



MAKE BI 2024

Microsoft Data Analytics – latest News and Trends



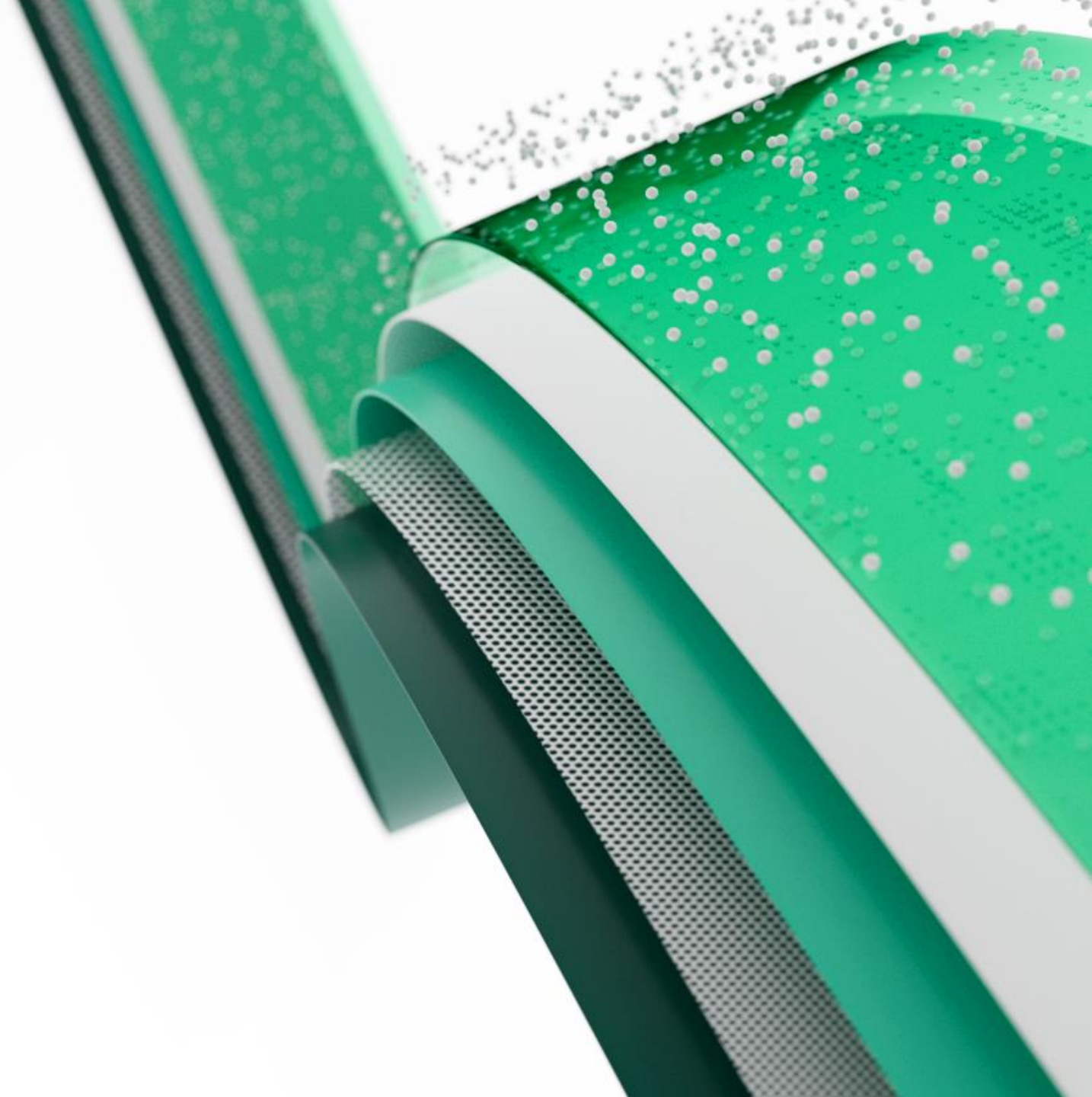
Microsoft

Microsoft Fabric



Kristian Bubalo

Cloud Solution Architect Data & AI
Microsoft Switzerland



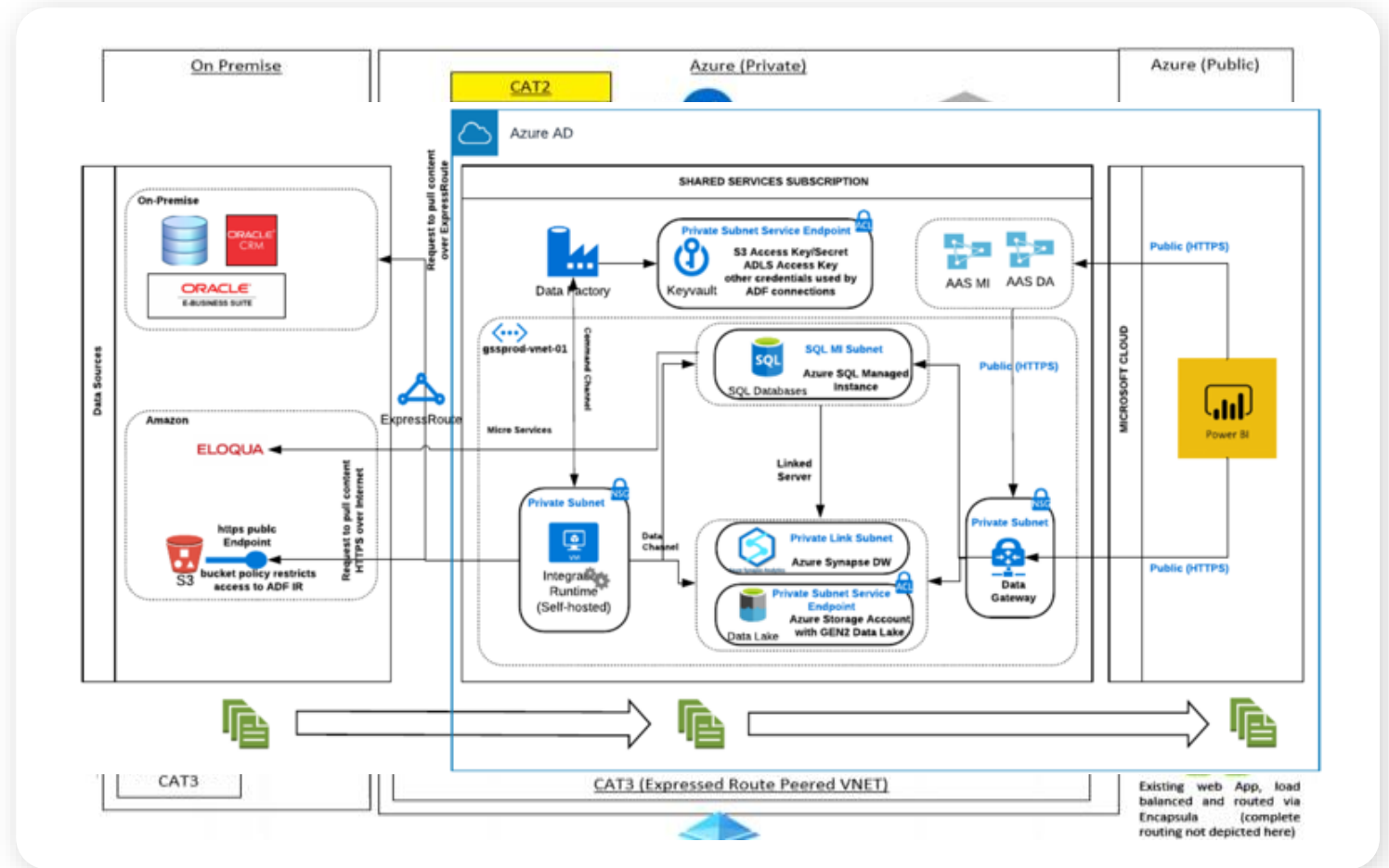
Analytics is complex and fragmented

