

kyndryl™

Data and AI Discovery Workshop for Azure Technologies

Microsoft & Kyndryl



Data and AI Discovery Workshop for Azure

Introduction

Purpose

This workshop helps develop **and improve clients' data architecture** leveraging Azure technologies. Over the course of 4 or 8 weeks, Kyndryl provides **in-depth analyses** and concrete **deliverables** to advise on the implementation of data & AI use cases, addressing data modernization and cloud migration strategies.

Furthermore, Kyndryl reviews clients' data architecture to **identify pain points** and propose advanced solutions such as **enterprise-grade** Data Fabric architecture for Azure.

This Data and AI workshop is for **any size company** that wants to improve their data strategy to **gain productivity**, better understand their customers and their business, and scale data & AI use cases throughout the enterprise.



Data and AI Discovery Workshop for Azure

Introduction

Why Kyndryl ?

Kyndryl Data and AI Discovery Workshop for Azure Technologies is the open and **collaborative experience** that's needed to solve today's complex real-world business problems. We love transforming ambiguous, **complex problems into elegant and modern solutions.**

Kyndryl takes customers on a journey **from problem definition to deliverable product.** Working side by side, we prototype promising ideas and examine them through multiple lenses to arrive at actionable plans.

When we converge on a solution, Kyndryl has the capabilities and scale to move smoothly into testing, execution, and measurement. And when we succeed? We don't stop—we start a new conversation and **find our next big idea together.**



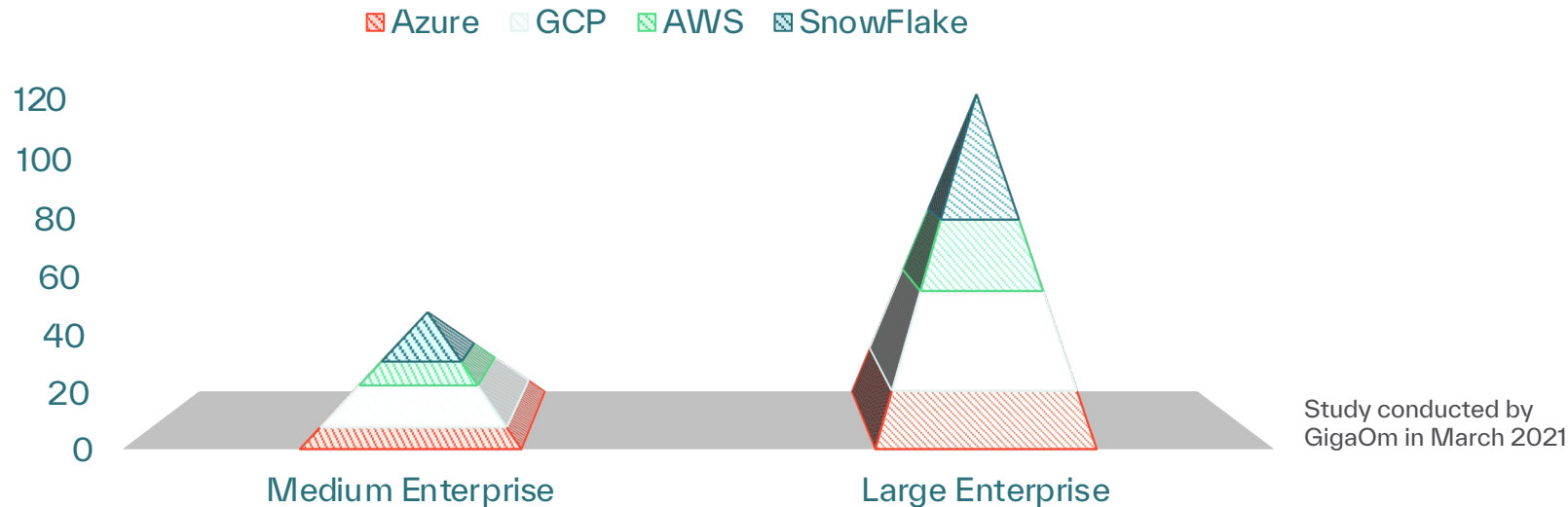
Data and AI Discovery Workshop for Azure

Introduction

Why Azure ?

