UNITED ARAB EMIRATES
MINISTRY OF INVESTMENT

MoI.IO Strategy | Target 4a

This document is the Target Architecture (Report #04a). of the MoI Data Strategy. It presents an analysis of the Target Architecture within MoI's Intelligence Office.

The report addresses the following target architecture perspectives:

> *Target MoI Capabilities*
> *Target MoI Platform Architecture & Design*
> *Target Intelligence Office Platform Architecture & Design*
> *Target Intelligence Office Solution Selection*

Title: DQ DT2.0 Target 4a Report
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DigitalQatalyst

MoI.IO Strategy | Reports

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DBP Platform | Operating Model | Investment Data Framework

04a. Target (Platform)

Framework (DBP | Platform) | MoI Capabilities | MoI Platform | MoI.IO Solution

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01. REPORT CONTEXT

Target Architecture (Platform): Report Context

This report #05 of "MoI's Data & AI Strategy" presents the target state architecture for the Ministry of Investment Intelligence Office. The target architecture identifies the capabilities, platforms and solutions required to automate operations.

The target architecture for the Intelligence Office is designed in the context of the overall organisation. This report defines the architecture across capabilities, platforms, solutions, selected technologies required for the MoI Intelligence Office.

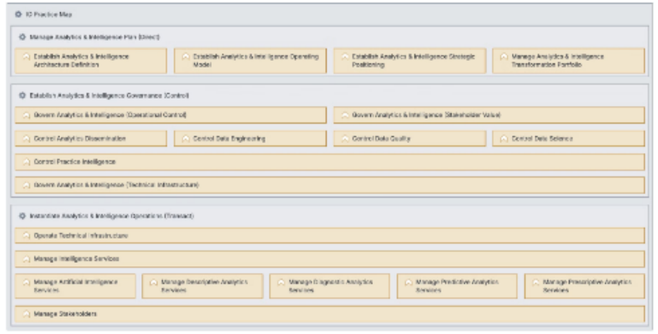
02. ANALYSIS FRAMEWORK

Framework: Platform Design Dimensions (Organisation)

The DQ Solution Design Method brings together three essential dimensions—Capability, Practice, and Solution Design—to create a comprehensive approach to platform development. This framework ensures that MoI.IO's platform is built on a foundation of robust skills, scalable practices, and impactful solutions.

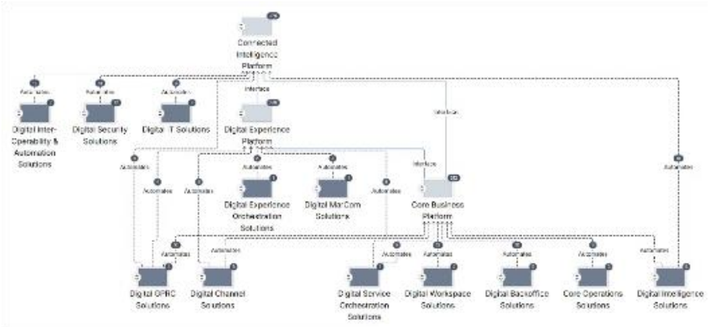
Capability Design

Identifies digital capabilities for MoI across three operational streams based on best practices from ISO, APQC, and TOGAF.



Practice Design

Defines core functions for MoI.IO across three operational layers aligned with best practices such as DAMA and COBIT standards.



Solution Design

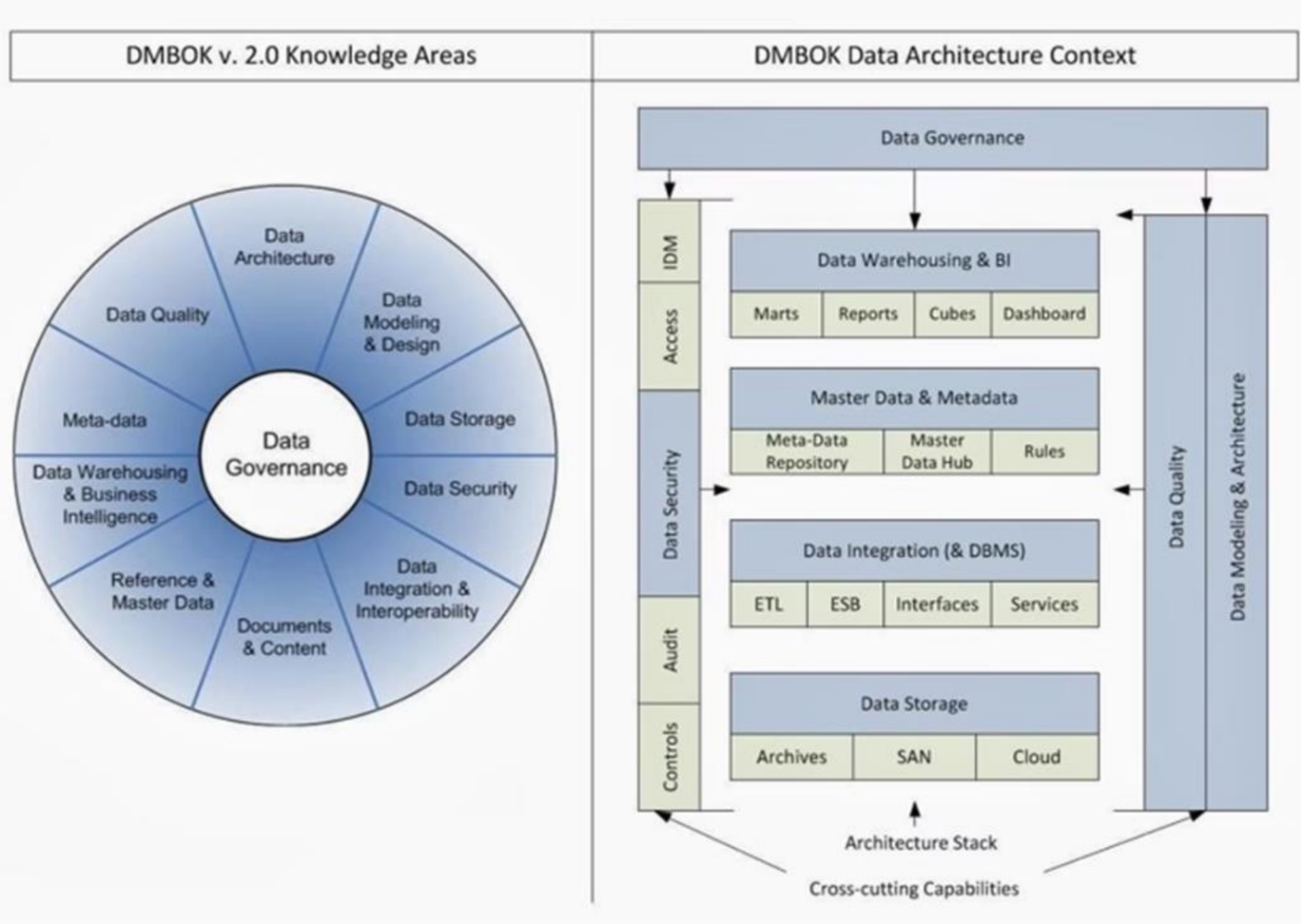
Outlines required platforms, components, and services for MoI.IO based on best practices in platform design, including Agile and Lean principles.

Framework: Platform Design Dimensions (Intelligence)

The DAMA DMBOK framework serves as a foundational reference for the MoI Intelligence Operations department.

The framework identifies the capabilities, platforms and solutions required to realise the vision & strategy of the department.

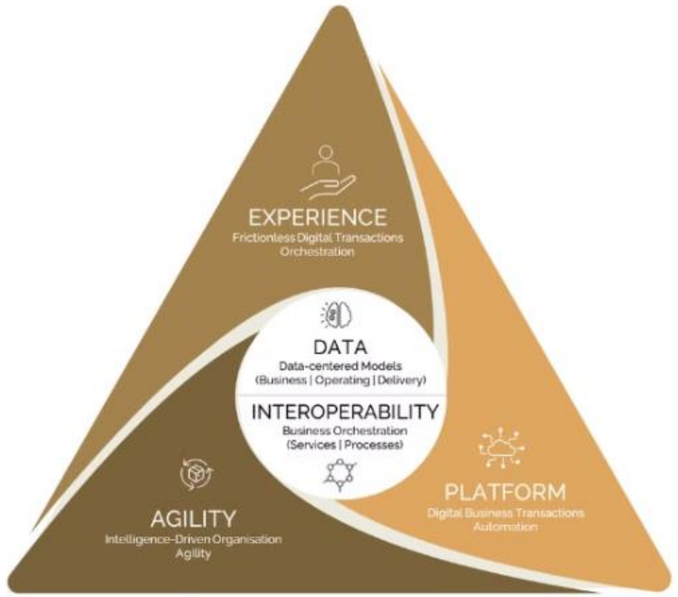
By adhering to these best practices, MoI.IO can ensure their operations are efficient and effective.