Every project has many subsystems

Every subsystem need a different class of product

Products often comes from multiple vendors

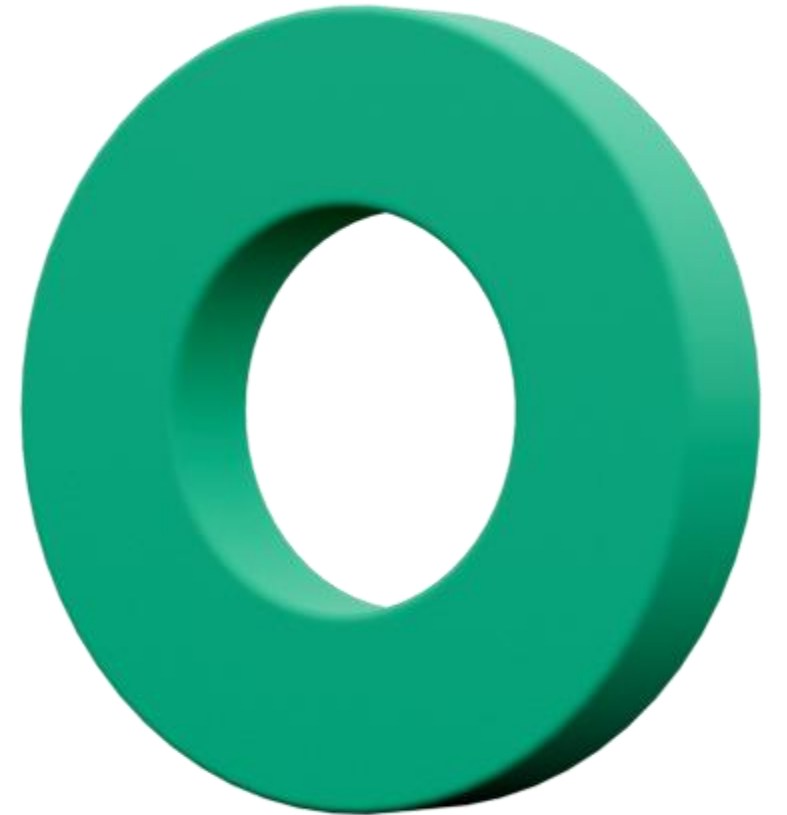
Integration is complex, fragile and expensive



// Simplify,

I am the Chief Data Officer
and don't want to be the
Chief Integration Officer.”

