new business use cases** (i.e. new cases to leverage the value of the data).
- **Resolve data issues within her/his domain** or escalating them to the Data Owner.

DS

04

Data Steward

DS is a **business and/or technical** role who **reports to the Lead Data Steward or to the Lead Data Governance** and works with them daily. The DS works in one or many specific subject areas (business domains). The main responsibilities of this role are to:

- **Document and maintain the data policies** (i.e. Data access policies, data protection policies, data retention policies, and data quality policies) in her/his domain.
- **Document and maintain the data standards** in cooperation with the Data Architecture team and DG Team in her/his domain.
- **Document and fill in the core business metadata (e.g. business terms, valid data values, business metrics, etc.)** in cooperation with the Data Architecture team.
- **Document and fill in the core technical metadata** (e.g. database and data stores, physical tables , etc.) in cooperation with the Data Architecture team and Data Custodian.
- **Document the detailed data profiling rules, the detailed business rules, the detailed data quality rules** (i.e. data cleansing rules) within her/his domain data.
- **Identify and capture any data-related issues within her/his domain**, and keep the issues log up-to-date.
- **Ensure that data decisions are communicated**, and business users understand impacts of the decisions to their lines of business.
- **Provide the technical expertise around source systems**, ETL (Extract, Transform, and Load) processes, data stores, data warehouses, and BI tools.

AL

05

Analytics Lead

The AL is the main role who **leads the efforts to unlock the value of the data** in practical terms. The main responsibilities of this role are to:

- **Lead the development and the refreshment of the data strategy** (including Analytics Strategy).
- **Define the internal and external customer segments of the data** (i.e. information profile).
- **Lead the efforts to discover the business use cases of the data for all relevant stakeholders**, such as:
  - Executive reporting;
  - Business reporting;
  - Generating official statistics;
  - Business intelligence activities;
  - Self-Service Analytics;
  - Data Storytelling and Data Infographics;
  - Applying advanced analytics and AI;
- **Lead any data monetization efforts** and **data-driven innovation**.
- Participate in the design of business metrics and KPIs.
- **Data products discovery** (i.e. Data Productization).
- **Promote data-driven decision-making processes** inside the Commission (with the DG Lead).
- **Ensure applying data policies on any generated information or content**.
- **Lead the analytics team**, such as: data analysts, data business analysts, data scientists, AI experts, data quality lead, statisticians, and data visualization specialists.

DGL

06

Data Governance Lead

DGL is the **key role to empower data-driven culture** in the Commission. The main responsibilities of this role are to:

- **Ensure the compliance with data-related regulations** and rules such as: SDAIA, NDMO. NCIA, CITC, and the GDPR.
- **Formulate and update the data principles** as the core guiding principles for any data-related decisions.
- **Adopt the relevant data management trends, best practices, and standards**.
- **Ensure the readiness and validity for all data-related policies** in cooperation with LDSs and Dos.
- **Ensure the timely access to the relevant data** by the users through monitoring the compliance with the data accessibility policies.
- **Ensure the safe access to the relevant data** by the users through monitoring the compliance with the data protection policies.
- **Ensure the full understandability of the data** by the users through capturing and publishing the relevant metadata.
- **Define and refine the data roles** in the Commission in alignment with the organizational structure and current responsibilities.
- **Design and monitor the data governance processes** in line with the business processes inside the commission.
- **Promote data-driven decision-making processes** inside the Commission (with the Analytics Lead).
- Playing a **key role with Analytics Lead in developing and updating the data strategy**.

LDA

07

Lead Data Architect

The LDA is the main role who **designs or leads the design of data technical solutions**. The main responsibilities of this role are to:

- Data models development such as developing the **enterprise data models and the logical data models**.
- **Leading the design and implementation of the data platform architecture** including the data stores (e.g. operational, data warehouse, master data, etc.).
- **Design the data integration architecture** (e.g. DW / BI Architecture, Data Virtualization, etc.)
- **Define and manage the end-to-end data lifecycle and the constituent data flows and data lineages**.
- Lead or guide the data quality team to **apply the data quality rules**.
- Ensure the validity of the **Reference and Master Data**.
- Lead or guide the data engineers' team to **ensure the proper implementation of the designed solution**.
- **Select technology vendors** in alignment with the development team and data custodians.
- **Ensure the alignment with any enterprise-level practice** such as Enterprise Architecture, Strategy Management, PMO, or Corporate Performance Management.
- **Develop the overall Data/Information ecosystem**.
- **Participate actively in developing and updating the data strategy**.

