



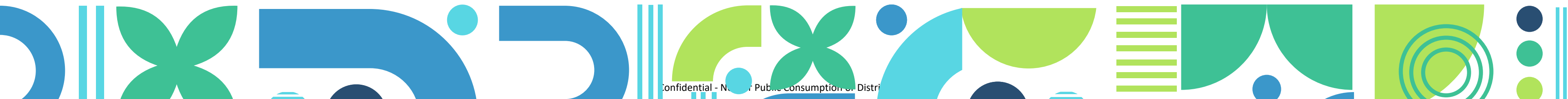
Asia's Largest

AI & Cloud

Conference 2024

15 - 16, November 2024

Chennai Trade Center, Chennai





It's me

Neha Kapoor

Manager - Data
Engineering

About Me

With 10 years of experience in the Data field, I specialize in managing ETL pipelines and have hands-on experience with various data storage solutions and cloud platforms. Over the last four years at Annalect, I have focused on optimizing data workflows and fostering collaboration among teams to create scalable data solutions. My work is centered on driving strategic business insights through effective data management and engineering practices.



It's me

Bharath s

**Senior Manager - Data
Engineering**

About Me

With over a decade of experience in Data Engineering, I specialise in building scalable solutions that navigate the evolving landscape of industry technologies. My expertise includes designing robust data architectures and optimising ETL processes to drive actionable insights. I thrive in dynamic environments and am passionate about leveraging data to solve complex business challenges.



Agenda

1

Data Explosion
and Industry
Evolution

2

The Monolithic
Approach

3

Cultural Shift: Data
as a Product

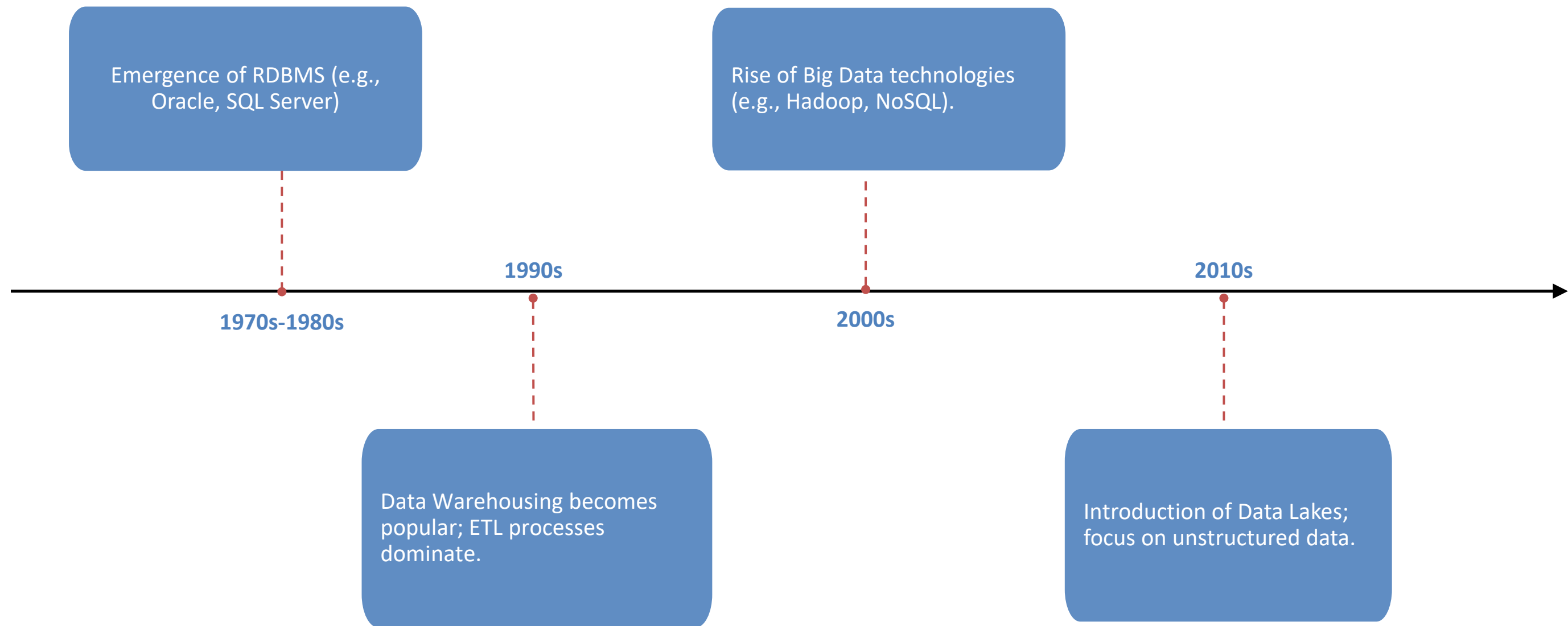
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Data Mesh
Architecture