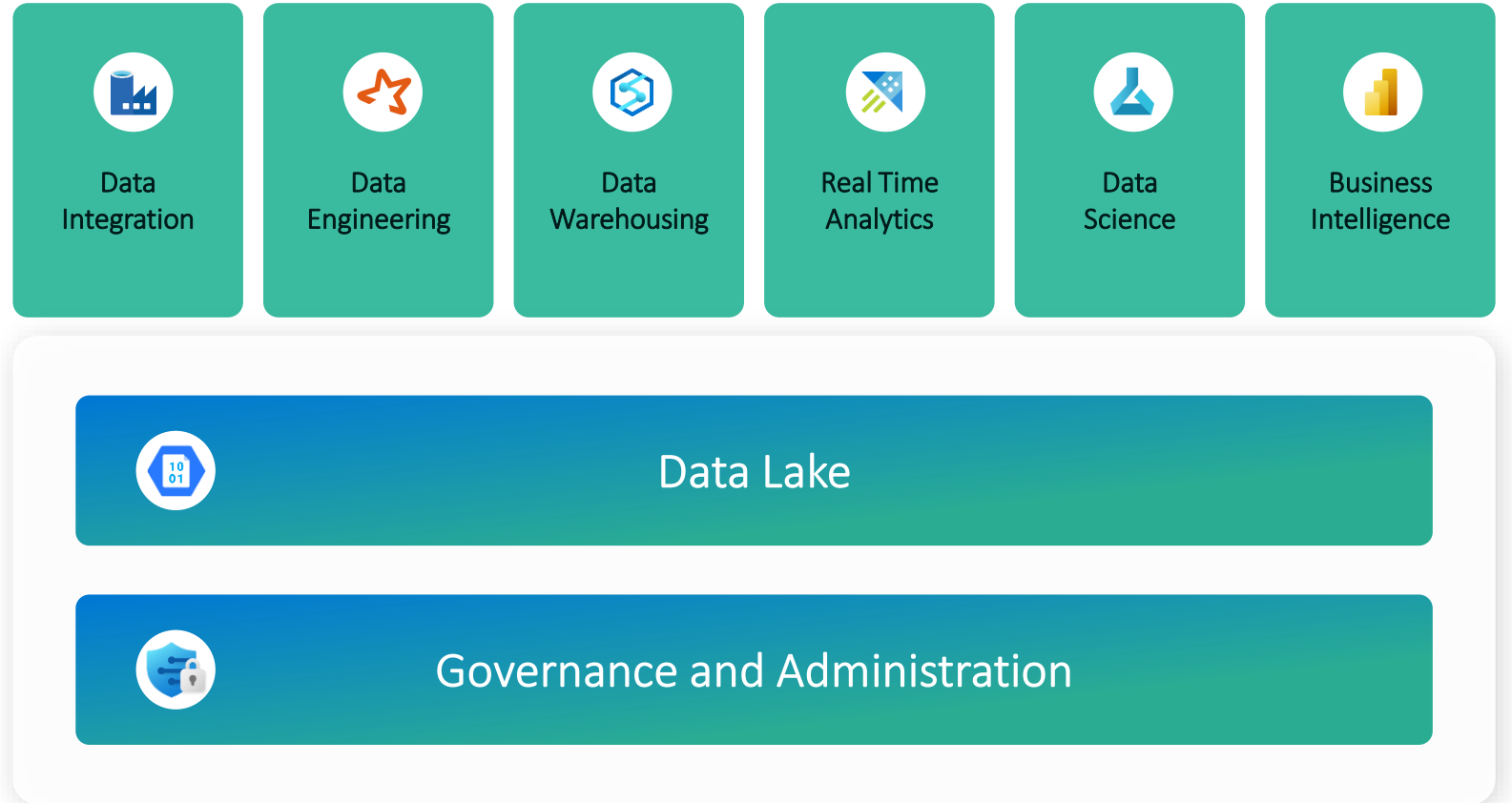
– Every CDO, Every Enterprise



A silver lining?

Analytics has very predictable patterns

Microsoft has all the products with the right scale needed to build a complete analytics system



Still far too complex

Many Products

Different Experiences

Proprietary and Open

Dedicated and Serverless

PaaS and SaaS

Different Business Models

Steep Learning Curves

Deep Expertise Needed

High Integration Effort



Purview



Power BI



Kusto



Data Factory



Azure AI



Synapse DW



Synapse Spark

Announcing



Microsoft Fabric

The data platform for the era of AI



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The data platform for the era of AI

Complete Analytics Platform



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The data platform for the era of AI

Complete Analytics
Platform

Lake Centric
and Open



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Lake Centric
and Open

Empower Every
Business User



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Complete
Analytics Platform

Lake Centric and
Open

Empower Every
Business User

AI
Powered



Microsoft Fabric

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Complete Analytics Platform

Everything, unified

SaaS-ified

Secured and governed

Lake centric and open

OneLake

One Copy

Open at every tier

Empower Every Business User

Familiar and intuitive

Built into Microsoft 365

Insight to action

AI Powered

Copilot accelerated

ChatGPT on your data

AI driven insights



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The unified data platform for the era of AI



Data
Factory



Synapse Data
Engineering



Synapse Data
Science



Synapse Data
Warehousing



Synapse Real
Time Analytics



Power BI



Data Activator



OneLake



Microsoft Fabric



Data
Factory



Synapse Data
Engineering



Synapse Data
Science



Synapse Data
Warehousing



Synapse Real
Time Analytics



Power BI



Data
Activator

AI Assisted

Shared Workspaces

Universal Compute Capacities

OneSecurity



OneLake

Intelligent data foundation

Single...

Onboarding and trials

Sign-on

Navigation model

UX model

Workspace organization

Collaboration experience

Data Lake

Storage format

Data copy for all engines

Security model

CI/CD

Monitoring hub

Data hub

Governance & compliance



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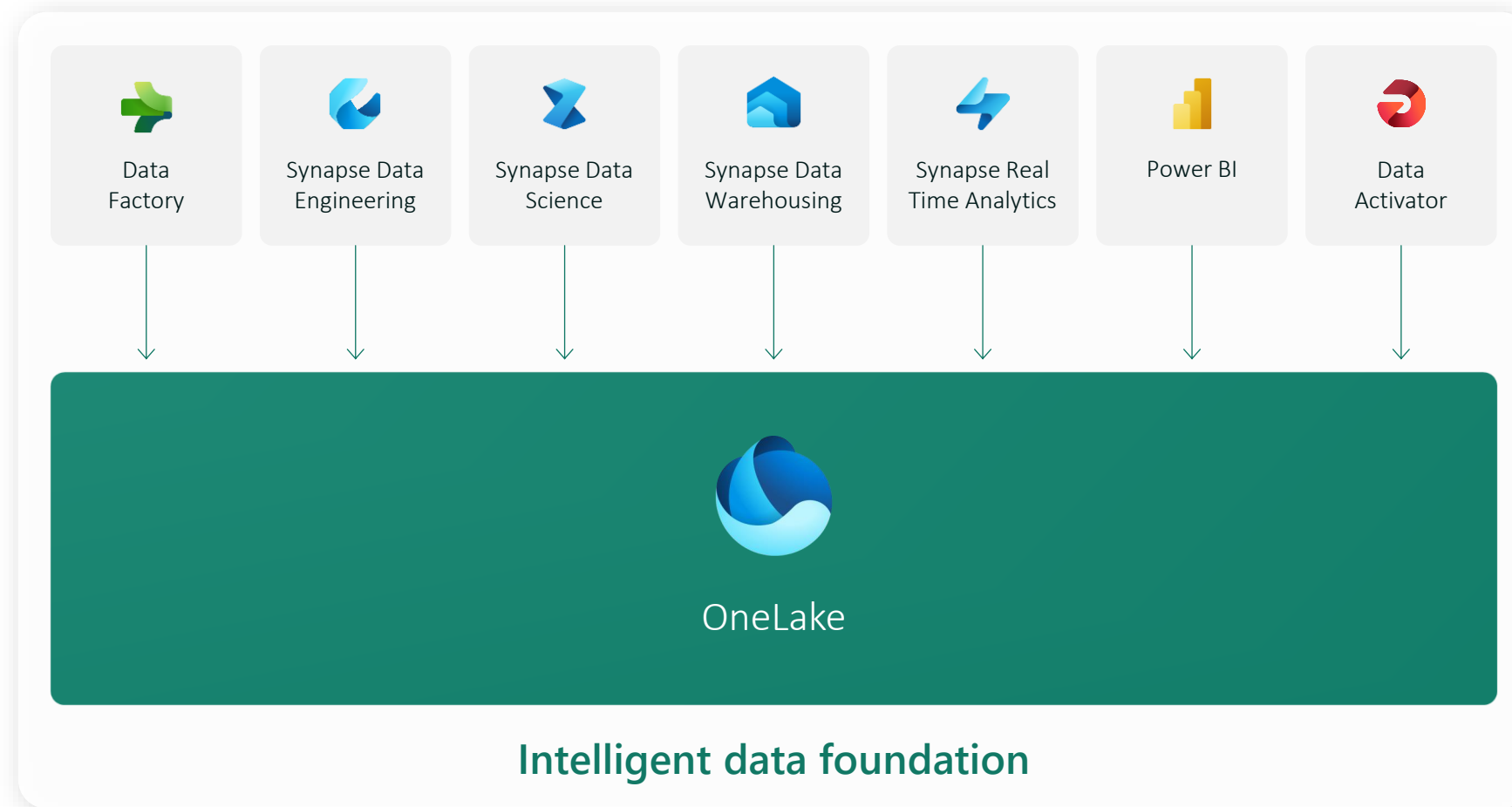
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OneLake for all Data