DAMA DMBOK Framework

Framework: Digital Organisation Competencies

Digital architecture design begins with understanding that a truly digital organization is defined by its core competencies and strategic capabilities. Leveraging the DBP (Digital Business Platform) framework, we assess and enhance these competencies to build a robust, agile foundation that aligns with the Ministry of Investment's vision. This approach ensures streamlined processes, enhanced decision-making, and the capacity to adapt swiftly to evolving market demands.



Digital Organisation Competency

Competency	Description
EXPERIENCE	Cross-channel journey orchestration
AGILITY	Business and technology adaptability
PLATFORM	Effective transaction automation
DATA	Data-driven decision-making
INTEROPERABILITY	Service & process cross-connectivity

03. MoI ORGANISATION ARCHITECTURE (CAPABILITIES)

MoI Capabilities: Core Business

The MoI Core Capabilities define the primary functional competencies of the organisation as an IPA. These include managing investment programs, gathering intelligence, conducting investigations, fostering partnerships, and orchestrating inbound and outbound activities.

Manage Strategy (Portfolio)

> *Develop Strategies*
> *Maintain Portfolio*

Govern Operation (Portfolio)

> *Develop Function*
> *Manage Efficiency*

Manage Policy (Readiness)

> *Develop Policies & Reforms*
> *Drive Reforms (cross-entities)*

Manage Program (Readiness)

> *Manage Programs*
> *Track Execution*

Manage Intelligence (Global Market Insight)

> *Gather & Process Economic Data (Global)*
> *Disseminate Insight (Knowledge & Decisions Support)*

Manage Investigations (FDI Insight)

> *Gather & Process Investment Data (Global & Local)*
> *Disseminate Insight (Knowledge & Decisions Support)*

Manage Promotion

> *Plan & Execute Campaigns*
> *Elevate National Profile*

Facilitate Investment

> *Enable Investments (In | Out)*
> *Guide Investors (In | Out)*

Manage Relation (Outreach)

> *Foster Partnerships (Global)*
> *Maintain Relationships*

Manage Agreement (Outreach)

> *Manage Agreement (Global)*
> *Ensure Effectiveness*

MoI Capabilities: Digital Canvas

The Digital Canvas is the blueprint for MoI's digital architecture. It defines the capabilities required to realise the functions and strategy of the organisation in a digital & AI economy. The capabilities are established through the analysis of the organisation's strategy and services, coupled with industry best practices. Unlike traditional models tied to organizational structure and functions, the Digital Canvas offers an unbiased, capability-driven perspective of the organisation.

Digital Canvas Design

MoI Capabilities: Digital Canvas Streams

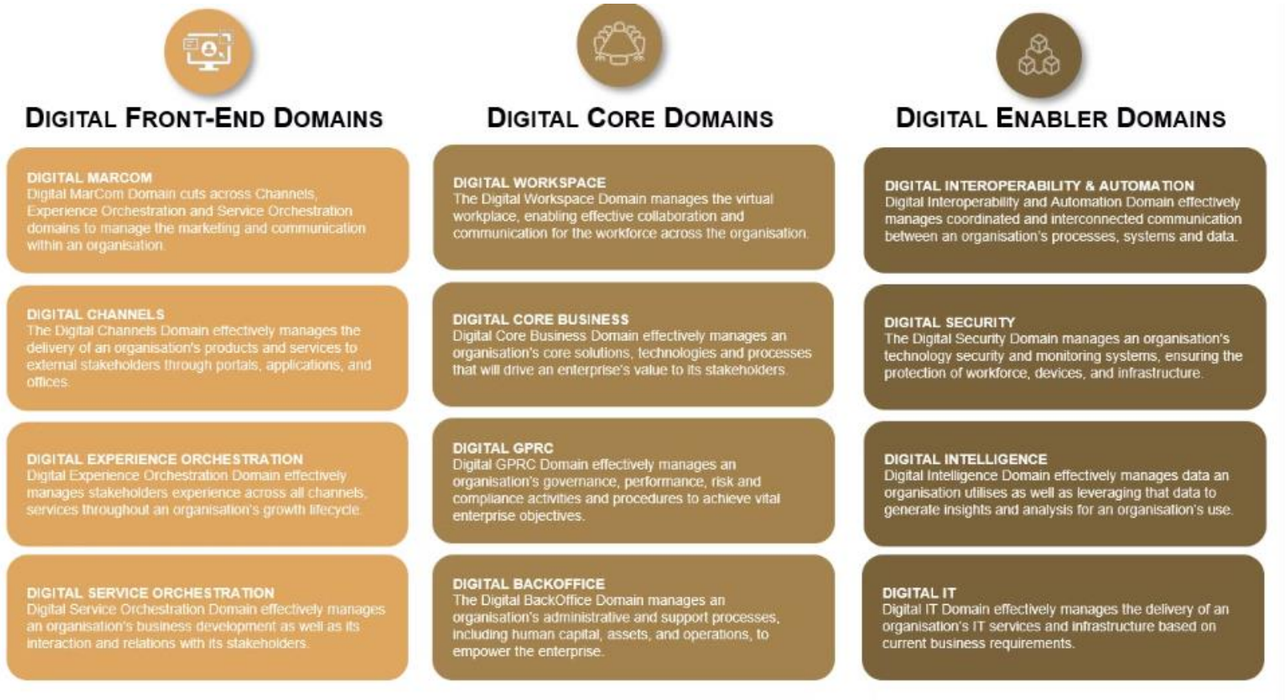
For MoI to operate as an effective Digital Organisation, several distinct capabilities must be matured digitally. To effectively integrate digital technologies into capabilities, capabilities are grouped into 3 streams. Each stream contains groups of capabilities that allow MoI to take control of various aspects of their Organisation. This structured approach allows for simplicity in activating, automating, and realising Organisational capabilities.

Digital Canvas Stream Design

MoI Capabilities: Digital Canvas Domains

The Digital Canvas streams are further broken down into 12 domains that cover different areas of MoI's digital capabilities. By organizing the capabilities into domains, MoI can focus on developing specific areas and ensuring a comprehensive digital transformation across the organization.

Digital Canvas Design



Digital Canvas (Domain)

MoI Capabilities: Digital Canvas (Organisation)

The capabilities within the Digital Canvas are the core elements driving organizational improvement. They serve as the essential building blocks that empower the Ministry of Investment to achieve its strategic objectives and respond effectively to evolving market demands.

Reference: The map of capabilities is compiled following the MoI Strategy (including NIS) and best practices guidelines (i.e. WBR CISF | WAIPA | OECD)