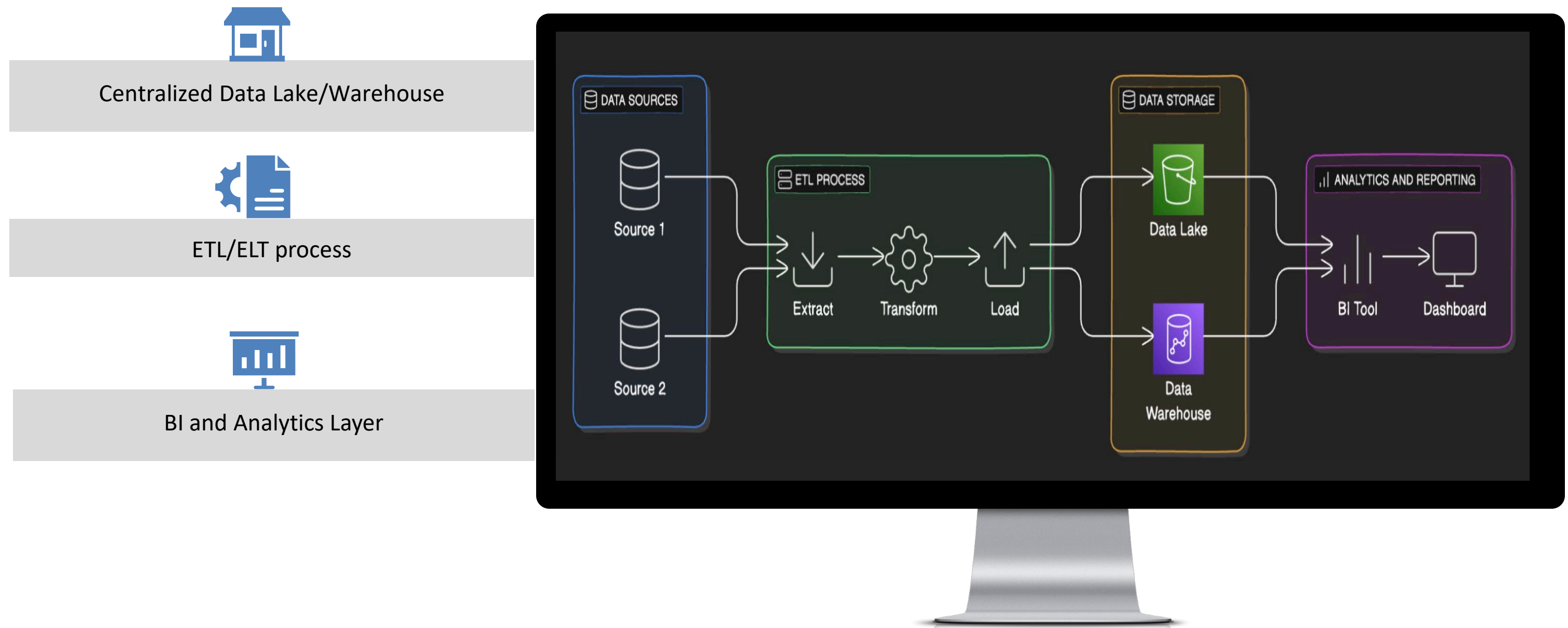
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Conclusion