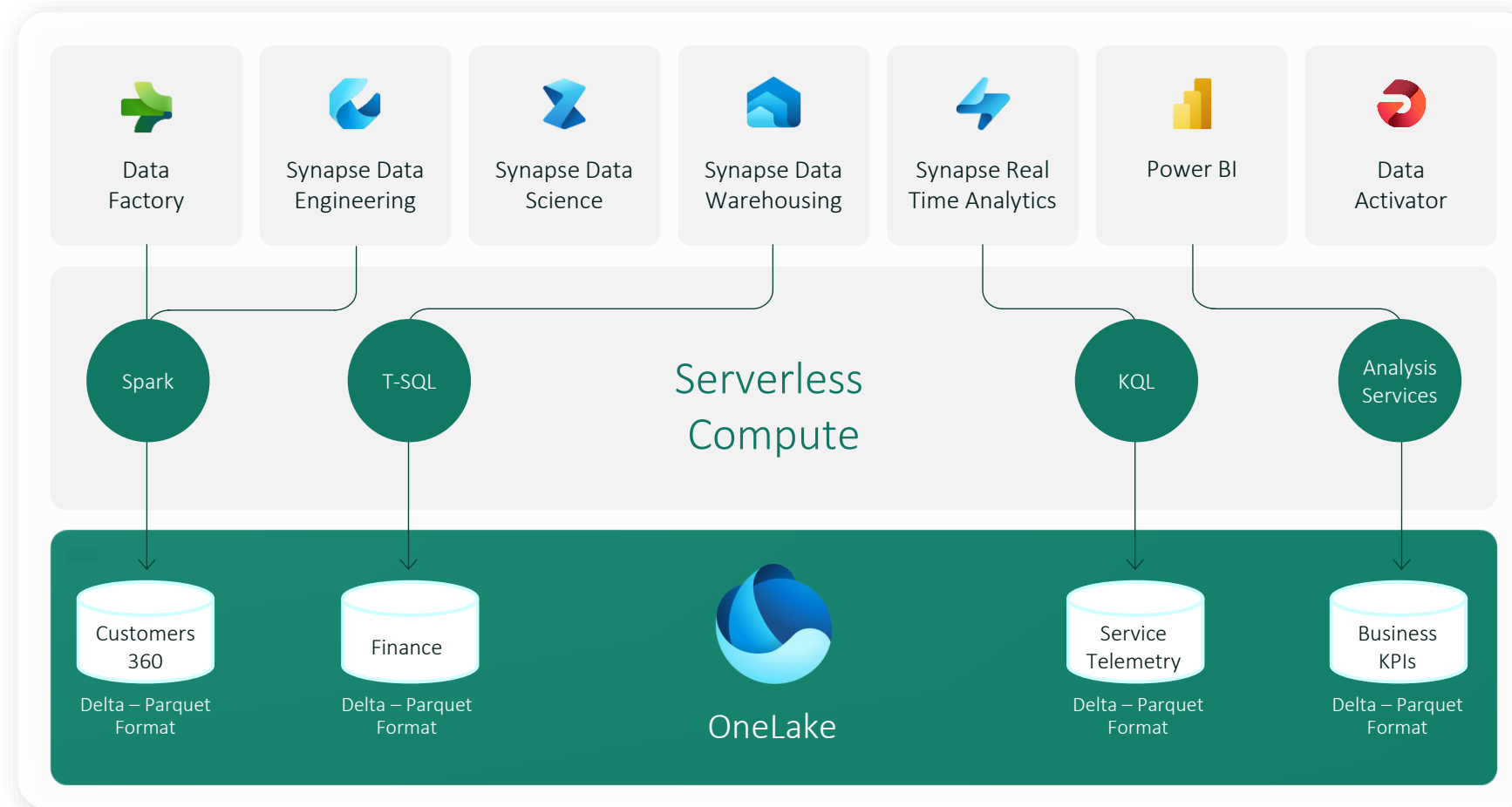
“The OneDrive for Data”



- A single SaaS lake for the whole organization
- Provisioned automatically with the tenant
- All workloads automatically store their data in the OneLake workspace folders
- All the data is organized in an intuitive hierarchical namespace
- The data in OneLake is automatically indexed for discovery, MIP labels, lineage, PII scans, sharing, governance and compliance