Digital Canvas Stream Design

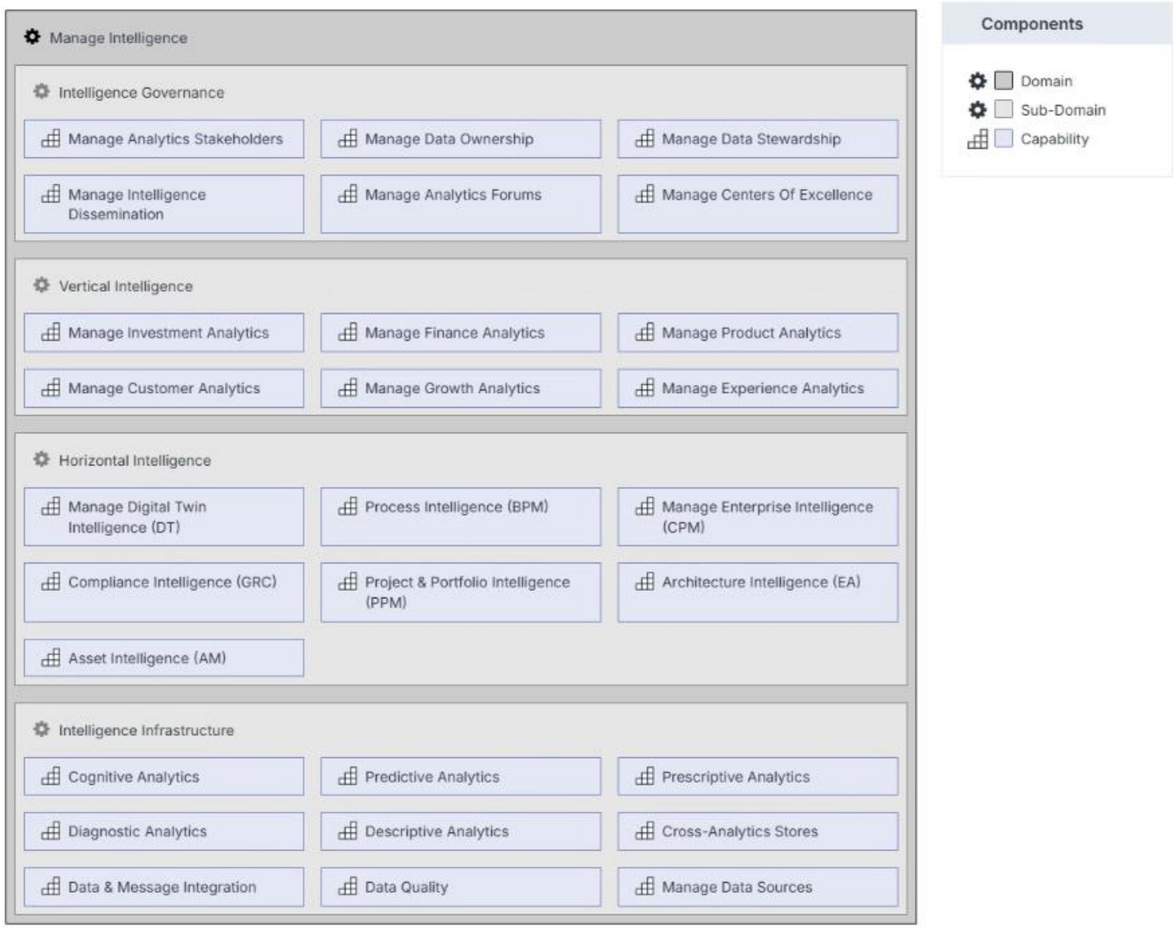
MoI Digital Canvas (Organisation)

MoI Capabilities: Digital Canvas (Intelligence Domain)

The MoI Intelligence Capabilities include advanced data analytics to provide comprehensive insights on global market trends and economic data. This enables effective decision-making and knowledge support for businesses and investors.

Reference: The map of capabilities is compiled following the MoI Strategy (including NIS) and best practices guidelines (i.e. DAMA | ISO8000 | DGI Data Governance)

Digital Canvas Domains

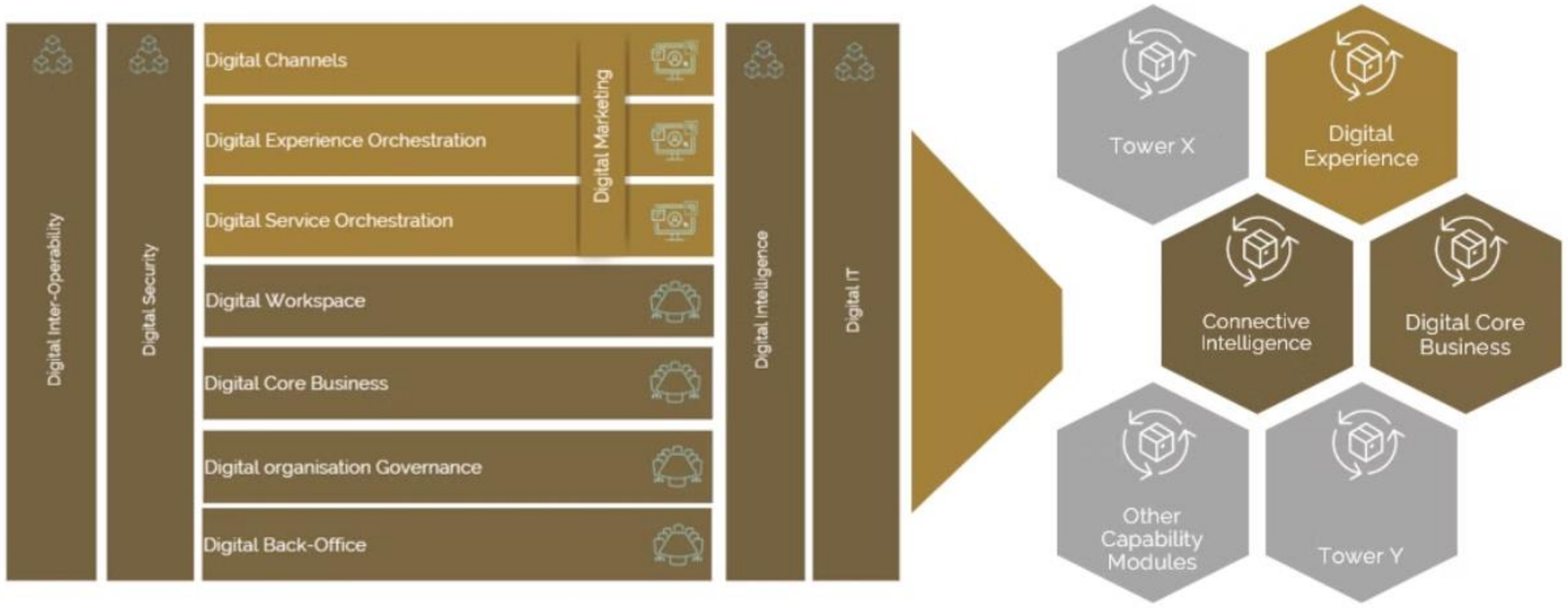


MoI Digital Canvas (Digital Intelligence Domain)

04. MoI ORGANISATION ARCHITECTURE (PLATFORMS)

MoI Platform: Modular Design

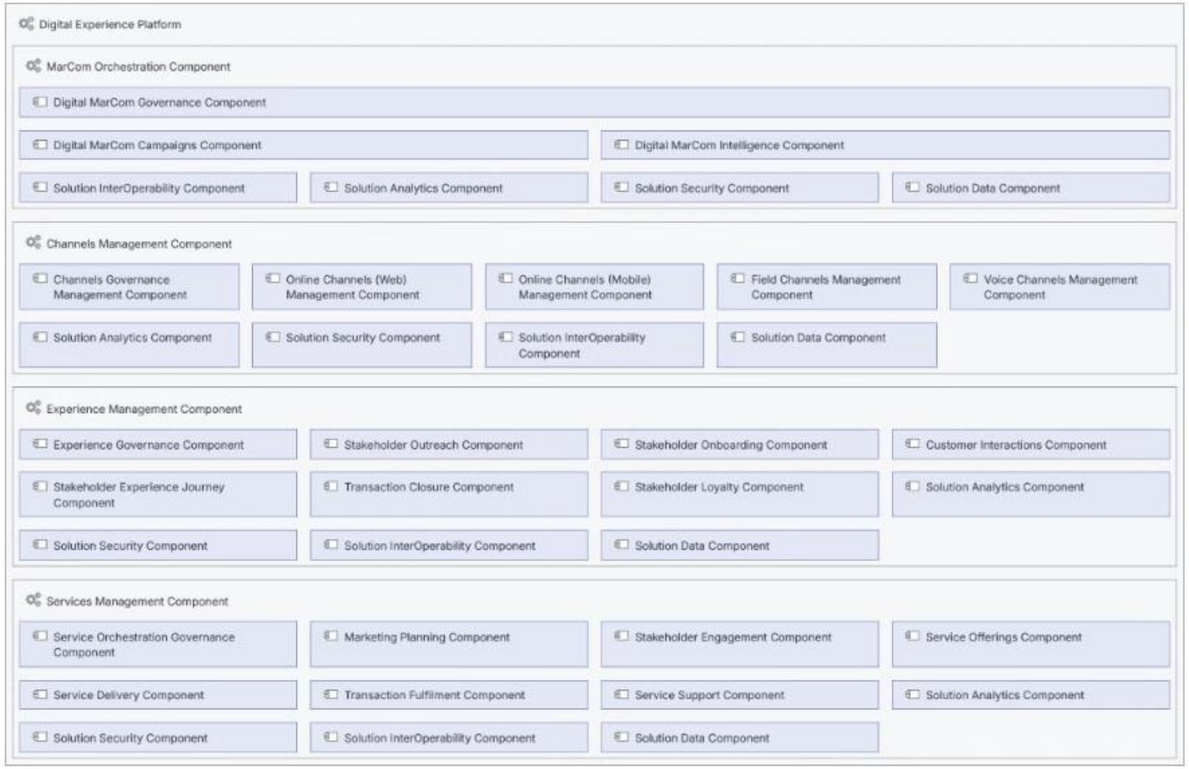
To achieve the target capabilities needed for MoI to become a successful digital organization, the required systems and platforms need to be architecturally defined. The Modular Platform Design enables composability by designing platforms to become scalable systems. The platforms designed through the Modular Platform approach are traced back to the Target Digital Capabilities through the Capability Model ensuring the realization of MoI's target digital state



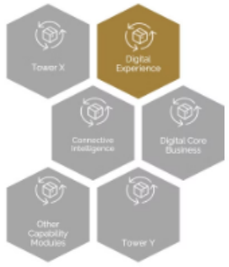
Digital Platforms (Modular Design)

MoI Platform: Tower.01 Digital Experience (Conceptual)

Tower 01 (Front.End | Digital Experience) focuses on **MoI's** user interaction, engagement, and service delivery, guided by a conceptual model—a high-level framework that outlines key components, relationships, and principles to provide a clear vision and strategic direction.