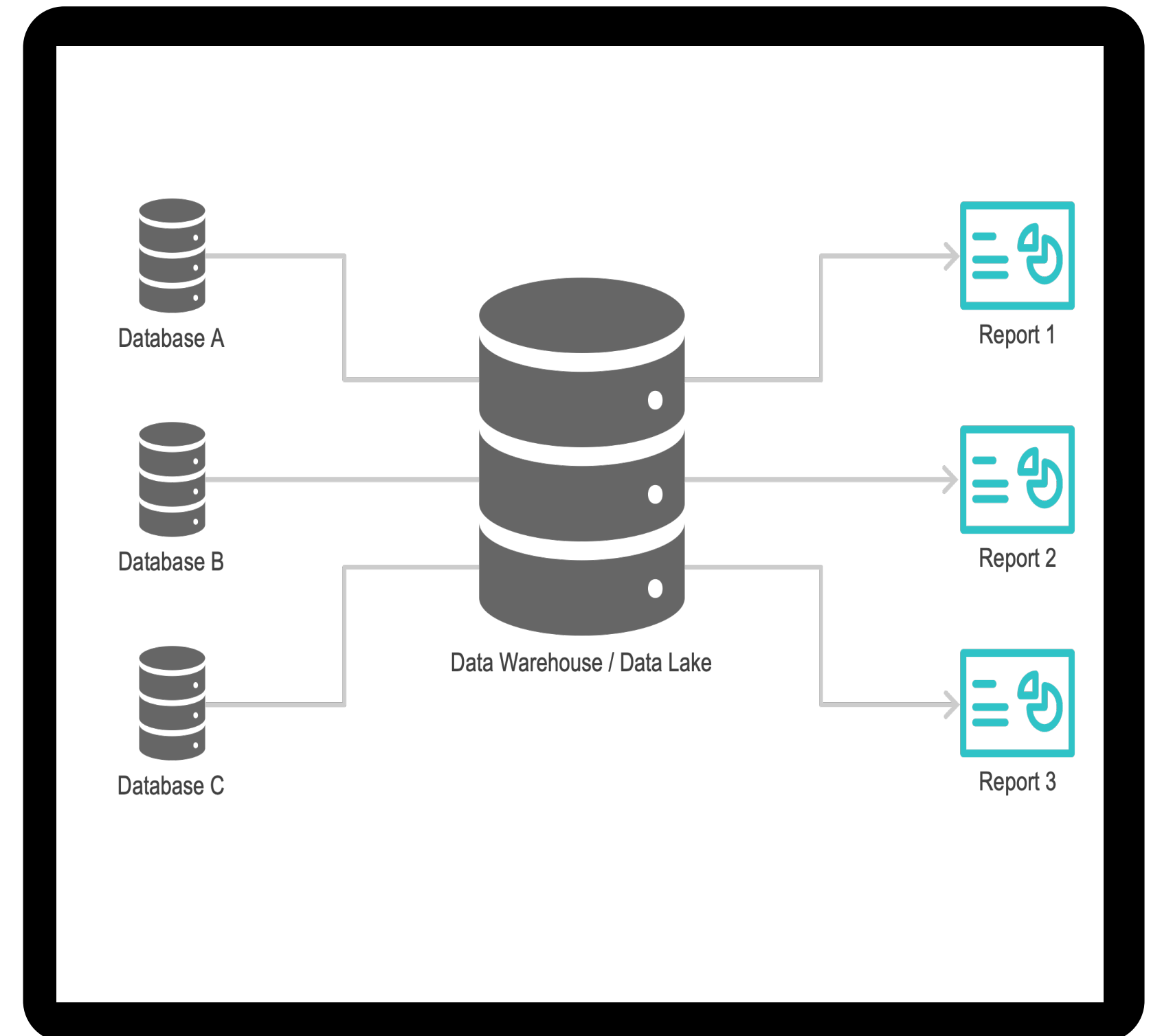