One Copy for all computes

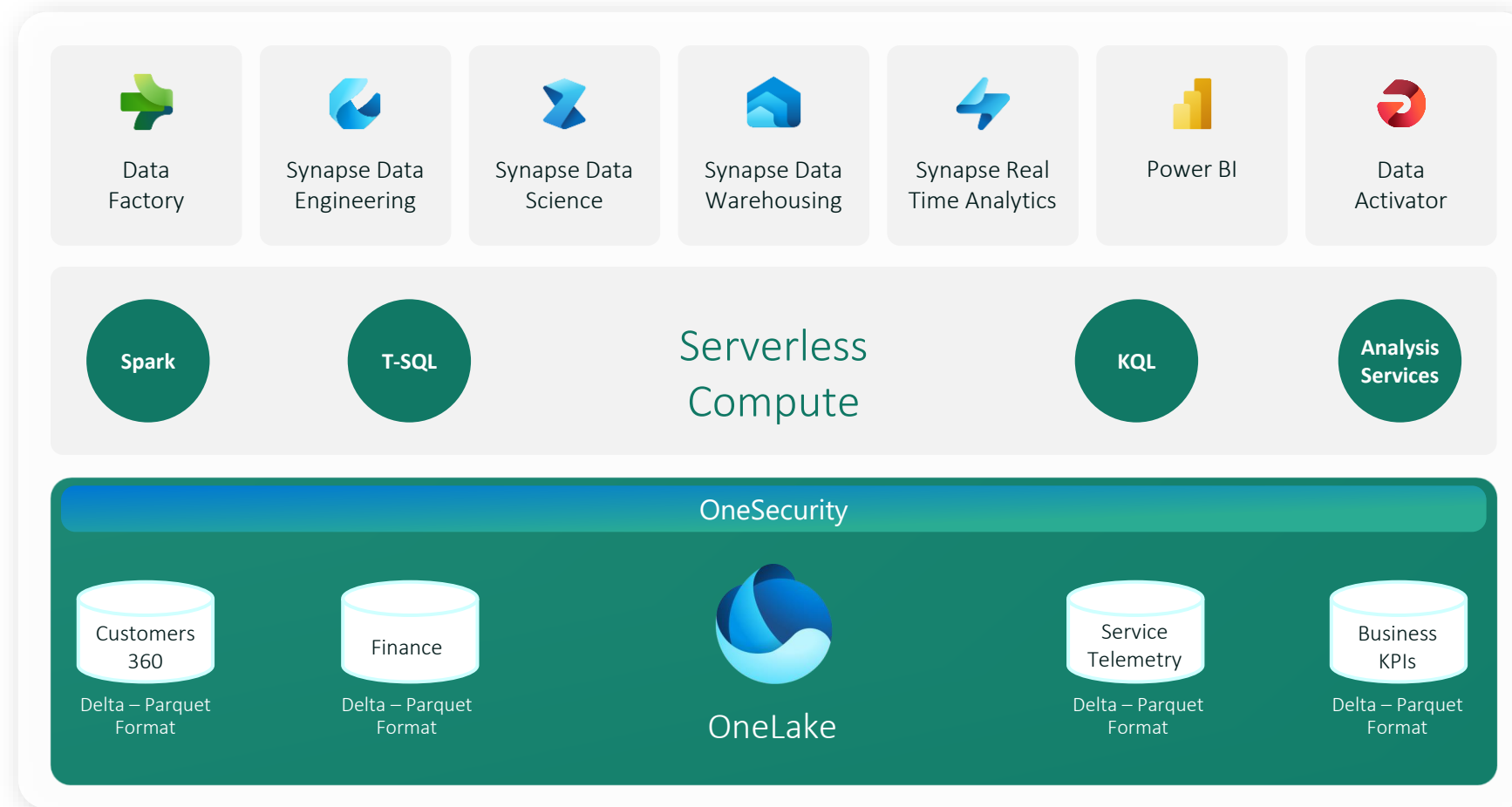
Real separation of compute and storage



- All the compute engines store their data automatically in OneLake
- The data is stored in a single common format
- Delta – Parquet, an open standards format, is the storage format for all tabular data in Analytics vNext
- Once data is stored in the lake, it is directly accessible by all the engines without needing any import/export
- All the compute engines have been fully optimized to work with Delta Parquet as their native format
- Shared universal security model is enforced across all the engines