Digital Experience (Conceptual)

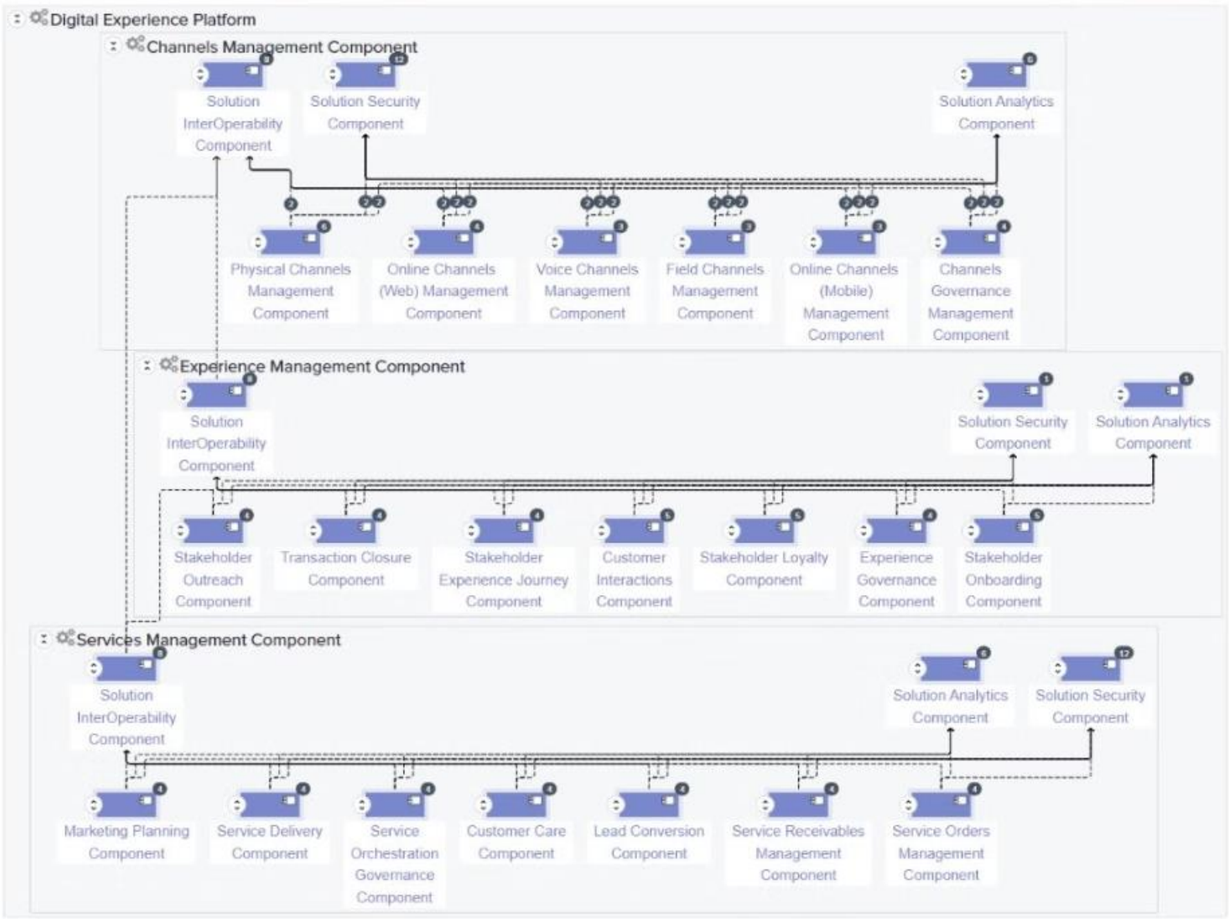


Digital Platforms (Modular Design)

MoI Platform: Tower.01 Digital Experience (Logical)

Tower 01 (Front.End | Digital Experience) focuses on **MoI's** user interaction, engagement, and service delivery, guided by a logical model—a high-level design that outlines key services, interfaces and technology connections to guide and manage technology selection for the organisation.

Digital Platforms (Modular Design)

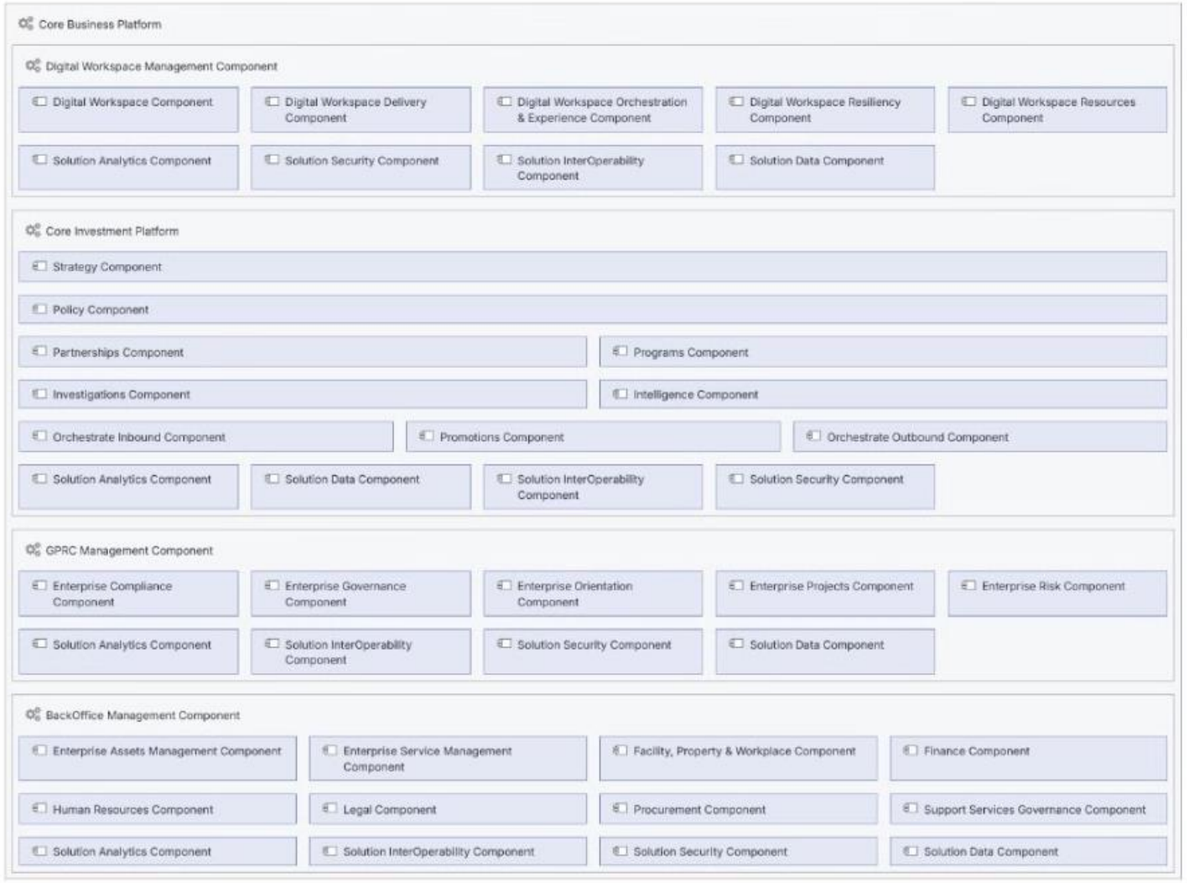


Digital Experience (Logical)

MoI Platform: Tower.02 Digital Core (Conceptual)

Tower 02 (Core | Digital Core) focuses on **MoI's** core service offering including development, management, governance and operations, guided by a conceptual model—a high-level framework that outlines key components, relationships, and principles to provide a clear vision and strategic direction.