Azure provides the **most comprehensive set of analytics** services from data ingestion to storage to data warehousing to machine learning and BI. Each of these services have been finely tuned to **provide industry leading performance**, security and ease of use, at unmatched value. In short, Azure has you covered. Implementing an end-to-end analytics solution in Azure **costs up to 59% less compared** to other providers.

PRICE PERFORMANCE COMPARISON FOR AN END-TO-END ANALYTICS SOLUTION



Data Assessment Agenda

Standard Version - 8 Weeks



Duration

1W

with client ~4H

2W

with client ~5H

3W

with client ~4H/UC

1W

with client ~2H

1W

with client ~3H

Deliverables

- Project Charter - Slide 7
- SMART - Slide 7

- Data Architecture State - Slide 8
- WBS - Slide 8

- UC prioritization - Slide 12
- Design Thinking (user experience)

- FinOps/AiOps
- Final Architecture - Slide 15

- List of KPI to validate the project - Slide 16

- Data Strategy per use case - Slide 7
- SWOT - Slide 7

- Gap Analysis - Slide 9
- Solution Assessment Table - Slide 10
- Design Thinking (new use cases discovery)

- State of the Art
- High-level blueprints - Slide 12

- Implementation Roadmap - Slide 16
- Allocation of Kyndryl human resources by use case - Slide 17

Data Assessment Agenda

Lite Version - 4 Weeks

Strategy
Vision



Current
State



Blueprints



Proposed
Architecture

Duration

2D

with client ~4H

1W

with client ~5H

2W

with client ~2H/UC

3D

with client ~3H

Deliverables

- Project Charter - Slide 7
- SWOT - Slide 7

- Data Strategy by use case - Slide 7

- Data Architecture State - Slide 8

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- High-level Blueprints - Slide 12

- List of KPI to validate the project - Slide 16

- Implementation Roadmap - Slide 16

Strategy & Vision

What caused the issues - Define these issues - What are the expected results ?

Who? Client: C-Levels & Data Managers – Kyndryl: Project Manager & Data Architect

01 Project Charter

It explains a project clearly and concisely

- Reasons for the project
- Objectives and constraints of the project
- Risks & Benefits of the project
- General overview of the budget
- Resources Pre-assigned

02 SMART & SWOT

Define a set of goals to provide a clear focus . They should be specific, measurable, relevant & time-bound.

SWOT is a technique used to help an organization identify their strengths, weaknesses, opportunities and threats related to competition or projects. And to design an effective strategy for the future.

03 Data Strategy by use cases

Define the use cases that the client wishes to develop and ensure that the scope is clearly defined. Identify areas for improvement.

Use Case	How	Why	Expectation	Requirement
Create a health score for each customer	Collect logs, messages, metadata ... related to each customer. To train an ML model that can predict churn.	It costs 10x more to find a new customer than to keep one.	Increase revenue, Increase customer happiness...	Connect to new data sources, On premise, Multilingual solution, Data stored in EU

Understand Current State

What's the current data architecture in production ?

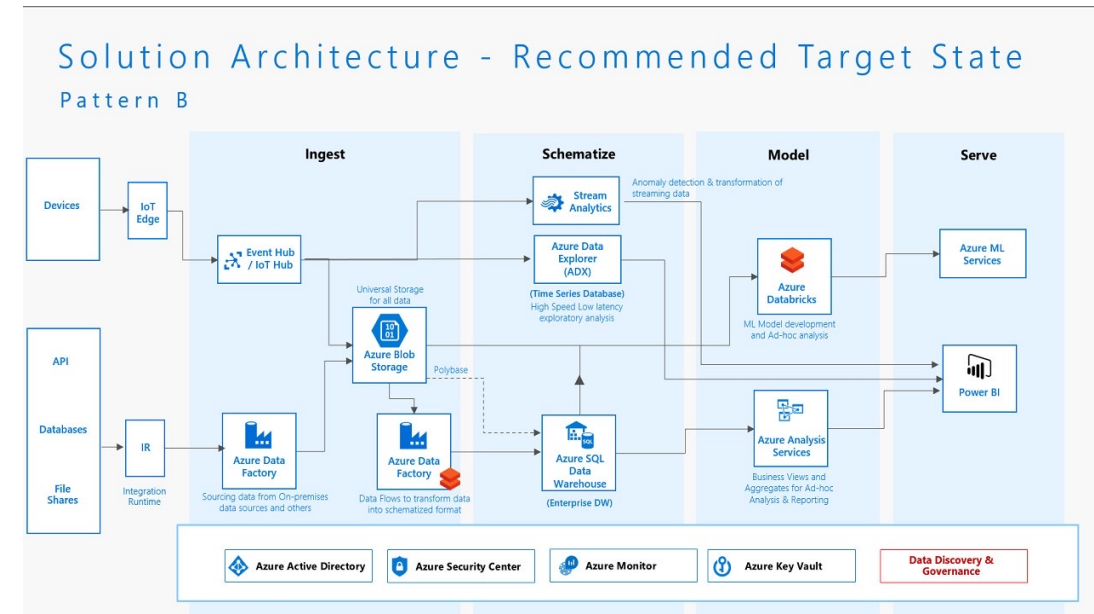
Who? Client: Data Managers (BI-ML-DWH ...) & End Users - Kyndryl: Project Manager, Data Architect & Senior Data Scientist