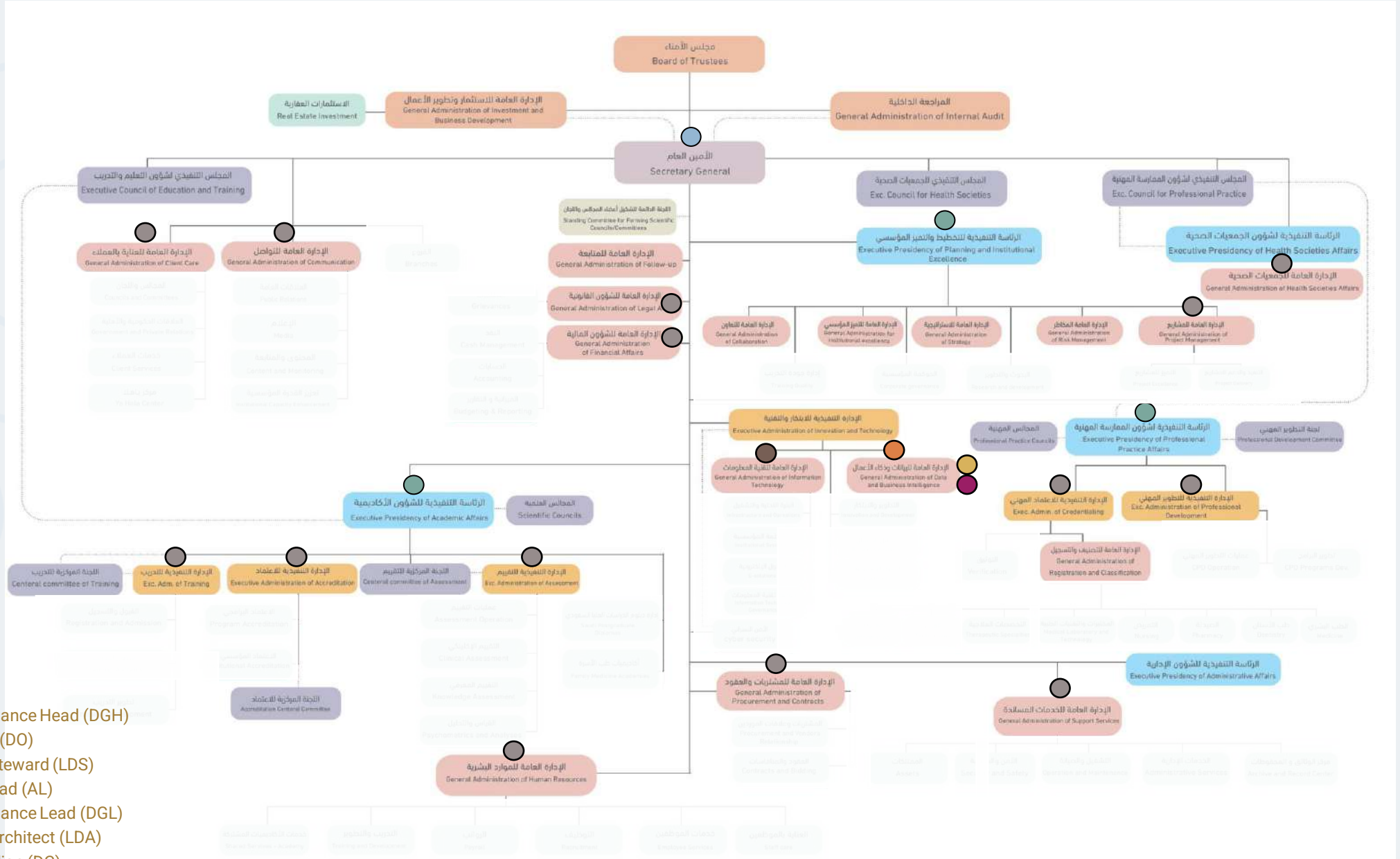
DC
08

Data Custodian

Data Custodian is a technical role who administers and manages the technical operations of the data. The main responsibilities of this role are to:

- Apply the data policies and rules, such as:
  - Applying the data accessibility rules.
  - Applying the data sharing rules.
  - Applying data retention and archiving rules.
  - Applying the data security controls.
- Manage data hosting and data storage.
- Mange the availability of the data as per the policies (including clustering and failover of the database).
- Perform the appropriate backup and recovery mechanisms to guarantee the recoverability of the data (i.e. business continuity).
- Detect and report any error that occurs in the databases, DBMS, or data servers.
- Specify Database Performance Service Levels.
- Maintain the DBMS software.
- Install and administer related data technology.
- Specify Data Technology Requirements before determining what technical solutions to choose.
- Manage and Track the Data Technology Licenses.
- Monitor and Tune the data warehousing processes
- Plan the expected data growth.

Data Domain	Data Sub-Domain	Source System	Data S&G Board Head	Data Owner	Lead Data Steward	Data Steward	Data Custodian	Data Governance Lead	Analytics Lead	Lead Data Architect
Assessment Management	License Exam data	Examinations System	Dr. Ayman Abdo	Dr. Wisam Abu Zanadeh	Dr. Fadi Munshi		Alaa Bin taha	Nouf Alqublan	Khaled Alzahrani	
	Questions Bank	ExamSoft (Cloud)	Dr. Ayman Abdo	Dr. Wisam Abu Zanadeh	Dr. Fadi Munshi		Ghaida Alhathloul - Assessment Dept.	Nouf Alqublan	Khaled Alzahrani	
		Person	Dr. Ayman Abdo	Dr. Wisam Abu Zanadeh	Dr. Fadi Munshi		?	Nouf Alqublan	Khaled Alzahrani	
		Prometrec	Dr. Ayman Abdo	Dr. Wisam Abu Zanadeh	Dr. Fadi Munshi		?	Nouf Alqublan	Khaled Alzahrani	
	Clinical Assessment Data	EMS	Dr. Ayman Abdo	Dr. Wisam Abu Zanadeh	Dr. Fadi Munshi		Mishaal Almuairi - Assessment Dept.	Nouf Alqublan	Khaled Alzahrani	
	Symmetric Analysis Data	Jad - Alteryx	Dr. Ayman Abdo	Dr. Wisam Abu Zanadeh	Dr. Fadi Munshi		Mohammed Alqahtani - Assessment Dept.			
	Question Writers Data	Item Development writer (IDS)	Dr. Ayman Abdo	Dr. Wisam Abu Zanadeh	Dr. Fadi Munshi		Rania Alagel - Assessment Dept.	Nouf Alqublan	Khaled Alzahrani	
	Item writers E-Learning Module	Elearning Module - Item Author Certification	Dr. Ayman Abdo	Dr. Wisam Abu Zanadeh	Dr. Fadi Munshi		Arwa Alrajhi - Assessment Dept.			
Training Management	Professional Training Data	Training System	Dr. Ayman Abdo	Dr. Wisam Abu Zanadeh	Dr. Sami Haidar	Feras Alduraibi	Zoha Zarea	Nouf Alqublan	Khaled Alzahrani	
	Matching Data	Matching System	Dr. Ayman Abdo	Dr. Wisam Abu Zanadeh	Dr. Sami Haidar	Abdulaziz Almajid	Zaid Kehalah, Mohammed Alayobi	Nouf Alqublan	Khaled Alzahrani	
	Trainees Progress Data	One45 System	Dr. Ayman Abdo	Dr. Wisam Abu Zanadeh	Dr. Sami Haidar	Rowaida Almutairi	Mohammed Alayobi	Nouf Alqublan	Khaled Alzahrani	
Accreditation	Accreditation		Dr. Ayman Abdo	Dr. Wisam Abu Zanadeh	Dr.Hussain AlHussain	Hind AlShammari	System will be luanched in April	Nouf Alqublan	Khaled Alzahrani	
Practitioners Management	Practitioner's Data	Mumaris Plus (CRM)	Dr. Ayman Abdo	Dr. Fahad Alwahabi	Dr.Abdulrahman Alnafjan	Abdullah Albarqi	Mohammad Abdulrahman	Nouf Alqublan	Khaled Alzahrani	
	Practitioner's Data -integrated	Mumaris	Dr. Ayman Abdo	Dr. Fahad Alwahabi	Dr.Abdulrahman Alnafjan	Abdullah Albarqi	Mohammad Abdulrahman	Nouf Alqublan	Khaled Alzahrani	
	Practitioner's Data - inactive	4s	Dr. Ayman Abdo	Dr. Fahad Alwahabi	Dr.Abdulrahman Alnafjan	Abdullah Albarqi	Mohammad Ahmad	Nouf Alqublan	Khaled Alzahrani	
Professional Development	Continuous Professional Development Data	Mumaris	Dr. Ayman Abdo	Dr. Fahad Alwahabi	Dr.Manal Alnasser	Ashia Alanezi	Mohammad Abdulrahman	Nouf Alqublan	Khaled Alzahrani	
Professional Associations	Voting Data	Saudi Board Association System	Dr. Ayman Abdo	Dr. Mohammad Alsultan	Huda Alfuhaily	?	Zoha Zarea	Nouf Alqublan	Khaled Alzahrani	
Client Care	Customer Support Data	Call Center	Dr. Ayman Abdo		Sara Alharbi	Ghader Aljizani	Contact directly with Extensya company	Nouf Alqublan	Khaled Alzahrani	
	Cutomer Technical support	Tawasoul (Ticketing System)	Dr. Ayman Abdo		Aljohara Alamir	Ghader Aljizani	Ashwag Alasmari	Nouf Alqublan	Khaled Alzahrani	
	Prectionners Appointment	Appointments Booking System	Dr. Ayman Abdo		Aljohara Alamir	?	Mohammed Ayoubi	Nouf Alqublan	Khaled Alzahrani	
Councils and Committee's Meeting Management	Meetings Data	E-Meeting System	Dr. Ayman Abdo		Sara Alharbi	Alaa Algubaisi	?	Nouf Alqublan	Khaled Alzahrani	
Communication	Customer Satisfaction	Press Ganey	Dr. Ayman Abdo		Aljohara Alamir	Ashwag Alduraie	Contact directly with the company	Nouf Alqublan	Khaled Alzahrani	
Enterprise Resources	Financial Data	ERP	Dr. Ayman Abdo		Emad Alkabi		Yasmeen asiri	Nouf Alqublan	Khaled Alzahrani	
	Planning and Budgeting Data	Oracle Planning & Budgeting (Hyperion)	Dr. Ayman Abdo		Emad Alkabi		Yasmeen asiri	Nouf Alqublan	Khaled Alzahrani	
	HR Data	ERP	Dr. Ayman Abdo		Saud Alshammari		Yasmeen asiri	Nouf Alqublan	Khaled Alzahrani	
	Attendance Management Data	Hadir	Dr. Ayman Abdo		Saud Alshammari		?			
	Employees Performance and Career development (HR)	Oracle Fusion Talent Management Cloud	Dr. Ayman Abdo		Saud Alshammari		Yasmeen asiri	Nouf Alqublan	Khaled Alzahrani	
	Procurement and Contract Data	ERP	Dr. Ayman Abdo		Meshari bin Falij	Abdullah Alwonais	Yasmeen asiri	Nouf Alqublan	Khaled Alzahrani	
Projects Management	Projects Data	EPM	Dr. Ayman Abdo	Dr. Abdulrahman Huosawi	Essa Alessa	Fawaz Alwohaif	Contact directly with the company	Nouf Alqublan	Khaled Alzahrani	
E-Learning	E-Learning	E-Learning (LMS)	Dr. Ayman Abdo	Mohammed Althunayan	Bashayer Alyousfi		?	Nouf Alqublan	Khaled Alzahrani	
Support Systems	Technical support Data	Manage Engine	Dr. Ayman Abdo	Mohammed Althunayan	Saleh Alhagbani		Haitham alqahtani	Nouf Alqublan	Khaled Alzahrani	
	Documents Management	Documents Management System (DMS)	Dr. Ayman Abdo	Mohammed Althunayan			?	Nouf Alqublan	Khaled Alzahrani	