Digital Platforms (Modular Design)



Digital Core (Conceptual)

MoI Platform: Tower.02 Digital Core (Logical)

Tower 02 (Core | Digital Core) focuses on **MoI's** core service offering including development, management, governance and operations, guided by a logical model—a high-level design that outlines key services, interfaces and technology connections to guide and manage technology selection for the organisation.

Digital Core (Conceptual)

Digital Platforms (Modular Design)

MoI Platform: Tower.03 Connective Intelligence (Conceptual)

Tower 03 (Enablers | Connective Intelligence) focuses on **MoI's** ability to orchestrate services, processes and data across the organization to break operational silos and improve operational efficiency, guided by a conceptual model—a high-level framework that outlines key components, relationships, and principles to provide a clear vision and strategic direction.

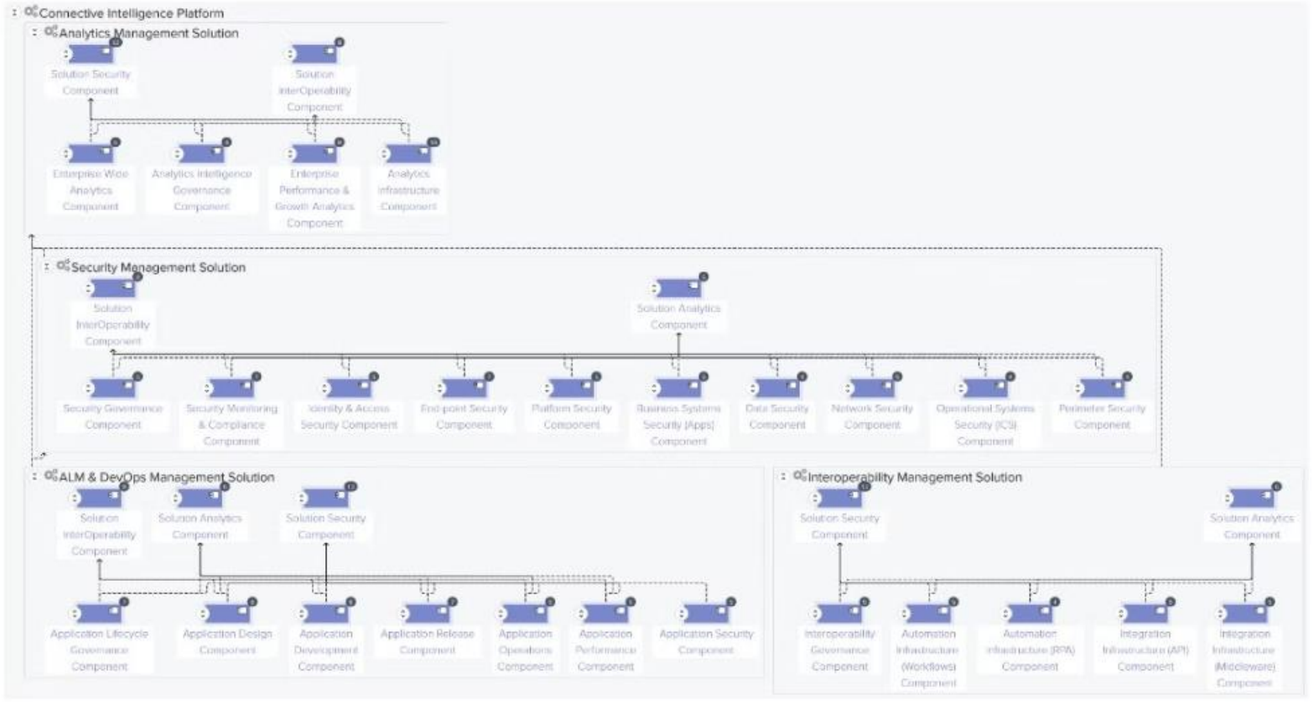
Digital Platforms (Modular Design)

Connective Intelligence (Conceptual)

MoI Platform: Tower.03 Connective Intelligence (Logical)

Tower 03 (Enablers | Connective Intelligence) focuses on **MoI's** ability to orchestrate services, processes and data across the organization to break operational silos and improve operational efficiency, guided by a logical model—a high-level design that outlines key services, interfaces and technology connections to guide and manage technology selection for the organisation.

Digital Platforms (Modular Design)



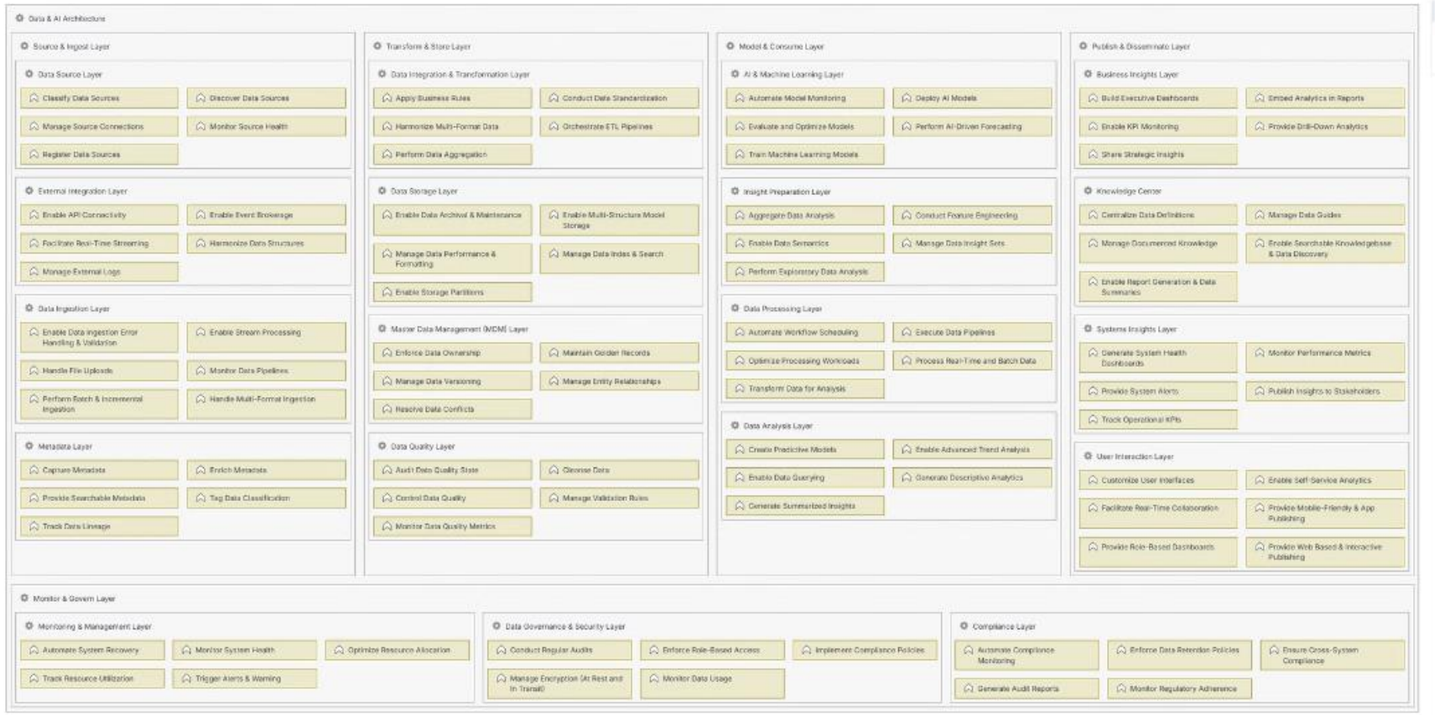
Connective Intelligence (Logical)

05. MoI INTELLIGENCE ARCHITECTURE (SOLUTIONS)

MoI Intelligence Solutions: Conceptual Architecture

This conceptual architecture provides a structured framework for MoI's intelligence operations, focusing on data lifecycle management and advanced analytics to support decision-making. It is designed to enhance operational efficiency, data quality, and insights across multiple layers.