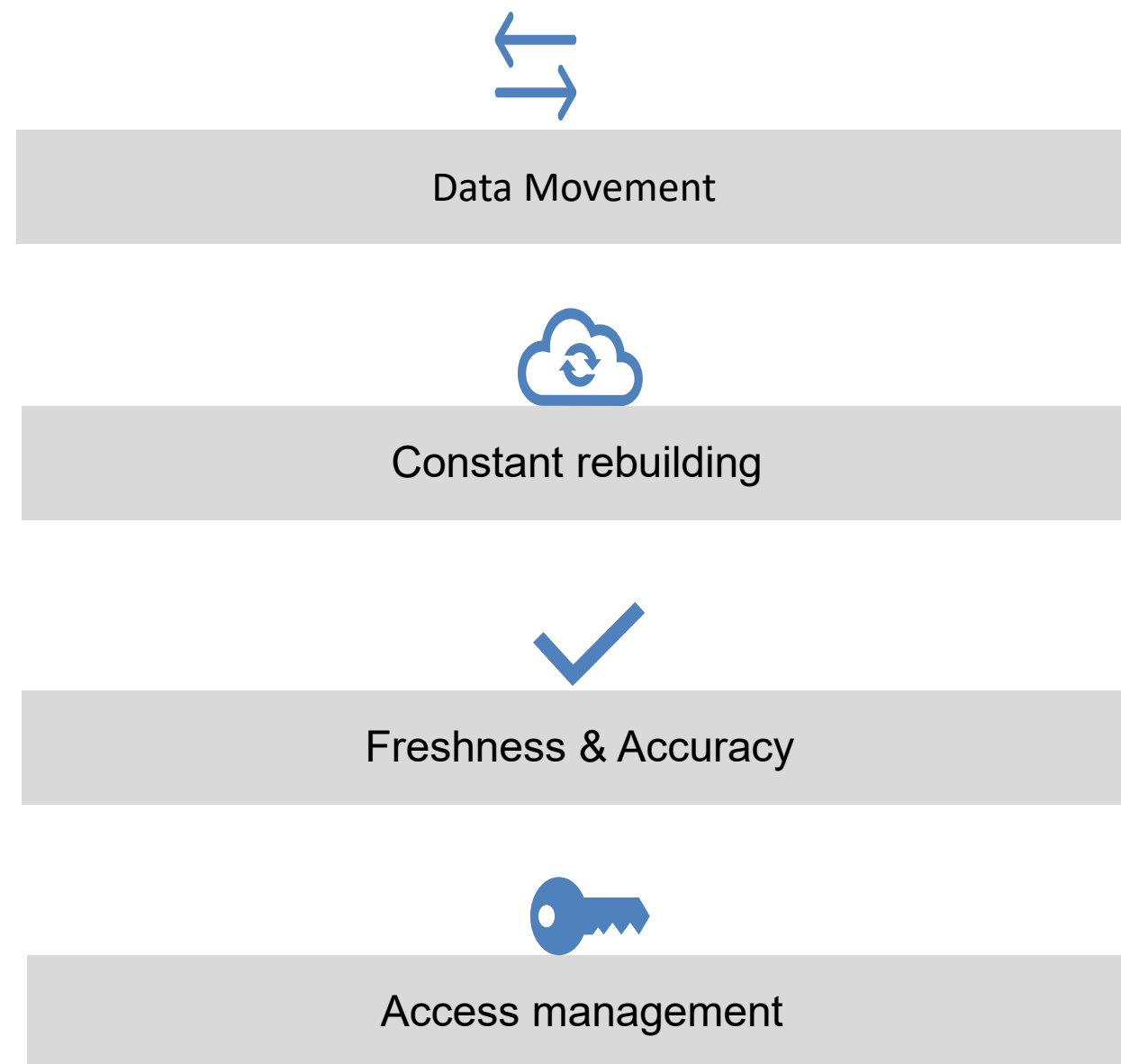
Data trends & Industry Evolution