One Copy for all computes

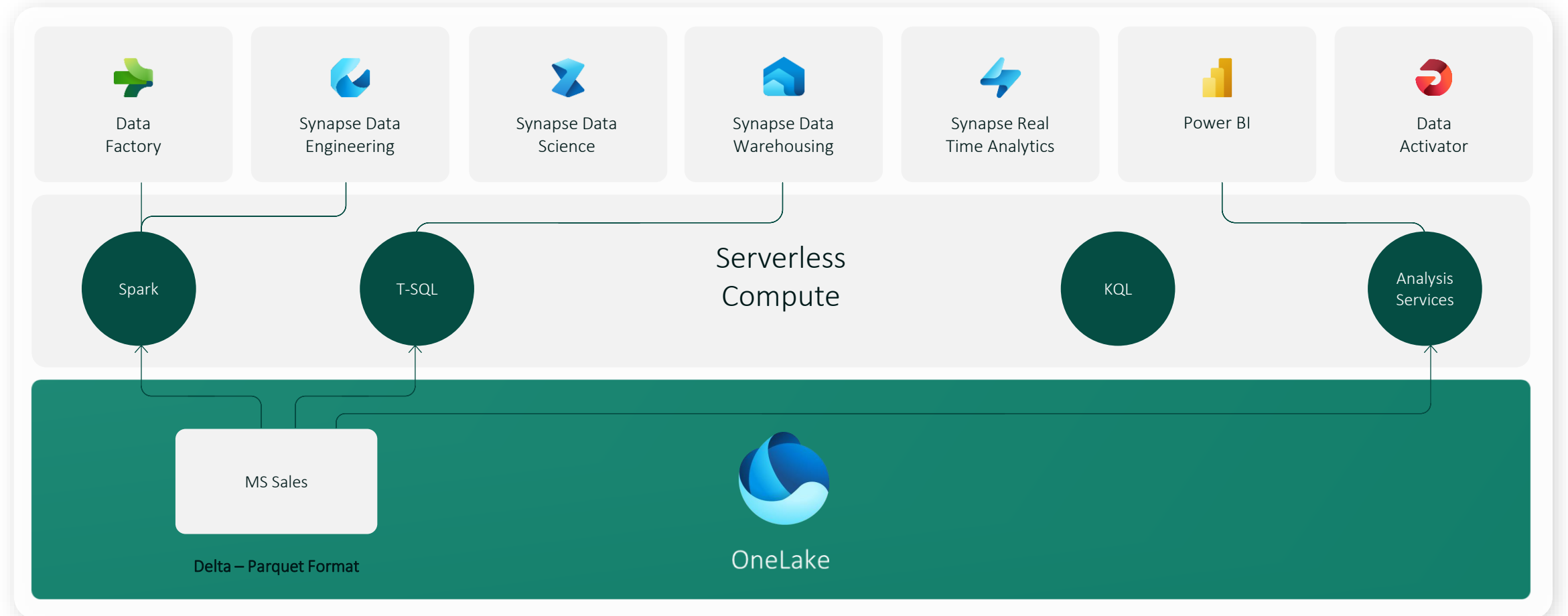
Universal security makes it real



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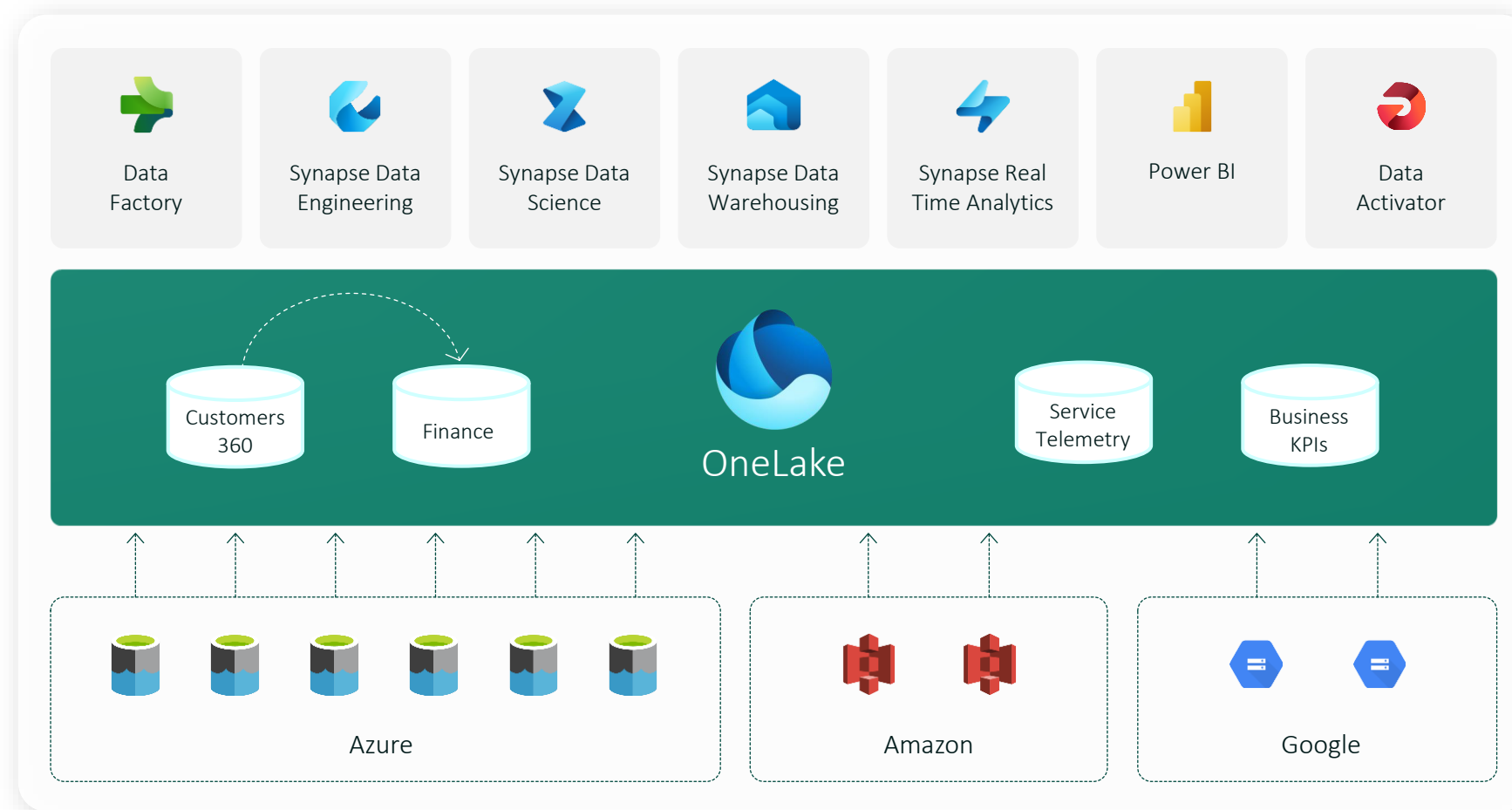
One Copy for all computes

Using the Lakehouse



Taking One Copy to the Next Level

Shortcuts



Sharing data in OneLake is as easy as sharing files in OneDrive, removing the needs for data duplication

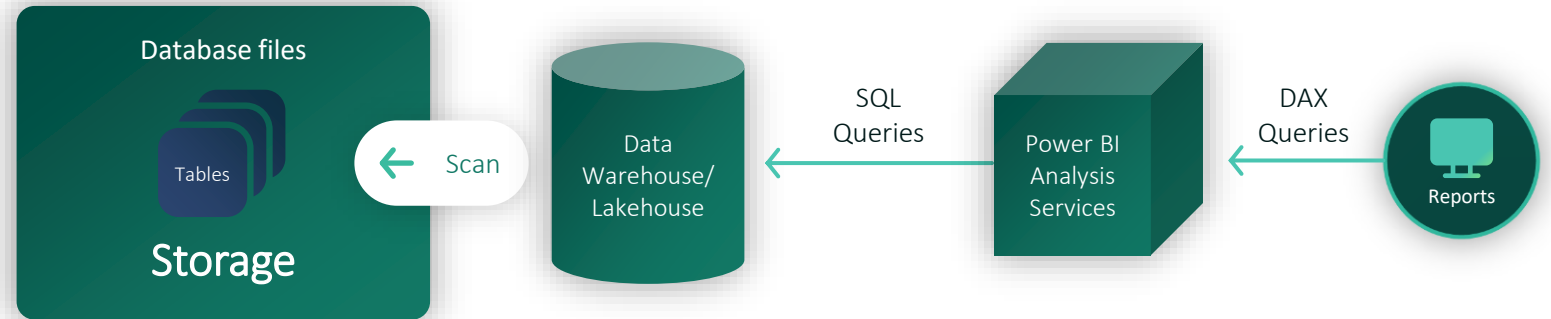
With [shortcuts](#), data throughout OneLake can be composed together without any data movement