Connective Intelligence (Conceptual Architecture)

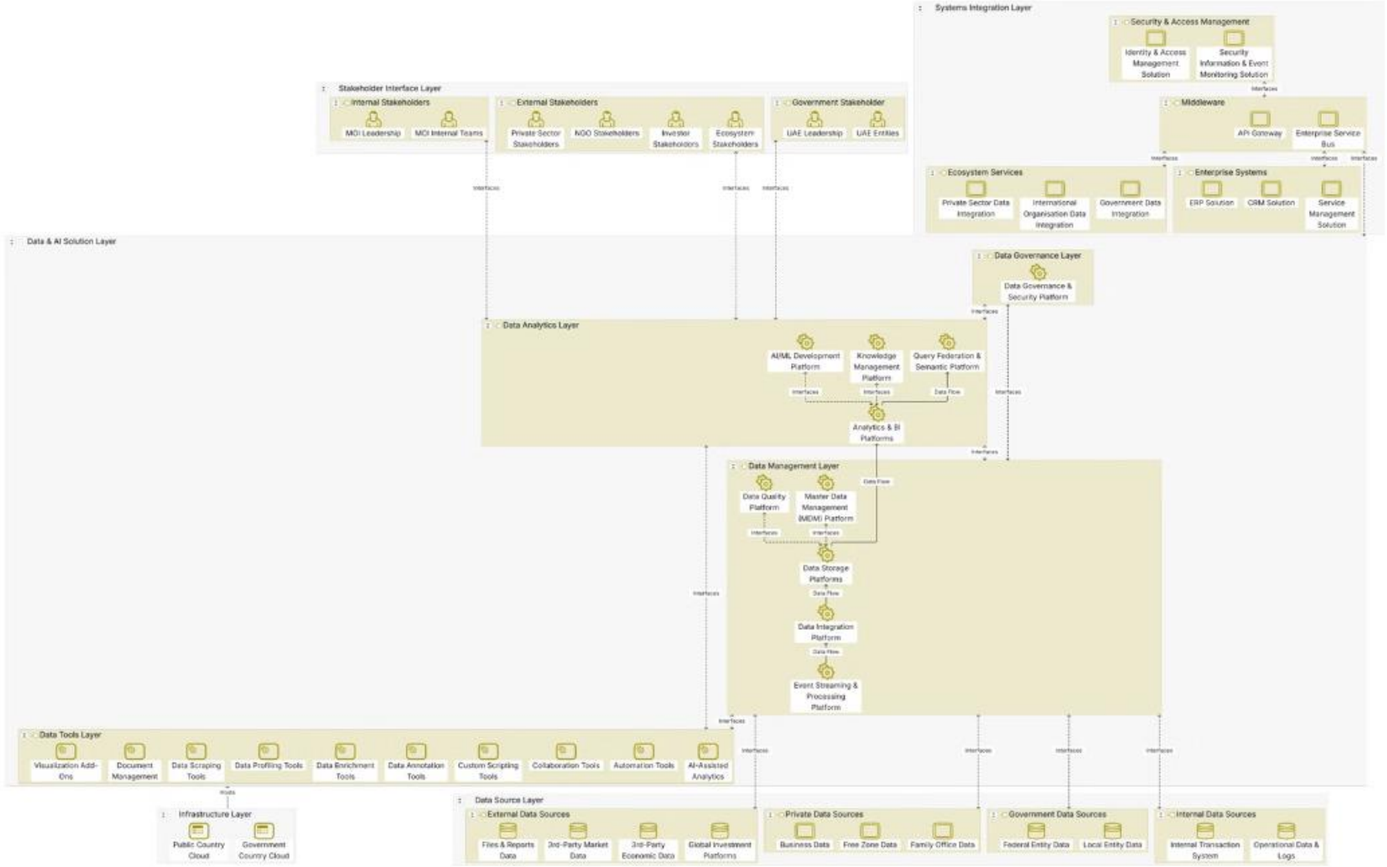


Intelligence Architecture: Conceptual

MoI Intelligence Solutions: Logical Architecture

This logical architecture outlines the structured flow of intelligence operations across distinct layers, providing clarity on system interactions and data management processes. This architecture enables MoI to deliver a unified, scalable, and secure intelligence ecosystem that supports advanced analytics and strategic decision-making

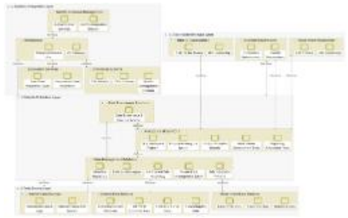
Connective Intelligence (Logical Architecture)



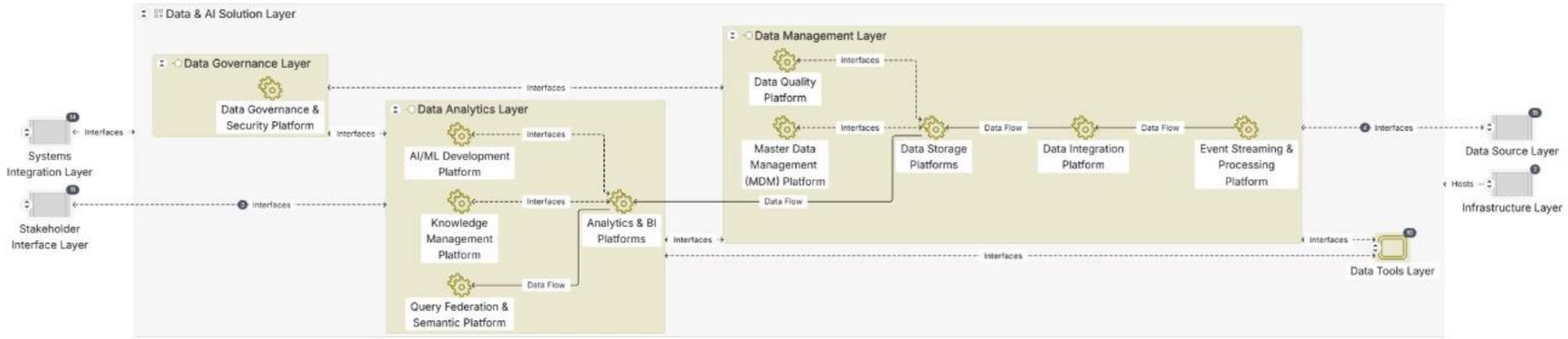
Intelligence Architecture: Logical

MoI Intelligence Solution: Core Solution Types

The logical architecture is further decomposed to identify the core solution types that will be used to automate the operations of the Intelligence department. Each of these solutions plays a crucial role in enhancing the intelligence capabilities of the MoI by facilitating efficient data management, analysis, and governance. Additionally, the logical architecture ensures interoperability and seamless integration between these solution types, enabling a cohesive and comprehensive intelligence ecosystem.



Logical Architecture



Intelligence Architecture: Solution Types

06. MoI INTELLIGENCE LANDSCAPE (SOLUTION SELECTION)

MoI.IO Solutions: Selection Approach (Process)

The solution selection process for MoI.IO was designed to identify optimal platforms and tools that align with the ministry's functional, technical, and operational needs. The approach leveraged a structured evaluation of capabilities, fitness criteria, and industry standards to ensure a robust, future-ready platform recommendation..

Step 01

Requirements Gathering

Identify functional and operational needs based on MoI.IO's conceptual architecture and mapped capabilities. Define key solution types and their alignment with ministry goals.

Step 02

Solution Identification

Shortlist potential solutions from recognized vendors based on industry-leading analyst reports (e.g., Gartner, Forrester) and local/regional hosting considerations.

Step 03

Fitness Assessment

Evaluate solutions against detailed fitness criteria, including Business Fitness, Architecture Fitness, CAPEX, and OPEX. Conduct a functional mapping to assess coverage of conceptual architecture functions.