- Data Governance Head (DGH)
- Data Owner (DO)
- Lead Data Steward (LDS)
- Analytics Lead (AL)
- Data Governance Lead (DGL)
- Lead Data Architect (LDA)
- Data Custodian (DC)

الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties

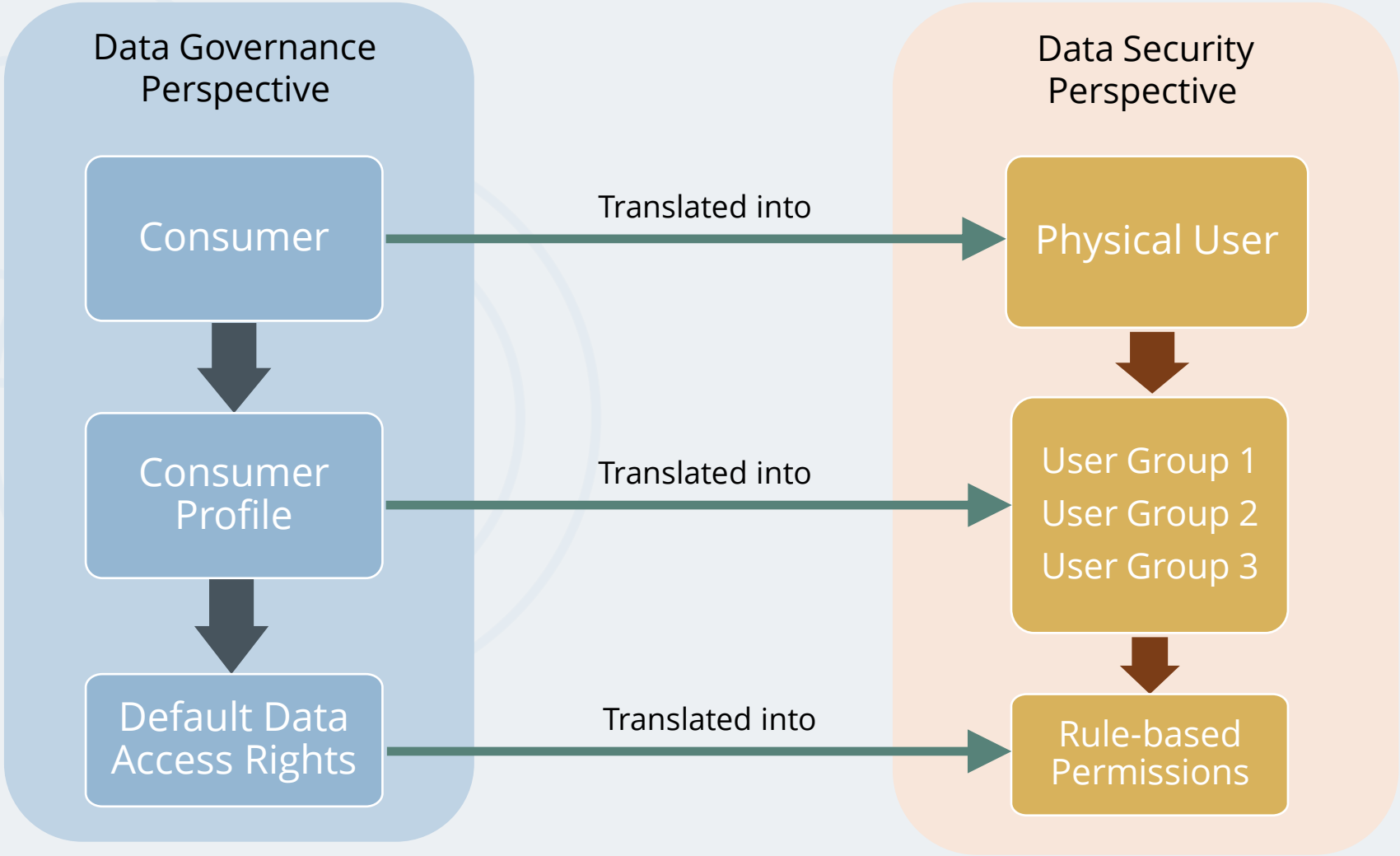
Data Consumer Profiles

الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties

About Consumer profiles

1. **Data Consumer Profiles** represent the high-level generic user groups that would be used to classify the consumer based on their common data needs (what they want) and characteristics (sensitive gov. agency, for-profit organization, etc.).
2. Each consumer profile grants the user specific **Data Entitlements** (Data Entitlement is aggregation of the particular data elements to which a user authorization provides access and the actions that the user can make).
3. A Data Consumer profile (DCP) represents the default entitlements granted to a consumer when she/he is assigned into specific DCP. However the authorized security person might change these entitlements at a more granular level.
4. These consumer profiles would be decomposed later by the security team into **granular user groups** using the security controls, mechanism, and tools used in the Commission.