01 Workshop Agenda

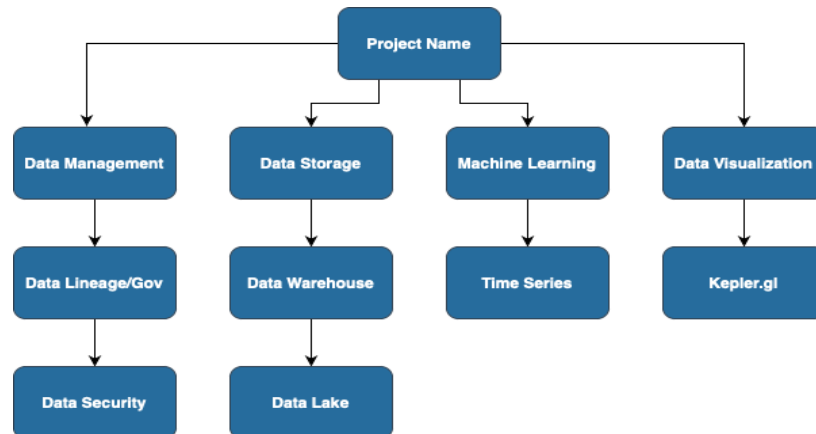
Early Data Adoption	Advanced Data Adoption
Presentation of relevant use cases	Core Data Services
Core Data Services & Ancillary Data Services	Ancillary Data Services
Bi & Machine Learning	BI
Summary & next steps	Machine Learning
	Summary & next steps

02 Data Architecture State

We illustrate in an accurate and simple way how the architecture is working. Pain points are detected



03 Work Breakdown Structure



Understand Current State

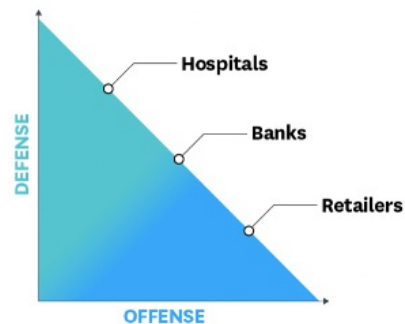
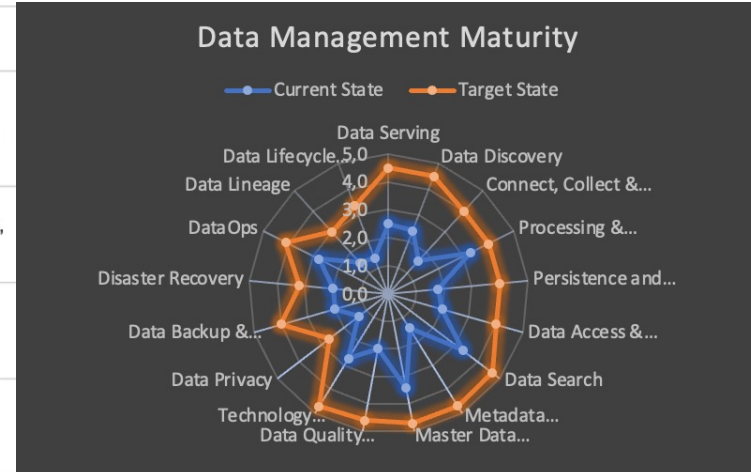
What's the current data architecture in production ?