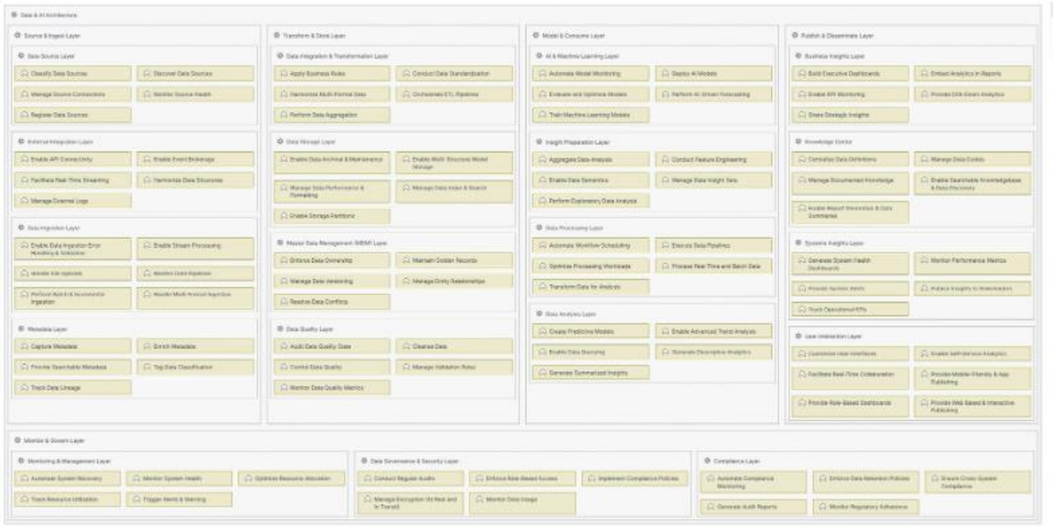
Step 04

Solution Recommendation

Generate a final recommendation based on the highest-rated solutions, balancing alignment with MoI.IO's needs, scalability, and regional compliance.

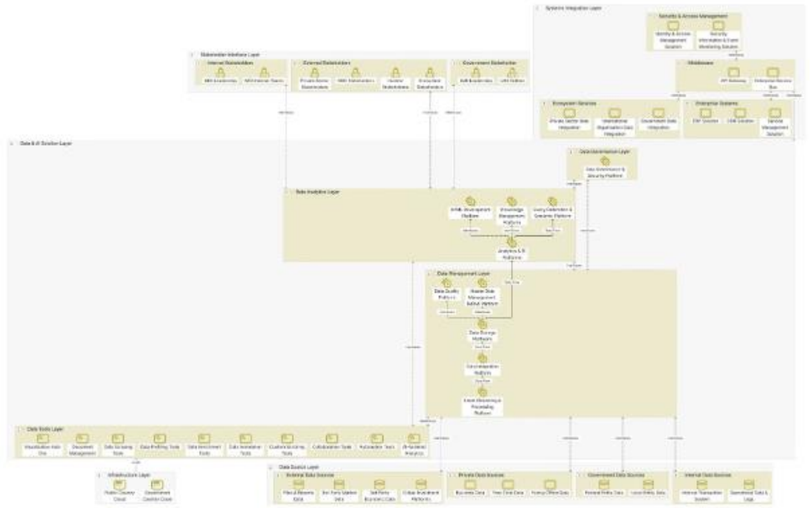
MoI.IO Solutions: Requirements Gathering

The requirement gathering process for MoI.IO was rooted in a structured approach that integrated the conceptual and logical architectures to ensure comprehensive alignment with organizational needs. This methodology facilitated a clear understanding of the functional, technical, and strategic requirements, laying the foundation for evaluating and selecting the most suitable solutions.



Data & AI Platform (Conceptual Architecture)

The conceptual architecture served as the high-level blueprint, outlining the key functions, layers, and components necessary for the MoI.IO platform.



Data & AI Platform (Logical Architecture)

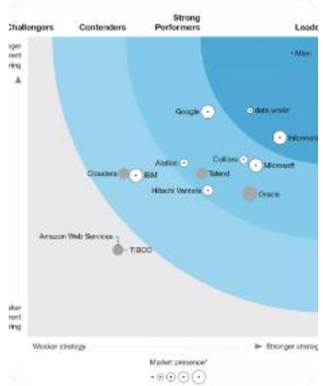
The logical architecture further detailed the functional requirements by mapping specific functions, workflows, and dependencies.

MoI.IO Solutions: Solution Identification (Market Leadership)

The Ministry of Investment prioritizes market-leading solutions by leveraging globally recognized evaluation frameworks and research. These frameworks ensure that selected solutions align with best practices, deliver proven value, and meet strategic objectives for intelligence operations. Each criterion reflects a commitment to robust analysis and informed decision-making.

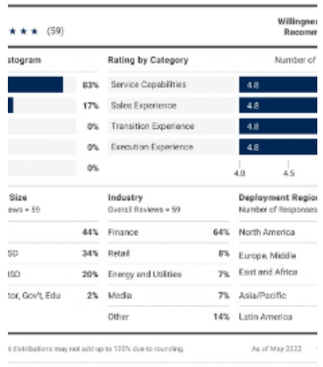
Gartner Magic Quadrant

Recognizes technology leaders based on execution capabilities and visionary strategies.



Forrester Wave

Ranks vendors by evaluating their functionality, strategy, and overall market influence.



Gartner Peer Review

Provides real-world user insights and satisfaction ratings for technology solutions.

Market Research

Identifies trends and innovations through comprehensive industry and market analysis.

MoI.IO Solutions: Solution Identification (Tiering)

The Ministry of Investment adopts a tiered approach to solution selection, ensuring alignment with operational diversity, scalability requirements, and compliance standards. Each tier is designed to cater to specific use cases, blending flexibility with robust governance.

Tier 1
(SaaS | Public Cloud)

- Hosted in the UAE
- Rapid scalability & cost efficiency
- Non-sensitive workloads

Tier 2
(SaaS | UAE Government Cloud)

- Hosted in the UAE
- Enhanced security & compliance
- Moderately sensitive workloads

Tier 3
(Self Hosted | Government Cloud)

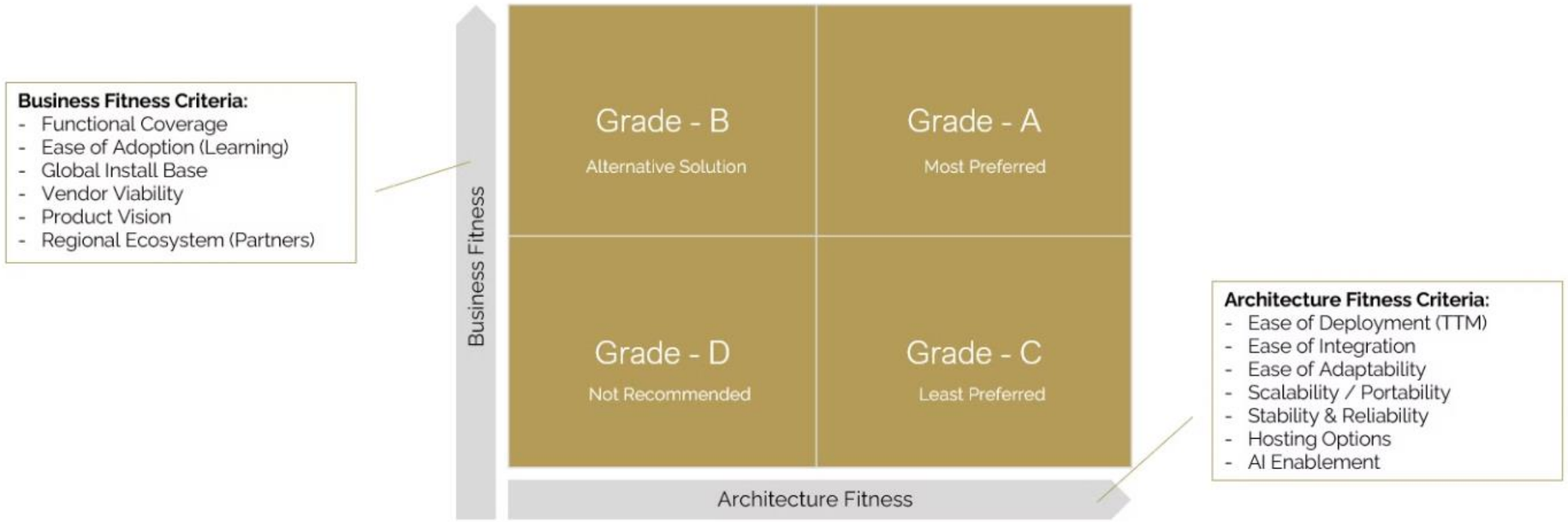
- Hosted in the UAE
- Full control of infrastructure
- Sensitive workloads

Tier 4
(Open Source | Government Cloud)

- Hosted in the UAE
- Flexible & interoperable
- Proof-of-concepts & innovation

MoI.IO Solutions: Fitness Assessment (Criteria)

The Rating criteria of the selected Vendors are based on the **Architectural Fitness (The Architectural stability of a system)** and **Business Fitness (The ability of a system to meet business needs)**. The solution is then classified in to a grading scale (Grade A, B, C or D) based on the combined architecture stability and business fitness scores. The classification helps identify the most preferred solution.