Standardized Data Model / The Monolithic Approach



Problems : Monolithic Approach



Creator of Data Mesh

Introduced Data Mesh, a decentralized sociotechnical paradigm drawn from modern distributed architecture.

Data Mesh Paper: <https://martinfowler.com/articles/data-mesh-principles.html>

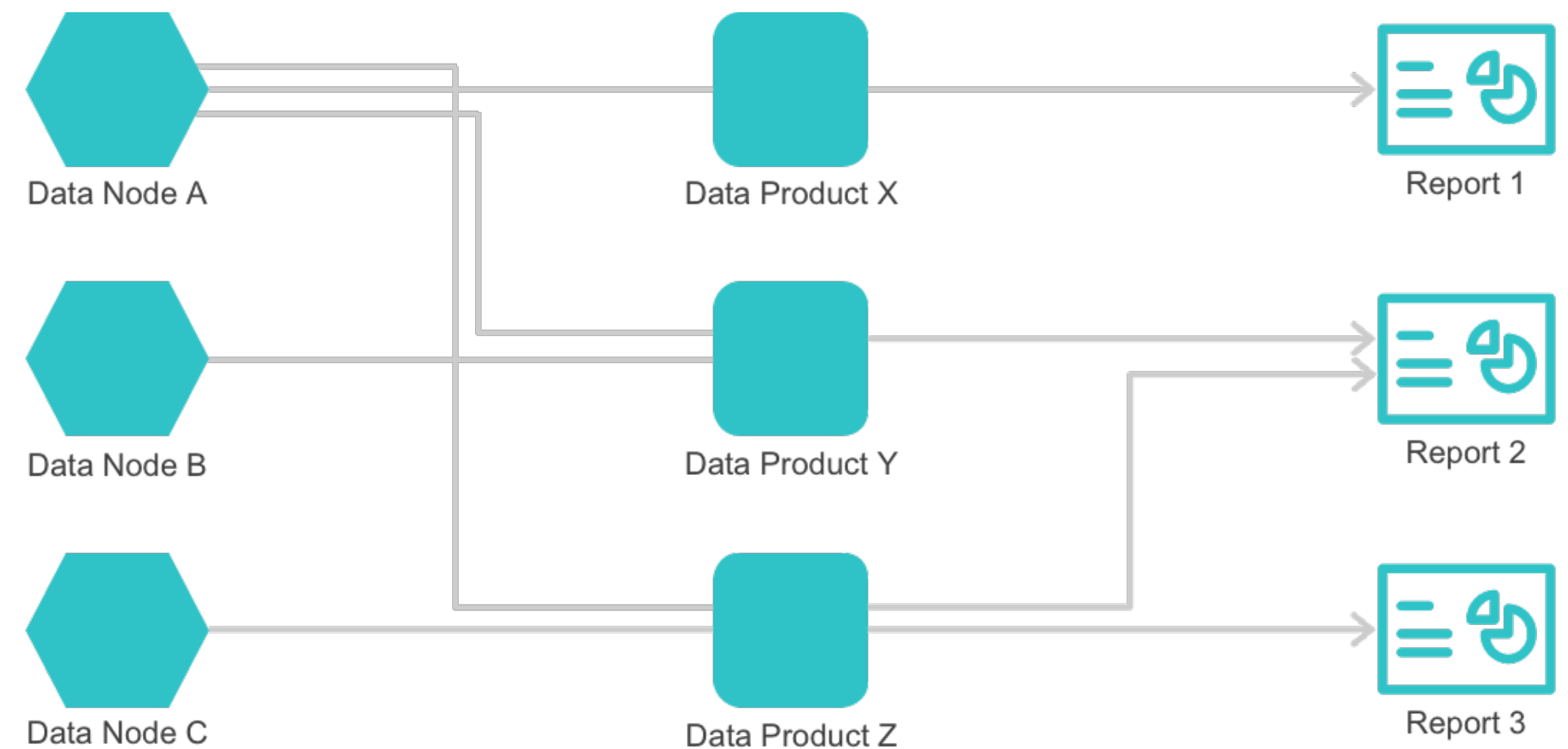
Author of Book : Data Mesh – Delivering Data Driven Value at Scale