Who? Client: Data Managers (BI-ML-DWH ...) & End Users - Kyndryl: Project Manager, Data Architect & Senior Data Scientist

01 Architecture Maturity Assessment

Depending on the type of business, we need to find a balance between security and flexibility that suits the business needs. The maturity model shows where we need to improve to successfully implement the solution.

	DEFENSE	OFFENSE
KEY OBJECTIVES	Ensure data security, privacy, integrity, quality, regulatory compliance, and governance	Improve competitive position and profitability
CORE ACTIVITIES	Optimize data extraction, standardization, storage, and access	Optimize data analytics, modeling, visualization, transformation, and enrichment
DATA-MANAGEMENT ORIENTATION	Control	Flexibility
ENABLING ARCHITECTURE	SSOT (Single source of truth)	MVOTs (Multiple versions of the truth)



Understand Current State

What's the current data architecture in production ?

Who? Client: Data Managers (BI-ML-DWH ...) & End Users - Kyndryl: Project Manager, Data Architect & Senior Data Scientist

01

Solution Assessment Table

For each use cases, we'll develop a solution assessment table. This deliverable will identify the key constraints / deliverables / resources for a specific use case.

This step is a continuation of the "Data strategy by use case" deliverable.

Furthermore, we will ensure that the project will create relevant business value for our client and modernize his architecture.

Solution	Enhance Data Storage Management
Owner	Data Warehouse Manager
Use case	The amount of data is increasing and slowing down the entire architecture
How	Implement Elastic with Azure to distribute data and increase the speed of data harvesting
Key deliverables	<ul style="list-style-type: none">Identify and assess the data storage architectureBuild a PoC if necessaryCreate architecture blueprints and identify the number of cluster/node/shard/replica needed
Constraints	<ul style="list-style-type: none">The owner has multiple data repositories
Key resources	<ul style="list-style-type: none">Data EngineersAzure Cloud
Business Value	<ul style="list-style-type: none">Customers will navigate faster on the application: Less churn