Data Governance is about segmenting the consumer into default profiles



Consumer Profiling Criteria (perspectives)

Consumer can be profiled based on the following criteria (or perspectives)

Characteristics/Needs	Connection Level	Relationship Type	Entity Type

▪ Common political or economical nature or common data needs that characterize each profile.	▪ Internal,
	▪ National (direct),
	▪ National (indirect)
	▪ Regional,
	▪ International
		▪ Beneficiary (or Customer):
		  ▪ Primary Customer (Main Beneficiary)
		  ▪ Secondary Customer (Casual Beneficiary)
		  ▪ Tertiary Customer (Temporary Beneficiary)
		▪ Partner
		▪ Vendor
		▪ Contractor
		▪ Employee
		▪ Investor
		▪ Regulator
		▪ Regulated Entity
		▪ Creditor or Funder
		▪ Peer Agency
		▪ Competitor
			▪ Individual
			▪ Governmental
			▪ Semi-governmental
			▪ For-profit Business
			▪ NGO or Community

Data Entitlement Dimensions: 1) Confidentiality Level

Data Entitlements would be based on two dimensions. the first one is **Confidentiality Level,** as defined in the Data Policy: Public – Internal – Confidential – Restricted – Sealed

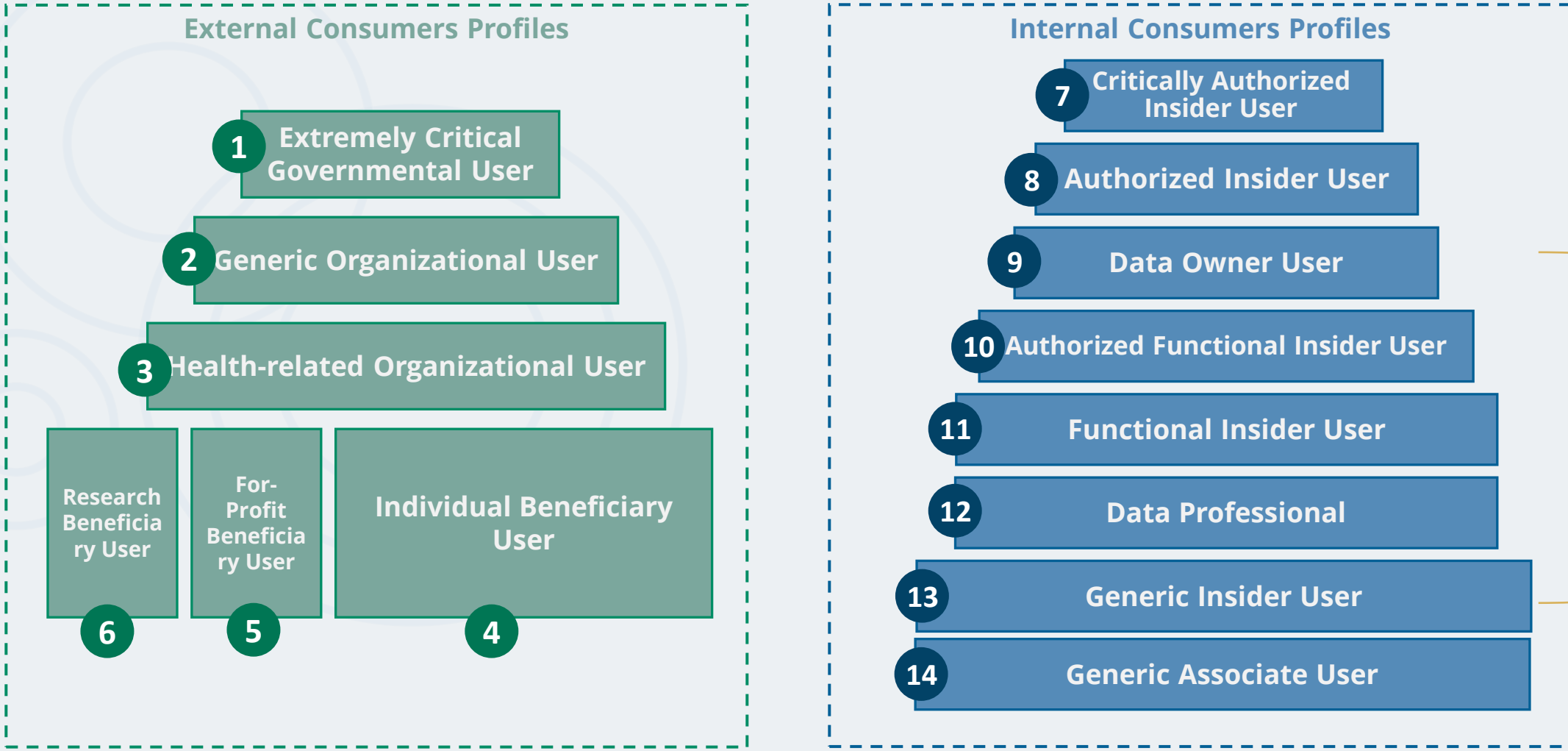
Confidentiality Level	Classification Criteria
Public	All information explicitly approved by SCFHS Management for release to public is considered as "Public". Unauthorized disclosure of such information does not cause any harm or damage to SCFHS.
Internal	All information that is not explicitly classified in one of other groups is considered as "Internal". Unauthorized disclosure of such information could have a minor impact on the business processes and reputation of SCFHS.
Confidential	Sensitive' business information which in case of disclosure may have financial losses, an impact on customer/supplier relationships or reputation, is considered as "Confidential".
Restricted	'Most sensitive' business information which in case of disclosure may have serious financial losses, severe impact on customer/supplier relationship or reputation is considered as "Restricted".
Sealed	"Extremely sensitive' business information which in case of disclosure may have serious financial losses, severe impact on customer/supplier relationship or reputation is considered as "Sealed". The information that can be authorized only by SG or Board of Trustees on case-by-case basis.

Data Entitlement Dimensions: 2) Privacy Tag

The Second dimensions is the **Privacy Tag,** as each field would be tagged based on the type from the perspective of personal privacy and organizational level.