Shortcuts also allow instant linking of data already existing in Azure and in other clouds, without any data duplication and movement, making OneLake the first multi-cloud data lake

With support for industry standard APIs, OneLake data can be directly accessed by any application or service

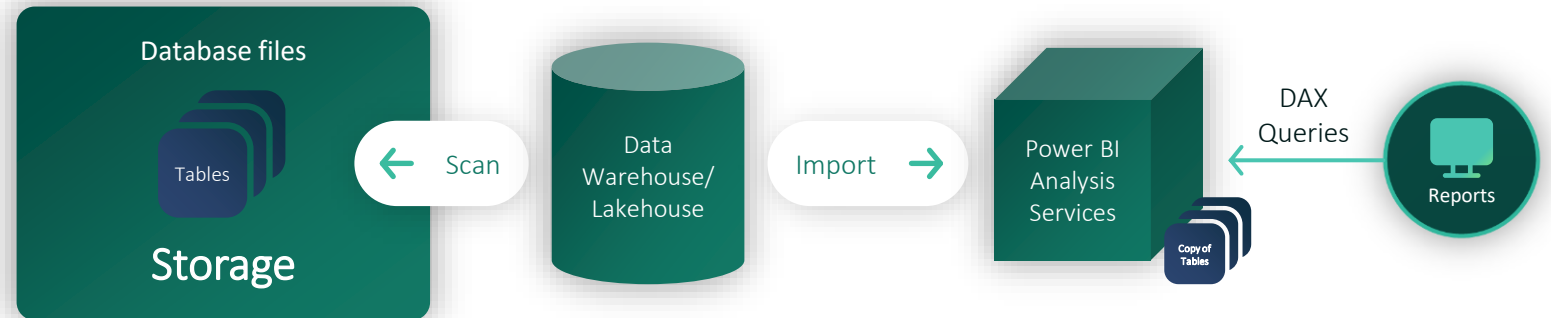
“Direct Query Mode”

Slow, but real time



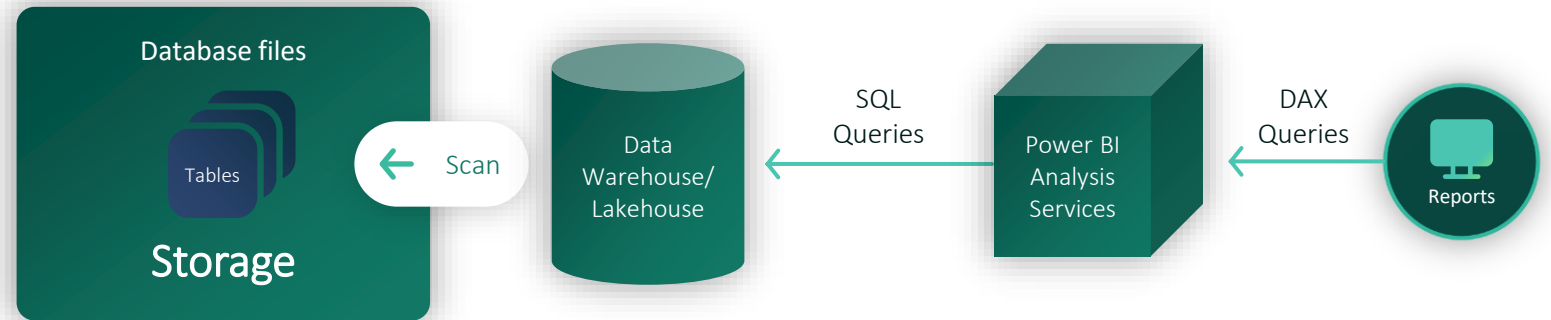
“Import Mode”

Latent & duplicative but fast



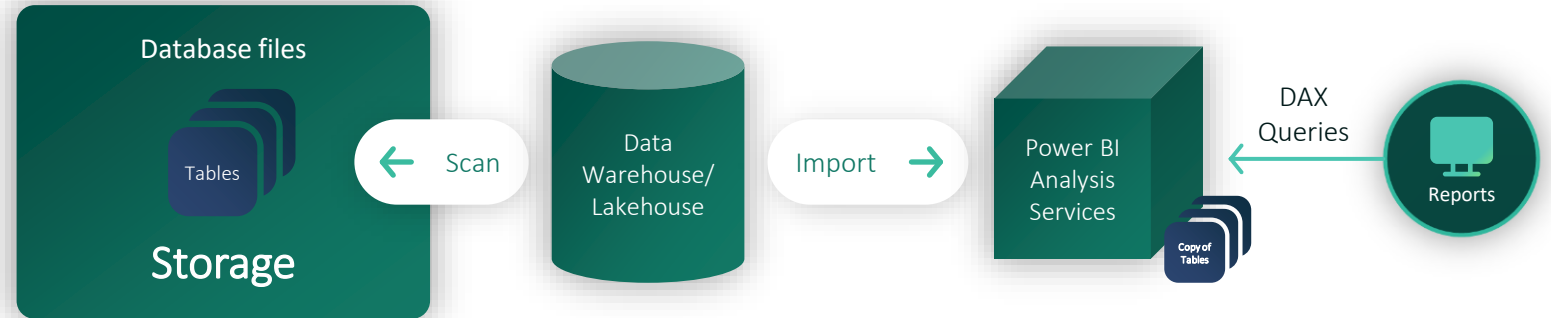
“Direct Query Mode”

Slow, but real time



“Import Mode”

Latent & duplicative but fast



“Direct Lake Mode”

Perfect!