Develop Use Cases

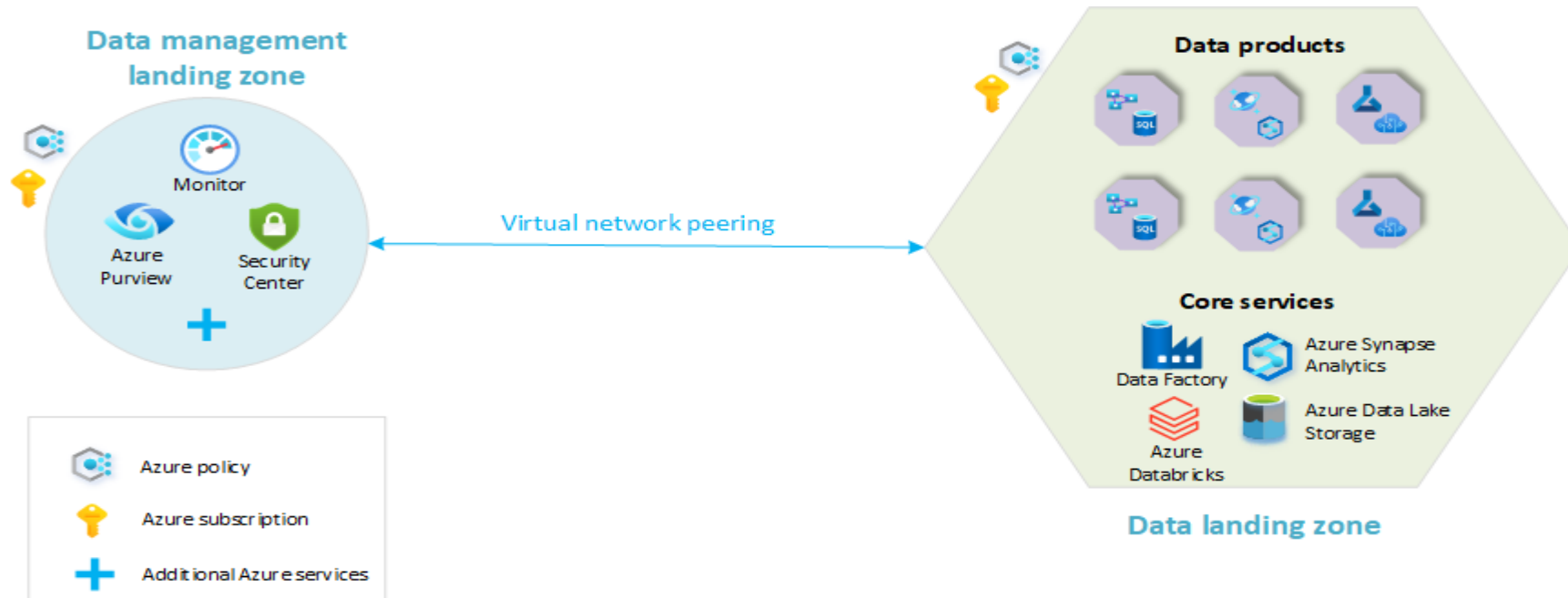
Create first blueprints

Who? Client: Data Team & End Users - Kyndryl: Project managers, Data Architect, Data Engineer & Senior Data Scientist

01 Data Mesh

Unlike a centralized data architecture where all the data of the departments are stored on a handful of systems. The Data Mesh principle decentralizes data management by creating an architecture specific to each Data Domain. A Data Domain represents a department of a company (delivery, marketing, sales, finance ...).

This create more flexibility in the processes / Reduces processing, request time, time-to-market / Each practice can use the products that correspond to it the most / Reconciles data ingestion with its sources, formats, and volumes / Harvest data where it resides, instead of making multiple copies / Data is managed by the people who know the product best.



Improve Blueprints

Link each blueprint to show how each data layer will work together.

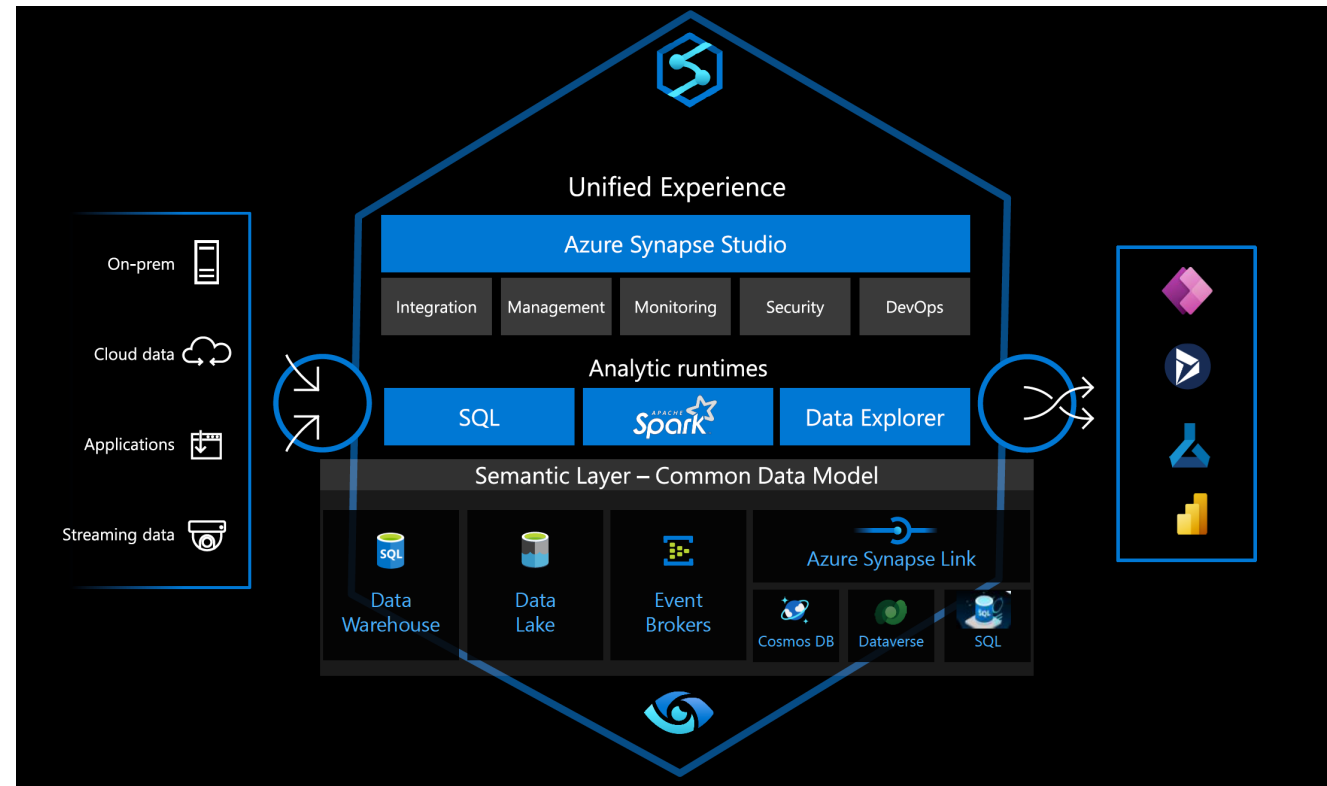
Who? Client: Data Managers - Kyndryl: Project managers, Data Architect, Data Engineer & Senior Data Scientist