Data Privacy Tag	Definition	Examples (can be changed case-by-case)
PI-ID	Personal Information - Identifier: It provides an explicit link to a data subject and can directly identify an individual.	First Name, Last Name, Father Name, Personal Email, Mobile Phone, Employee ID, Business Phone, Business Email, Home Address, Personal Photo, Passport Info, National ID/Iqama ID, Handwritten Signature, IP address , MAC Address, Vehicle registration plate number, Driver's license number, Fingerprints, Passport Info.
PI-DM	Personal Information -Demographic or Quasi-identifier: by itself does not identify a specific individual, but QIs can be aggregated and linked with other information to identify data subjects.	Full Birth Date, Birthplace, Religion, Nationality Full Home Address, Gender, Marital Status, Current City.
PI-FN	Personal Information -Financial Information. Most of these data are sensitive	Bank Account Number, Bank Balance, Credit Card Number, Salary, Loans.
PI-ED	Personal Information -Education Information	Professional Certificates, University Certificates, GPA.
PI-WI	Personal Information-Work Information (Employment)	Join Date, Payments, Deductions, Leaves Data, Attendance Data, Projects Hours Data, Out-of-office Data, Service Data, HR Requests Data, Training Courses, Performance Evaluation Data, Contract Data, Emails, BU, Department, Manager, Location, Grade.
PI-HL	Personal Information - Health Data	Health Insurance Information, Current Medical Conditions, Medical History, Medications, Allergies, Hospital admission, Disabilities information, discharges, Lab results, Radiology results, specimen collection, payments.
PI-BH	Personal Information - Behavioral Data: The behavioral data on digital channels.	Clickstream Data, Cookies files, eye tracking data.
OI	Organizational Information. Information related to the organization as an entity (fictitious person)	Services Public Information, Clients Public Information, Products Public Information, Financial Public Information, Number of Employees, Accredited Vendors Data, Current Deals, Cash Flow Data, Financial Statements, Projects Pricing Data, Revenues & Losses Data, GL, Current Loans.
Non-PI	No privacy tag is applicable	

Consumer Profiles: Overview



Consumer Profile: ECGU

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Saudi Commission for Health Specialties

Consumer Profile #01		“Extremely Critical Governmental User” - ECGU
Profile	Key Characteristics	▪ *External Occasional Data consumers* ▪ *Highly sensitive political entities that might request data for undisclosed but sensitive reasons.* ▪ *Request data or information on Ad-hoc basis.* ▪ *Not directly related to the core business of the Commission.*
	Examples	▪ *Royal Court* ▪ *Crown Prince Office* ▪ *Council of Political and Security Affairs* ▪ *Council of Economic and Development Affairs* ▪ *The Cabinet* ▪ *Ministry of Justice (i.e. PP, Nazaha*)* ▪ *MoI (i.e. public security) and Presidency of State Security* ▪ مركز الأمن الوطني
Type	Connection Level	▪ *National (Indirect)*
	Relationship Type	▪ *Regulator/Supervisory*
	Entity Type	▪ *Governmental*
Entitlements	Typical End Users	▪ *High-profile Official or decision-maker* ▪ *Security-critical official*
	Typical Entitlements	▪ *Can access (read) to all Data at all level of details.* ▪ *Can request the commission to update any data based on approvals (conditional).*

The default Data Access Rights for: “Consumer Profile #01 - Extremely Critical Governmental User”

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Saudi Commission for Health Specialties

	Public	Internal	Confidential	Restricted	Sealed
PI-ID	A	A	A	A	A
PI-DM	A	A	A	A	A
PI-FN	A	A	A	A	A
PI-ED	A	A	A	A	A
PI-WI	A	A	A	A	A
PI-HL	A	A	A	A	A
PI-BH	A	A	A	A	A
OI	A	A	A	A	A
Non-PI	A	A	A	A	A

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

Consumer Profile: GOU

الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties

Consumer Profile #02		“Generic Organizational User” - GOU
Profile	Key Characteristics	▪ *External Occasional or External regular Data consumers* ▪ *Governmental or semi-Governmental entities that might request data for their own goals.* ▪ *Request data or information on Ad-hoc basis or on pre-defined intervals.* ▪ *Not directly related to the core business of the Commission.*
	Examples	▪ *General Authority for Statistics (GASTAT)* ▪ *Saudi Data and Artificial Intelligence Authority (SDAIA)* ▪ *Human Resources Development Fund (HRDF)* ▪ *ADAA*
Type	Connection Level	▪ *National (Indirect)*
	Relationship Type	▪ *Beneficiary (Secondary such as GaStat or Tertiary such as HRDF)*
	Entity Type	▪ *Governmental or Semi-governmental or NGO*
Entitlements	Typical End Users	▪ *Data Collection user at a data-critical governmental entity* ▪ *One-time (temporary) user to get specific data for specific case.*
	Typical Entitlements	▪ *Usually can read (read) to all Data available for internal users..* ▪ *Cannot access any record-level data unless this entity goes through the “Data Access Request process”.*

The default Data Access Rights for: “Consumer Profile #02 - Generic Organizational User”

الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties

	Public	Internal	Confidential	Restricted	Sealed
PI-ID	A	A*	A**	A**	X
PI-DM	A	A*	A**	A**	X
PI-FN	A	A*	A**	A**	X
PI-ED	A	A*	A**	A**	X
PI-WI	A	A*	A**	A**	X
PI-HL	A	A*	A**	A**	X
PI-BH	A	A*	A**	A**	X
OI	A	A	A**	A**	X
Non-PI	A	A	A**	A**	X

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

Consumer Profile: HOU

Consumer Profile #03		“Health-related Organizational User” - HOU
Profile	Key Characteristics	▪ *External user.* ▪ *Mainly Data Consumers and Data Creators* ▪ *Entity who interacts with the Commission regularly in matters related to health practice.* ▪ *Core business is related to healthcare.*
	Examples	▪ *Saudi Ministry of Health (MOH)* ▪ *Saudi Health Council (SHC)* ▪ *Accredited Local Healthcare University (e.g. medical certificate granting entities)*
Type	Connection Level	▪ *National (direct)*
	Relationship Type	▪ *Partner*
	Entity Type	▪ *Governmental or Semi-governmental or NGO*
Entitlements	Typical End Users	▪ *MOH user* ▪ *University Dean User*
	Typical Entitlements	▪ *Access individual data related to health practitioners registration or trainees* ▪ *Access to most of the aggregates related to health practice.*

The default Data Access Rights for: “Consumer Profile #03 - Health-related Organizational User”

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Saudi Commission for Health Specialties

	Public	Internal	Confidential	Restricted	Sealed
PI-ID	A	A*	A*	A**	X
PI-DM	A	A*	A*	A**	X
PI-FN	A	A*	A*	A**	X
PI-ED	A	A*	A*	A**	X
PI-WI	A	A*	A*	A**	X
PI-HL	A	A*	A*	A**	X
PI-BH	A	A*	A*	A**	X
OI	A	A*	A*	A**	X
Non-PI	A	A*	A*	A*	X

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

Consumer Profile: IBU

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Saudi Commission for Health Specialties

Consumer Profile #04		“Individual Beneficiary User” - IBU
Profile	Key Characteristics	▪ *Represents the main individual stakeholders that the Commission must serve or regulate.* ▪ *External user.* ▪ *Mainly Data Creators (i.e. customer-generated data)* ▪ *Data consumers for the data generated by the Commission*
	Examples	▪ *Healthcare practitioners.* ▪ *Healthcare Trainees (or students).*
Type	Connection Level	▪ *National (direct): Saudi and Non-Saudis.*
	Relationship Type	▪ *Primary Beneficiary*
	Entity Type	▪ *Individual*
Entitlements	Typical End Users	▪ *Practitioner user.* ▪ *Trainee user.*
	Typical Entitlements	▪ *Access her/his own personal data only.* ▪ *Update her/his own personal data, but only with clear rules.* ▪ *Access non-personal data, but only with clear rules.*

The default Data Access Rights for: “Consumer Profile #04 - Individual Beneficiary User”

الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties

	Public	Internal	Confidential	Restricted	Sealed
PI-ID	Personal (A)	Personal (A)	Personal (A)	Personal (A)	X
PI-DM	Personal (A)	Personal (A)	Personal (A)	Personal (A)	X
PI-FN	Personal (A)	Personal (A)	Personal (A)	Personal (A)	X
PI-ED	Personal (A)	Personal (A)	Personal (A)	Personal (A)	X
PI-WI	Personal (A)	Personal (A)	Personal (A)	Personal (A)	X
PI-HL	Personal (A)	Personal (A)	Personal (A)	Personal (A)	X
PI-BH	Personal (A)	Personal (A)	Personal (A)	X	X
OI	A	A*	A* or A**	X	X
Non-PI	A	A* or Personal (A)	A* or Personal (A)	A* or A**	X

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

Consumer Profile: PBU

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Saudi Commission for Health Specialties

Consumer Profile #05		“For-Profit Beneficiary User ” - PBU
Profile	Key Characteristics	▪ *Represents businesses that need to utilize the Commission data for commercial or operational purposes.* ▪ *This is a generic profile for customer segments that must be defined by any data monetization strategy.* ▪ *External Data consumers for the data generated by the Commission.*
	Examples	▪ *Private hospitals and healthcare providers.* ▪ *International healthcare providers.* ▪ *Pharmacies.* ▪ *Insurance companies.* ▪ *Ex: Lean, صحتي*
Type	Connection Level	▪ *National, Regional or International.*
	Relationship Type	▪ *Secondary Beneficiary*
	Entity Type	▪ *For-profit business.*
Entitlements	Typical End Users	▪ *Healthcare recruiter.*
	Typical Entitlements	▪ *Access some non-restricted personal information of individuals based on the this user consent.* ▪ *Access some aggregates and insights not intended for public publishing.*

The default Data Access Rights for: “Consumer Profile #05 - For-Profit Beneficiary User”

الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties

	Public	Internal	Confidential	Restricted	Sealed
PI-ID	A	A**	A**	A**	X
PI-DM	A	A*	A*	A* or A**	X
PI-FN	A	A*	A*	A* or A**	X
PI-ED	A	A*	A*	A* or A**	X
PI-WI	A	A*	A*	A* or A**	X
PI-HL	A	A*	A*	A* or A**	X
PI-BH	A	A**	A**	A**	X
OI	A	A*	A*	A* or A**	X
Non-PI	A	A*	A*	A* or A**	X

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

Consumer Profile: RBU

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Saudi Commission for Health Specialties

Consumer Profile #06		“Research Beneficiary User” - RBU
Profile	Key Characteristics	▪ *Represents individual users who need to use data or information for research purposes.* ▪ *Their data needs must not be commercial or for-profit.* ▪ *The purposes of the usage must be beneficial for the Kingdom.* ▪ *External Temporary Data consumers for the data generated by the Commission.*
	Examples	▪ *Masters or PHD degree student.* ▪ *Non-profit research center.*
Type	Connection Level	▪ *National, Regional or International.*
	Relationship Type	▪ *Tertiary Beneficiary*
	Entity Type	▪ *Individual*
Entitlements	Typical End Users	▪ *Individual researcher.* ▪ *Individual student.*
	Typical Entitlements	▪ *Access some non-restricted personal information of individuals based on the this user consent.* ▪ *Access some aggregates and insights not intended for public publishing.*

The default Data Access Rights for: “Consumer Profile #06 - Research Beneficiary User”

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	Public	Internal	Confidential	Restricted	Sealed
PI-ID	A	A**	A**	X	X
PI-DM	A	A*	A**	X	X
PI-FN	A	A*	A**	X	X
PI-ED	A	A*	A**	X	X
PI-WI	A	A*	A**	X	X
PI-HL	A	A*	A**	X	X
PI-BH	A	A**	X	X	X
OI	A	A*	A**	X	X
Non-PI	A	A*	A**	X	X

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

Consumer Profile: Critically Authorized Insider User

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Consumer Profile #07		"Critically Authorized Insider User" - CAIU
Profile	Key Characteristics	▪ *Internal Highly Authorized user.* ▪ *Enterprise-level user (not peculiar to specific functional domain).* ▪ *No directly involved in the daily operational work.* ▪ *Should be limited to a very few numbers of users (i.e. max 5 users)*
	Examples	▪ *Few members of the Commission board.* ▪ *Few members of some sensitive committees*
Type	Connection Level	▪ *Internal*
	Relationship Type	▪ *Employee or Partner or Regulator*
	Entity Type	▪ *Individual*
Entitlements	Typical End Users	▪ *Secretary General, The Data Governance Head (as defined in the DG Roles and Responsibilities).* ▪ *Highly authorized Executive user.* ▪ *The Internal Audit General Director*
	Typical Entitlements	▪ *Granting this profile to a specific user must be based on high-level approvals or voting by the DG board members or higher.* ▪ *Can access any data item.* ▪ *Should be time-based entitlement.*

The default Data Access Rights for: “Consumer Profile #07- Critically Authorized Insider User”

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	Public	Internal	Confidential	Restricted	Sealed
PI-ID	A	A	A	A	A
PI-DM	A	A	A	A	A
PI-FN	A	A	A	A	A
PI-ED	A	A	A	A	A
PI-WI	A	A	A	A	A
PI-HL	A	A	A	A	A
PI-BH	A	A	A	A	A
OI	A	A	A	A	A
Non-PI	A	A	A	A	A

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

Consumer Profile: Authorized Insider User

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Consumer Profile #08		"Authorized Insider User" - AIU
Profile	Key Characteristics	▪ *Internal Authorized user.* ▪ *Enterprise-level user (not peculiar to specific functional domain).* ▪ *Needs to access the vast majority of the data for critical decision-making or for governance purposes .* ▪ *Should be limited to a few numbers of users (i.e. max 10 users in the Commission).*
	Examples	▪ *Selected executives inside the commission.* ▪ *Authorized committees members.* ▪ *Authorized people who govern or secure data assets.*
Type	Connection Level	▪ *Internal*
	Relationship Type	▪ *Employee or Partner or Regulator*
	Entity Type	▪ *Individual*
Entitlements	Typical End Users	▪ *Data and Business Intelligence (D&BI) Department Director, The Analytics Lead (as defined in the DG Roles and Responsibilities).* ▪ *The Data Governance Lead (as defined in the DG Roles and Responsibilities).* ▪ *The person who lead the data custodians or ensure the security over the data assets.* ▪ *Sensitive committee member.*
	Typical Entitlements	▪ *Granting this profile to a specific user must be based on high-level approvals or voting by the DG board members.* ▪ *Can access any data item unless it is sealed.* ▪ *Might be time-based entitlement.*

The default Data Access Rights for: “Consumer Profile #08 - Authorized Insider User”

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	Public	Internal	Confidential	Restricted	Sealed
PI-ID	A	A	A*	A*	X
PI-DM	A	A	A*	A*	X
PI-FN	A	A	A*	A*	X
PI-ED	A	A	A*	A*	X
PI-WI	A	A	A*	A*	X
PI-HL	A	A	A*	A*	X
PI-BH	A	A	A*	A*	X
OI	A	A	A*	A*	X
Non-PI	A	A	A*	A*	X