Solution Fitness Quadrant

MoI.IO Solutions: Solution Recommendation (Scenario)

To align with MoI.IO's strategic priorities, the solution recommendation process was divided into two distinct scenarios. Each scenario leverages a specific lens to evaluate the solutions, balancing objective performance metrics with contextual practicality. This dual approach ensures that recommendations are both data-driven and operationally feasible.

Scenario 01 - Criteria Led Solutioning

This approach focuses solely on the solution fitness assessment scores, using objective metrics such as architecture fitness, business fitness, and functional coverage to guide the recommendation. By relying on quantitative measures, this method ensures alignment with the predefined evaluation framework. However, it does not account for contextual nuances or the unique operational needs of MoI.IO, which could limit its effectiveness in addressing practical implementation challenges.

Scenario 02 - Strategic Practicality

This approach combines fitness assessment results with practical considerations such as alignment with MoI.IO's operational context, scalability within existing frameworks, ease of implementation, and vendor ecosystem compatibility. By integrating real-world factors into the decision-making process, this method provides a more balanced and forward-looking recommendation. It emphasizes the practicality of the solution, ensuring both immediate and long-term success for MoI.IO's digital transformation initiatives.

MoI.IO Solutions: Solution Recommendation (Scenario 01)

This scenario relies strictly on the results of the fitness assessment, prioritizing solutions that scored the highest based on architecture fitness, business fitness, and functional coverage. The recommended solutions for the MoI.IO platform have been carefully selected based on a comprehensive evaluation process, incorporating fitness scoring, market analysis, and functional coverage.

Fitness Assessment Quadrant

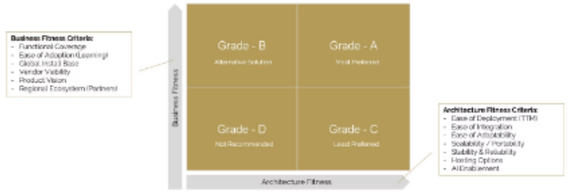
Scenario 01 (Criteria Led Solutioning) Result:

- Collibra (Data Governance Platform)
- Azure Machine Learning (AI / ML Platform)
- Snowflake (Query & Semantic Platform)
- Qlik Sense (Analytics & BI Platform)
- Microsoft Viva Topics (Knowledge Platform)
- Informatica Data Quality (Quality Platform)
- Informatica MDM (MDM Platform)
- Snowflake Data Cloud (Storage Platform)
- Talend Data Integration (integration Platform)
- Azure Stream Analytics (Stream Platform)

Fitness Assessment Result

MoI.IO Solutions: Solution Recommendation (Scenario 02)

This scenario is based on a combination of **fitness results** and **practical suitability** for streamlined implementation and operational excellence. This approach balances technical performance metrics with strategic considerations to ensure a robust, scalable, and cohesive ecosystem.



Fitness Assessment Quadrant

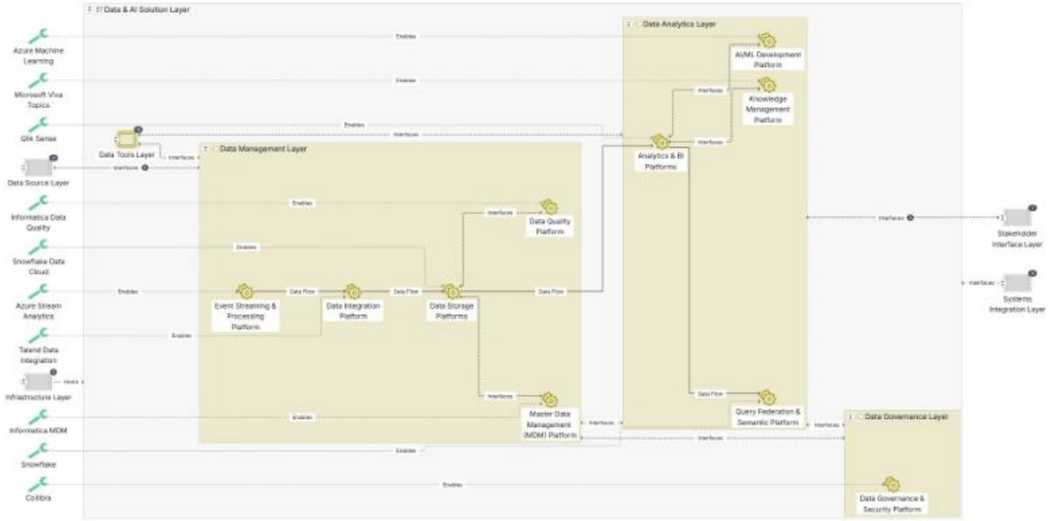
Scenario 02 (Strategic Practicality) Result:

- Microsoft Purview (Data Governance Platform)
- Azure Machine Learning (AI / ML Platform)
- Azure Synapse (Query & Semantic Platform)
- PowerBI (Analytics & BI Platform)
- Microsoft Viva Topics (Knowledge Platform)
- Informatica Data Quality (Quality Platform)
- Informatica MDM (MDM Platform)
- Azure Data Lake Storage (Storage Platform)
- Talend Data Integration (integration Platform)
- Azure Stream Analytics (Stream Platform)

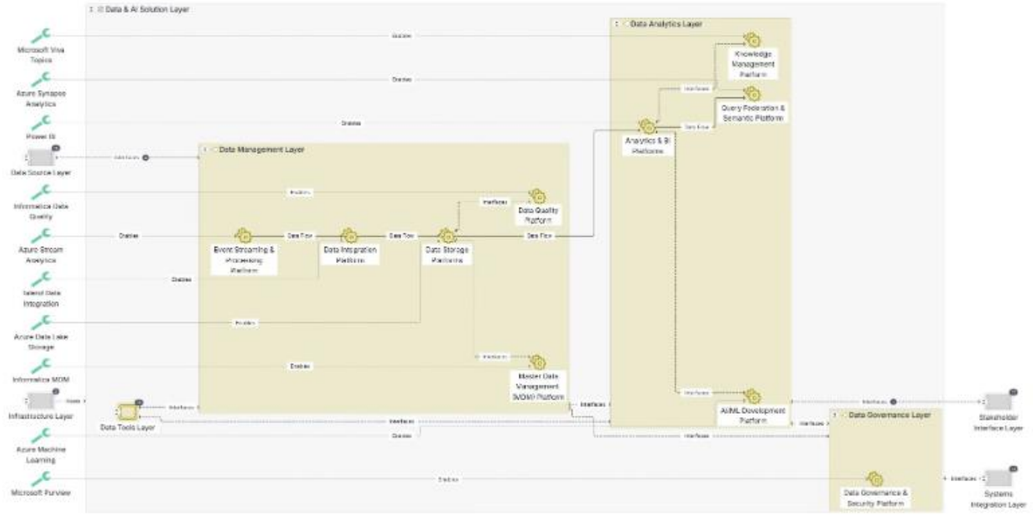
Fitness Assessment Result

MoI.IO Solutions: Solution Recommendation (Architecture)

While both scenarios leverage high-ranking solutions based on fitness assessments; Scenario 01 emphasizes purely on fitness metrics, offering a technically strong, but potentially fragmented architecture. Conversely, Scenario 02 prioritizes **interoperability**, **scalability**, and **operational efficiency**, selecting solutions that align with integration goals and support long-term adaptability. ***Recommendation: Scenario 02*** *is preferred for its balanced approach, delivering robust capabilities while reducing complexity and enhancing alignment with strategic objectives. This architecture ensures seamless collaboration, innovation, and value realization.*



Solution Architecture (Criteria Led Solutioning)



Solution Architecture (Strategic Practicality)

07. CONCLUSION

Target Architecture (Platform): Report Conclusion

The target architecture serves as the foundation for achieving the strategic vision by defining the systems, processes, and solutions required for success. It provides a clear framework to align operational capabilities with strategic objectives.

This architecture will guide the baseline assessment (Data Strategy - Report 5 | Baseline), identifying current capabilities and gaps. The insights gained will be instrumental in shaping a comprehensive roadmap (Data Strategy - Report 6 | Roadmap) that drives transformation, ensures alignment with organizational goals, and positions the Ministry for sustained innovation and growth.

END REPORT

Thank You