01 Create an End-to-End Solution

Let's assume that a C-level needs a detailed report on sales performances. Typically, this would require the data engineer to invest considerable time to locate this piece of information. They might also need the assistance of a partner to extract it. Sounds like a time-consuming, expensive & exhaustive proposition!

But Synapse & Purview can make this easy! The platform offers the flexibility to query data on-demand, using dedicated options and serverless – at scale. Therefore, you can quickly ingest the data, transform and query it using SQL. Azure Analytics is up to **380% faster than other cloud providers.**

Purview's data lineage, discovery, and metadata management will help us **discover the right data** to build the sales report



Improve Blueprints

Link each blueprint to show how each data layer will work together.

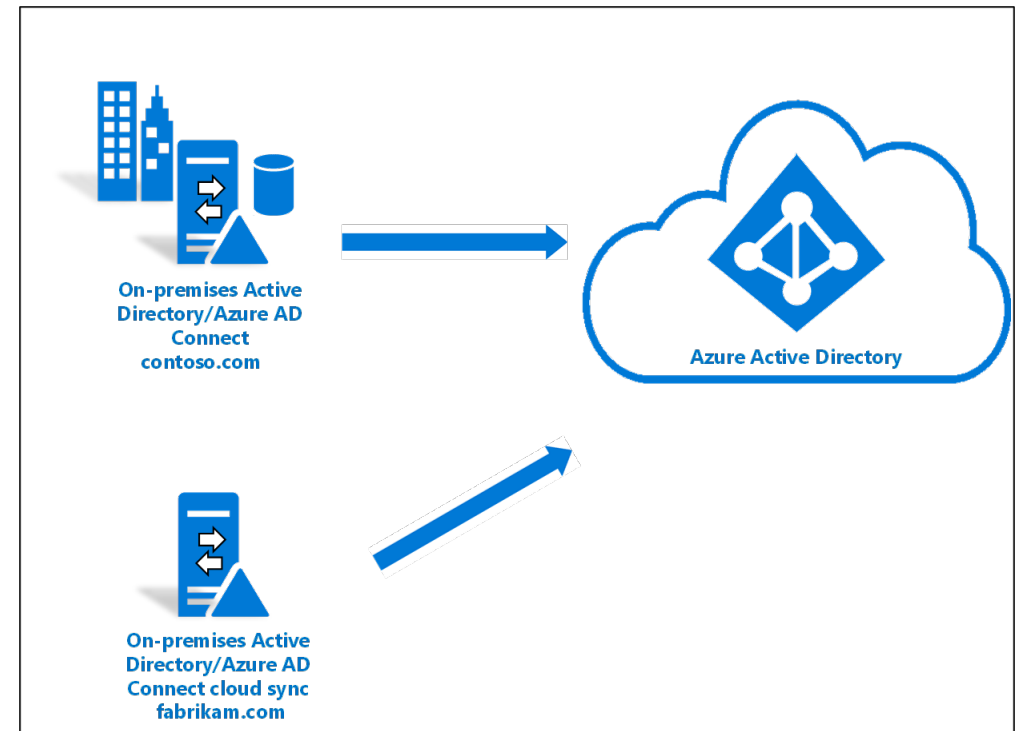
Who? Client: Data Managers - Kyndryl: Project managers, Data Architect, Data Engineer & Senior Data Scientist

01 Microsoft 365

Microsoft 365 and Azure offer an excellent way to increase efficiency in the workplace when used together. Microsoft 365 provides the applications to support your day-to-day office tasks. You can gather data stored in places such as OneDrive, SharePoint, Exchange mailbox, and more directly into the cloud to gain insights on your company.