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

Consumer Profile: Data Owner User

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Consumer Profile #09		“Data Owner User” - DOU
Profile	Key Characteristics	▪ *Internal Authorized user.* ▪ *Functional user (peculiar to specific functional domain).* ▪ *The main decision-maker when it comes to her/his domain data.*
	Examples	▪ *The Chief Executive Directors of the core and support business units.* ▪ *The Executive Directors* ▪ *The General Directors*
Type	Connection Level	▪ *Internal*
	Relationship Type	▪ *Employee only*
	Entity Type	▪ *Individual*
Entitlements	Typical End Users	▪ *The Data Owners (as defined in the DG Roles and Responsibilities).*
	Typical Entitlements	▪ *Granting this profile to a specific user must be based on high-level approvals or voting by the DG board members.* ▪ *Can access any domain-specific data item unless it is sealed.*

The default Data Access Rights for: “Consumer Profile #09 - Data Owner User”

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	Public	Internal	Confidential	Restricted	Sealed
PI-ID	A	A	Domain (A)	Domain (A)	Domain (A*)
PI-DM	A	A	Domain (A)	Domain (A)	Domain (A*)
PI-FN	A	A	Domain (A)	Domain (A)	Domain (A*)
PI-ED	A	A	Domain (A)	Domain (A)	Domain (A*)
PI-WI	A	A	Domain (A)	Domain (A)	Domain (A*)
PI-HL	A	A	Domain (A)	Domain (A)	Domain (A*)
PI-BH	A	A	Domain (A)	Domain (A)	Domain (A*)
OI	A	A	Domain (A)	Domain (A)	Domain (A*)
Non-PI	A	A	Domain (A)	Domain (A)	Domain (A*)

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

Consumer Profile: Authorized Functional Insider User

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Consumer Profile #10		"Authorized Functional Insider User" - AFIU
Profile	Key Characteristics	▪ *Internal Authorized user.* ▪ *Functional user (peculiar to specific functional domain).* ▪ *The user must be critical in operating the business in this domain.*
	Examples	▪ *The Department Managers of the core and support business units.* ▪ *The supporting data governance users.*
Type	Connection Level	▪ *Internal*
	Relationship Type	▪ *Employee only*
	Entity Type	▪ *Individual*
Entitlements	Typical End Users	▪ *The Lead Data Stewards (as defined in the DG Roles and Responsibilities).* ▪ *The Core business user in the domain.*
	Typical Entitlements	▪ *Granting this profile to a specific user must be done by the Data Owner Users.* ▪ *No access to any sealed data.* ▪ *Can access any domain-specific data item unless it is restricted.*

The default Data Access Rights for: “Consumer Profile #10 - Authorized Functional Insider User”

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	Public	Internal	Confidential	Restricted	Sealed
PI-ID	A	A	Domain (A)	Domain (A)	X
PI-DM	A	A	Domain (A)	Domain (A)	X
PI-FN	A	A	Domain (A)	Domain (A)	X
PI-ED	A	A	Domain (A)	Domain (A)	X
PI-WI	A	A	Domain (A)	Domain (A)	X
PI-HL	A	A	Domain (A)	Domain (A)	X
PI-BH	A	A	Domain (A)	Domain (A)	X
OI	A	A	Domain (A)	Domain (A)	X
Non-PI	A	A	Domain (A)	Domain (A)	X

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

Consumer Profile: Functional Insider User

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Consumer Profile #11		“Functional Insider User” - FIU
Profile	Key Characteristics	▪ *Internal Authorized user.* ▪ *Functional user (peculiar to specific functional domain).* ▪ *The user must be related to the daily work in this domain.*
	Examples	▪ *The Department Employees.* ▪ *The supporting data governance users.*
Type	Connection Level	▪ *Internal*
	Relationship Type	▪ *Employee only*
	Entity Type	▪ *Individual*
Entitlements	Typical End Users	▪ *The Data Stewards (as defined in the DG Roles and Responsibilities).* ▪ *The department users that participate in handling the business activities and processes.*
	Typical Entitlements	▪ *Granting this profile to a specific user must be done by the Data Owner Users.* ▪ *No access to any sealed or restricted data.* ▪ *Can access to any domain-specific data item unless it is restricted or sealed.*

The default Data Access Rights for: “Consumer Profile #11 - Functional Insider User”

الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties

	Public	Internal	Confidential	Restricted	Sealed
PI-ID	A	A	Domain (A)	Domain (A*)	X
PI-DM	A	A	Domain (A)	Domain (A*)	X
PI-FN	A	A	Domain (A)	Domain (A*)	X
PI-ED	A	A	Domain (A)	Domain (A*)	X
PI-WI	A	A	Domain (A)	Domain (A*)	X
PI-HL	A	A	Domain (A)	Domain (A*)	X
PI-BH	A	A	Domain (A)	Domain (A*)	X
OI	A	A	Domain (A)	Domain (A*)	X
Non-PI	A	A	Domain (A)	Domain (A*)	X

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

Consumer Profile: Data Professional

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Consumer Profile #12		“Data Professional User” - DPU
Profile	Key Characteristics	▪ *Authorized user.* ▪ *Functional user (peculiar to specific functional domain) or Enterprise-level user.* ▪ *Technical role which is important to support the business.*
	Examples	▪ *IT Department.* ▪ *D&BI Department.* ▪ *Data or Technology Vendor.*
Type	Connection Level	▪ *Internal or External*
	Relationship Type	▪ *Employee, Vendor, or Contractor.*
	Entity Type	▪ *Individual*
Entitlements	Typical End Users	▪ *The Data Custodians (as defined in the DG Roles and Responsibilities).* ▪ *The Data Architect (as defined in the DG Roles and Responsibilities).* ▪ *D&BI Department employee.* ▪ *Vendor user or Contractor.*
	Typical Entitlements	▪ *Granting this profile to a specific user must be done by the Data Owner and IT Manager or the Data Management Head.* ▪ *No access to any sealed or restricted data.* ▪ *If the data professional needs more entitlements to perform her/his work (data analysis work), then she/he can be assigned to other profiles as needed (e.g. assigned to the profile “Authorized Functional Insider User”)*

The default Data Access Rights for: “Consumer Profile #12 - Data Professional User”

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	Public	Internal	Confidential	Restricted	Sealed
PI-ID	A	A	A*	A*	X
PI-DM	A	A	A*	A*	X
PI-FN	A	A	A*	A*	X
PI-ED	A	A	A*	A*	X
PI-WI	A	A	A*	A*	X
PI-HL	A	A	A*	A*	X
PI-BH	A	A	A*	A*	X
OI	A	A	A*	A*	X
Non-PI	A	A	A*	A*	X