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AI driven insights

- Activity
- Chat 40
- Teams 1
- Calls 1
- Files
- Approvals
- Calendar
- Power BI (...
- ...
- Apps
- Help

+ New report ☰

Good evening, Patrick

Find and share actionable insights to make data-driven decisions

Recommended

- You frequently open this**
Power BI
- You favorited this**
2021 - TeamsNotificationUsage
- Will Thompson (HE/HIM) featured this**
COVID Bakeoff
- Mohammad Ali opened this**
Intelligence Platform LT Dashboard
- You frequently open this**
Workforce Planning

Recent In Teams Favorites My apps From external orgs

Filter

Name	Type	Opened	Location	Endorsement	Sensitivity
Sales Pipeline 🔒	Report	39 seconds ago	Contoso Sales Excellence	—	Confidential\Microsoft Extended ⓘ
Goals Usage(Kusto)	Report	9 days ago	Goals	—	Confidential\Microsoft FTE ⓘ
Workforce Demographics (Demo Mid)	Report	12 days ago	My workspace	—	General ⓘ
Goals usage - Client events - Feature usage	Report	13 days ago	Goals usage metrics	—	Confidential\Microsoft FTE ⓘ
Workforce Hiring Summary	Report	14 days ago	My workspace	—	General ⓘ
My workspace	Workspace	14 days ago	Workspaces	—	—



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Announcing AI Skill (Public Preview)

AI Skill

- Make Data more accessible using GenAI to answer questions on your data
- Configure the answers of AI Skill
 - An AI skill can often provide out-of-the-box answers to reasonable questions, but it could provide incorrect answers for your specific situation. Incorrect answers typically occur because the AI is missing context about your company, setup, or definition of key terms.
- Useful links
 - Introducing AI Skill
<https://blog.fabric.microsoft.com/de-ch/blog/introducing-ai-skills-in-microsoft-fabric-now-in-public-preview>
 - AI Skill using Sample Data
<https://learn.microsoft.com/en-us/fabric/data-science/ai-skill-scenario>
 - AI Skill Documentation
<https://learn.microsoft.com/en-us/fabric/data-science/concept-ai-skill>

**And how does Azure Synapse
fit into this?**

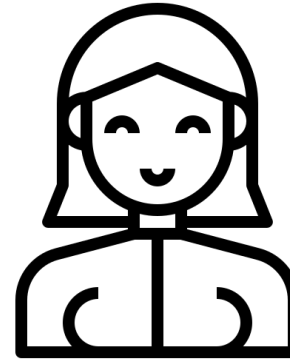
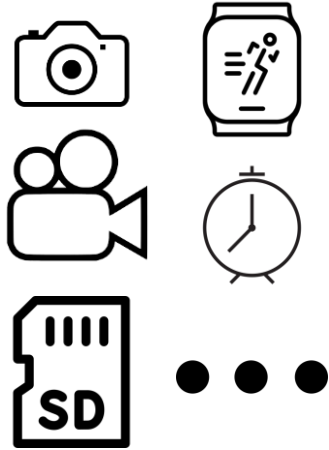
Azure Synapse

With Microsoft Fabric

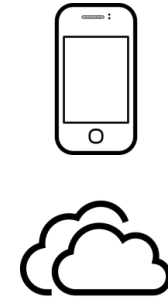
- Microsoft has no current plans to retire Azure Synapse
- If in future we change our plans, [Modern Lifecycle Policy](#) applies
 - Microsoft will provide a minimum of 12 months' notification prior to ending support
- Your existing solutions will keep working
- <https://blog.fabric.microsoft.com/en-us/blog/microsoft-fabric-explained-for-existing-synapse-users>



John



Lucy




Data
Factory



Synapse Data
Engineering



Synapse Data
Warehouse



Synapse Data
Science



Synapse Real
Time Analytics



Power BI



Data
Activator

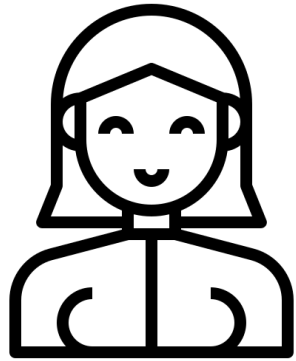
And what about Databricks?



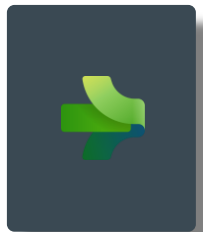
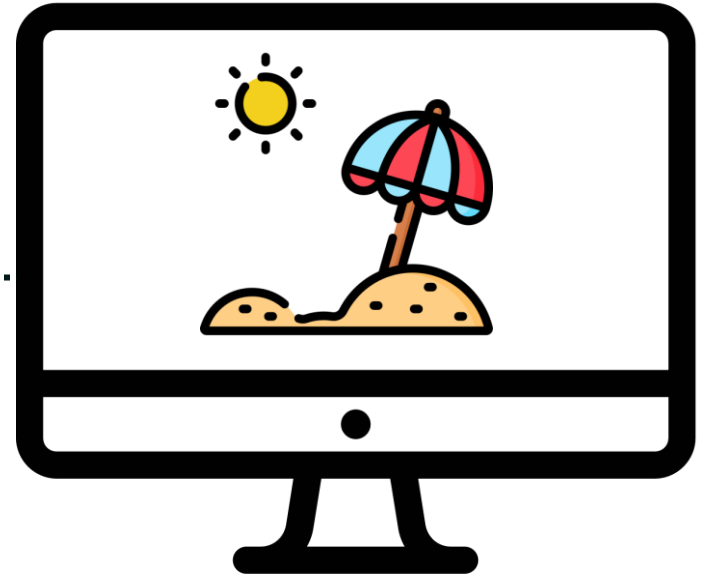
Microsoft



databricks



Lucy



**And what if a feature is missing in
Microsoft Fabric?**

Thank You!

<https://aka.ms/FabricGuy>

<https://aka.ms/FabricGuyBlog>



This is
my
thank you
dance!