You can classify and protect documents and emails by applying labels. These labels also make your document easy to find.

You can monitor your Microsoft 365 environment activities for suspicious sign-ins, unusual activities performed by existing users, and unexpected changes made using machine learning to analyze the behavior of users and applications in your organization's network. That, in turn, helps you detect potential attacks by malicious users.



Improve Blueprints

Link each blueprint to show how each data layer will work together.

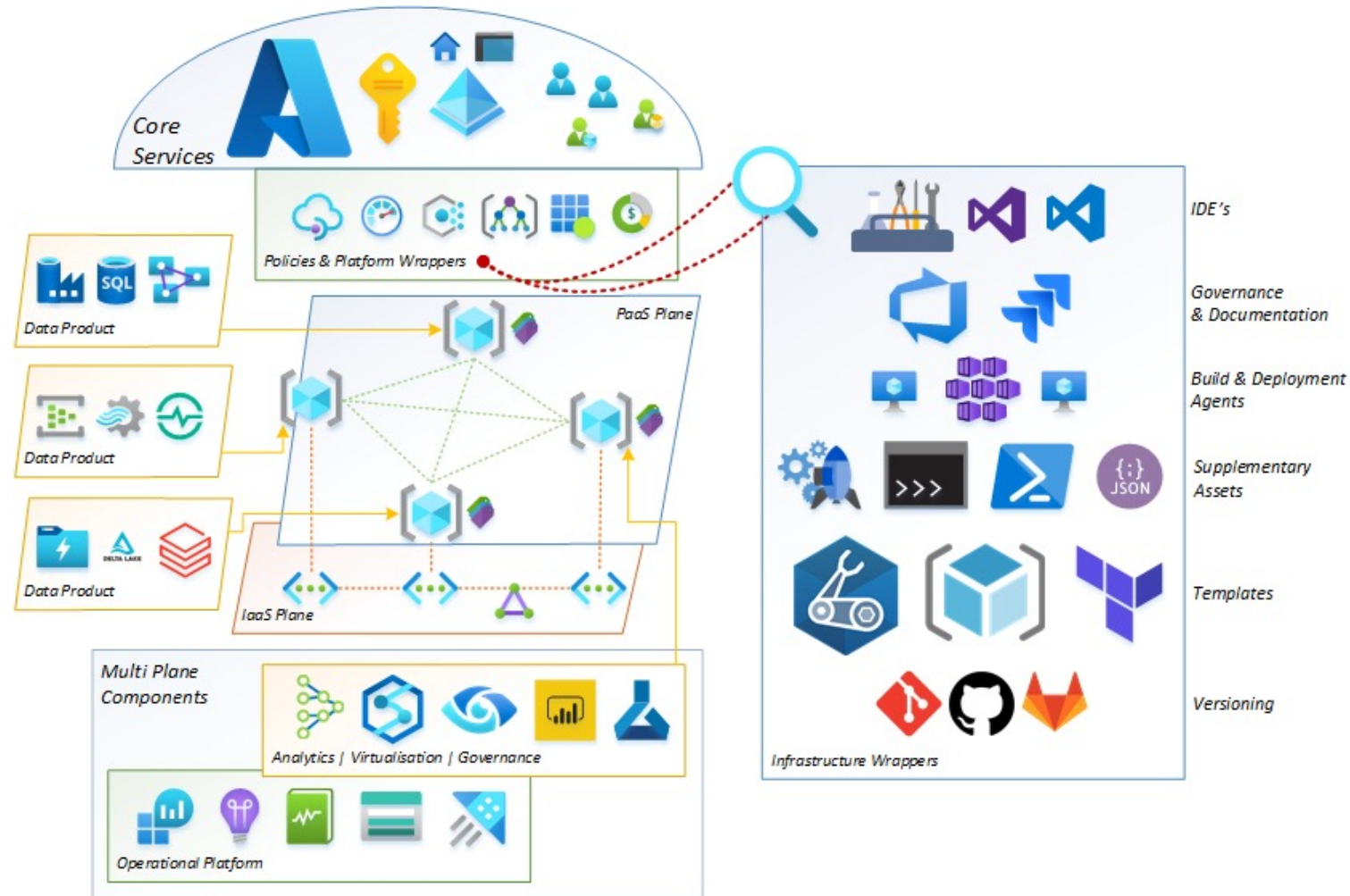
Who? Client: Data Managers - Kyndryl: Project managers, Data Architect, Data Engineer & Senior Data Scientist