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

Consumer Profile: Generic Insider User

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Consumer Profile #13		"Generic Insider User" - GIU
Profile	Key Characteristics	▪ *Any internal user.* ▪ *Enterprise-level user.*
	Examples	▪ *Any employee* ▪ *Data or Technology Vendor.*
Type	Connection Level	▪ *Internal or External*
	Relationship Type	▪ *Employee, Vendor, or Contractor.*
	Entity Type	▪ *Individual*
Entitlements	Typical End Users	▪ *Employee User* ▪ *Vendor user or Contractor.*
	Typical Entitlements	▪ *Granting this profile to a specific user must be done by the Data Owner and IT Manager or the Data Management Head.* ▪ *In general, no access to any sealed or restricted or confidential data.* ▪ *If the data professional needs more entitlements to perform her/his work, then she/he can be assigned to other profiles as needed.*

The default Data Access Rights for: “Consumer Profile #13 - Generic Insider User”

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	Public	Internal	Confidential	Restricted	Sealed
PI-ID	A	A	A**	A**	X
PI-DM	A	A	A*	A**	X
PI-FN	A	A	A*	A**	X
PI-ED	A	A	A*	A**	X
PI-WI	A	A	A*	A**	X
PI-HL	A	A	A*	A**	X
PI-BH	A	A	A**	A**	X
OI	A	A	A*	A**	X
Non-PI	A	A	A*	A**	X

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

Consumer Profile: Generic Associate User

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Consumer Profile #13		"Generic Associate User" - GAU
Profile	Key Characteristics	
	Examples	▪ *Committee Members*
Type	Connection Level	▪ *Internal*
	Relationship Type	▪ *Employee only*
	Entity Type	▪ *Individual*
Entitlements	Typical End Users	▪ *المجالس العلمية* ▪ *المجالس المهنية*
	Typical Entitlements	▪ *Granting this profile to a specific user must be done by the Data Owner and IT Manager or the Data Management Head.* ▪ *In general, no access to any sealed or restricted or confidential or internal data* ▪ *If the data professional needs more entitlements to perform her/his work, then she/he can be assigned to other profiles as needed.*

The default Data Access Rights for: “Consumer Profile #14 - Generic Associate User”

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	Public	Internal	Confidential	Restricted	Sealed
PI-ID	A	A**	A**	A**	X
PI-DM	A	A*	A*	A**	X
PI-FN	A	A*	A*	A**	X
PI-ED	A	A*	A*	A**	X
PI-WI	A	A*	A*	A**	X
PI-HL	A	A*	A*	A**	X
PI-BH	A	A**	A**	A**	X
OI	A	A*	A*	A**	X
Non-PI	A	A*	A*	A**	X

A : Access **X** : Not Allowed *** :** Conditional (must meet pre-defined conditions) **** :** Exceptional (must authorized by relevant authorities)

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Monitoring

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OKRs

Incentives, performance and career paths

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Background

- Creating appropriate team and individual incentives becomes a critical pre-requisite to continually grow and sustain the team objectives and improve the overall maturity model of the Data & BI team.
- Some core principles for designing incentives for the Data & BI team:
  - Incentives must align individual goals with team and organisational goals.
  - Incentives should be measurable yet provide room for creativity and innovation for employees to actively contribute to overall improvements and achievements.
  - Incentives should be transparent and be separated from direct performance measurement, although they can serve as inputs to the later.
- Based on these, several frameworks have been studied:

Balanced Scorecard	Heavily focused on cascading KPIs. Faces the challenges of ‘performance gaming’
Management by Objectives	Rigid and top down by design, hard to gain buy-in and provide best practices to achieve goals.
OKR (Objectives & Key Results)	Evolution of MBO, bottom-up alignment with top down. Focus on operational efficiencies and employee motivation and engagement.

Operating Model – Incentives

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Individual	Team	Organisation
OKR	OKR	OKR
Career Pathway	Process Metrics	Ideation Metrics

Transparency & Alignment

OKR: Sample Fill

Data Catalog Expert

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Objective 1	Build and deploy a central data catalog for the organization by Q3 2021
Description	The catalog should be the single point of discovery and cataloging for the entire organization, must have search abilities and maintain privacy preservation and security compliance. The catalog must include all critical data assets.
Alignment	NDMO: Develop the comprehensive national data catalog
Key Results	1: Centralized tool launched internally with 70+ users.
	2: Identify and catalog critical data assets for 90% of source dbs.
	3: Assign 95% of ongoing named resources with ongoing operations

Status

Person identified:

Name:

OKR Reviewed

Approved?

OKR Finalized

Date:

Career Pathway

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The Career pathway is centralized around OKRs and the ‘Data Literacy Curriculum’ Initiative. The high-level framework for pathway is based on existing skills, role and capability of everyone and their desire towards a target role.

Objectives

Current Objectives = Target Role Objectives

Improve Capability | Current Objectives	Augment Capability | Current Objectives
Improve Capability | New Objectives	Augment Capability| New Objectives
Project Participation | T Breadth	Capacity Planning | T Breadth
Project Participation | Mentorship	OKR | Prioritization

Individual

Target Role

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Appendix

Sample Use Cases

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45+ Data Use Cases

Data Use Case Card

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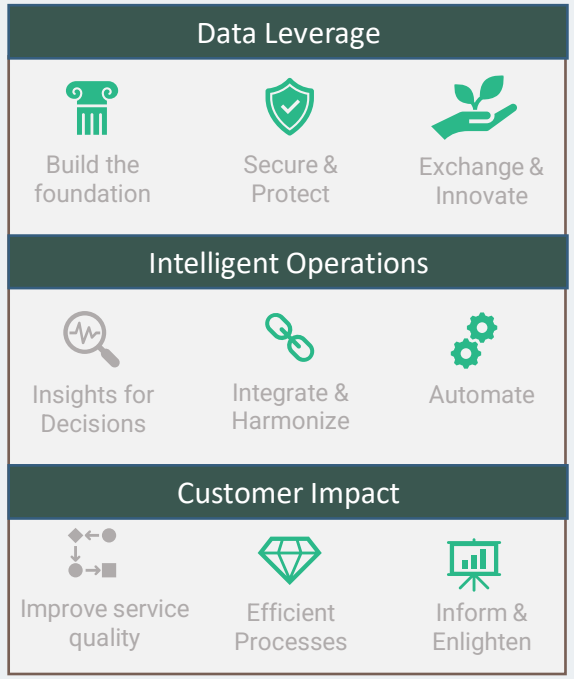
Title	AI and Data Science Infrastructure
Strategic Stream(s):	- Building Capability (Data Science Platform)
Outputs & Outcomes	Collaborative, powerful, and modern AI and Data Science infrastructure
Timeframe	Setup:
	Incubation:
	Roll-Out:
	Scale-Out:



SV	CV	IF	OF
3	3	3	3

Brief

Implement all necessary tools and infrastructure for a modern Advanced Analytics unit where machine learning algorithms can be built and collaboratively shared among the team.

Objectives

- To make SCFHS ready to adapt or develop machine learning solutions by building the infrastructure

Stakeholders

- Data & BI
- IT

Benefits

- Follow the global standards in equipping data scientists with all the necessary hardware/software
- Allow for collaborative work

Risks

Priority

- Horizon 1

AVG SCORE: 3

DUC No.	Created Date	Created By
		Saud Altamimi

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THANK YOU