01 Final Blueprint

Detail each high-level blueprint. Merge all the blueprints created as one to connect each layer:

- Source
- Ingest
- Store
- Process
- Analyze
- Consume

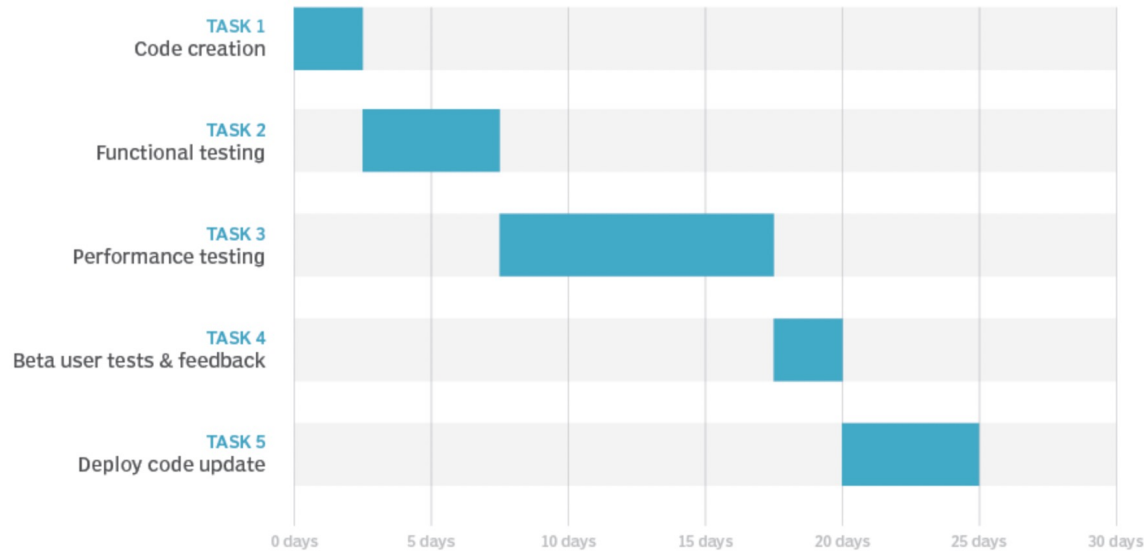
Put each use case in their mesh.



Proposed Architecture

Who? Client: C-Levels & Data Managers – Kyndryl: Project Manager & Data Architect

01 Implementation Roadmap



Implementation roadmap for the creation of the solutions with detailed costs, migration plans, and milestones.

Each step of your data modernization will be explained to provide a clear picture of what to expect.

02 KPI List

KPI	Threshold
Sentiment Analysis - F1	80%
Nbr of transactions/min	1K
Nbr of Backups	2

Develop a list KPIs, to create a common agreement on the performance our solutions should achieve.

Global Overview – Schedule & Pricing



● Blueprints - 1W ● Current State - 2W ● Proposed Architecture - ... ● Strategy and Vision - 1W ● Uses Cases - 3W

Standard Version – 8 Weeks – 43K €



● Blueprints - 2W ● Current State - 1W ● Proposed Architecture - ... ● Strategy and Vision - 2D

Lite Version – 4 Weeks – 25K €

Global Overview – Human Resources

For each use case, those trades will be fully or partially assigned as needed.

01

Project Manager Senior

For each phase of the data assessment workshop

04

Data Engineer

For the technical phases of the data assessment workshop

02

Data Architect Senior

For each phase of the data assessment workshop

05

Data Viz & Business Analyst

To support the work of the Data Scientist and Engineer with visualizations

03

Data Scientist Senior

For the technical phases of the data assessment workshop