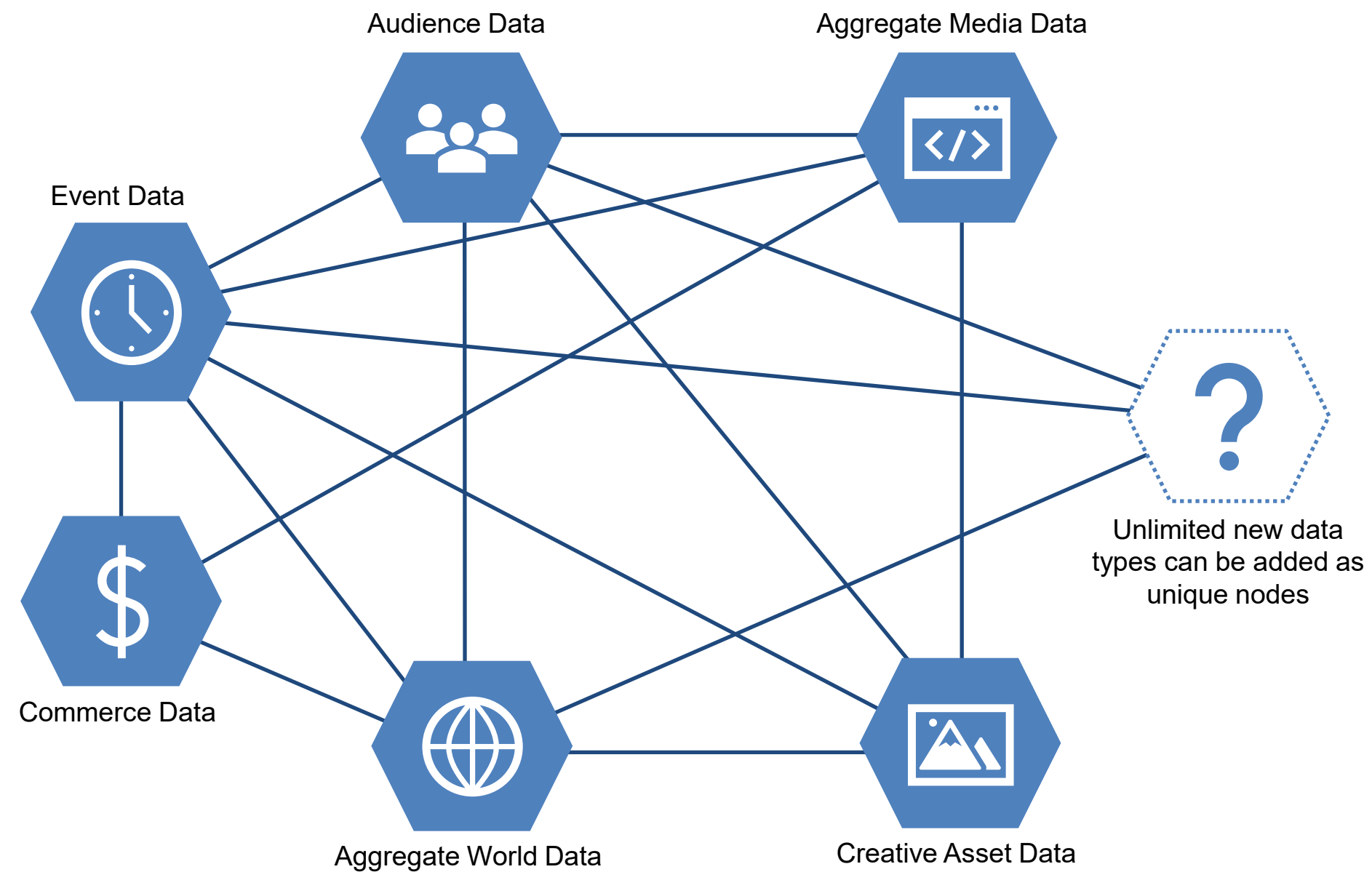
Zhamak Dehghani

Data Mesh

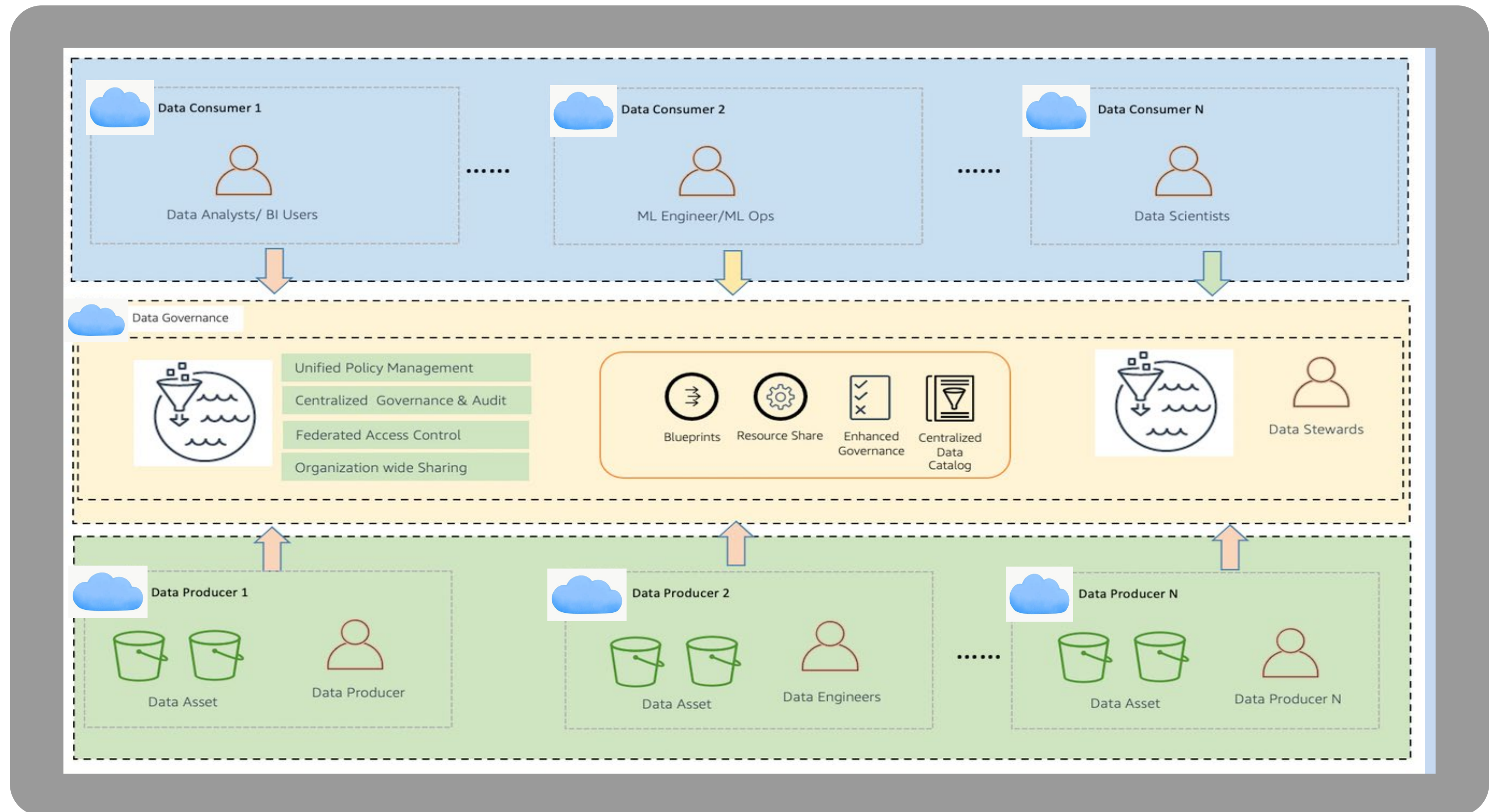
1. **Query Data Remains Where it Is** — no data movement.
2. **Freedom to Combine Data Sources** — wherever they reside.
3. **Data Works Together** — no re-engineering to adhere to a single standard.
4. **No “One Central Team” Bottleneck** — multiple.
5. **Architectural Agility** — data infrastructure is independent and can use any tool.



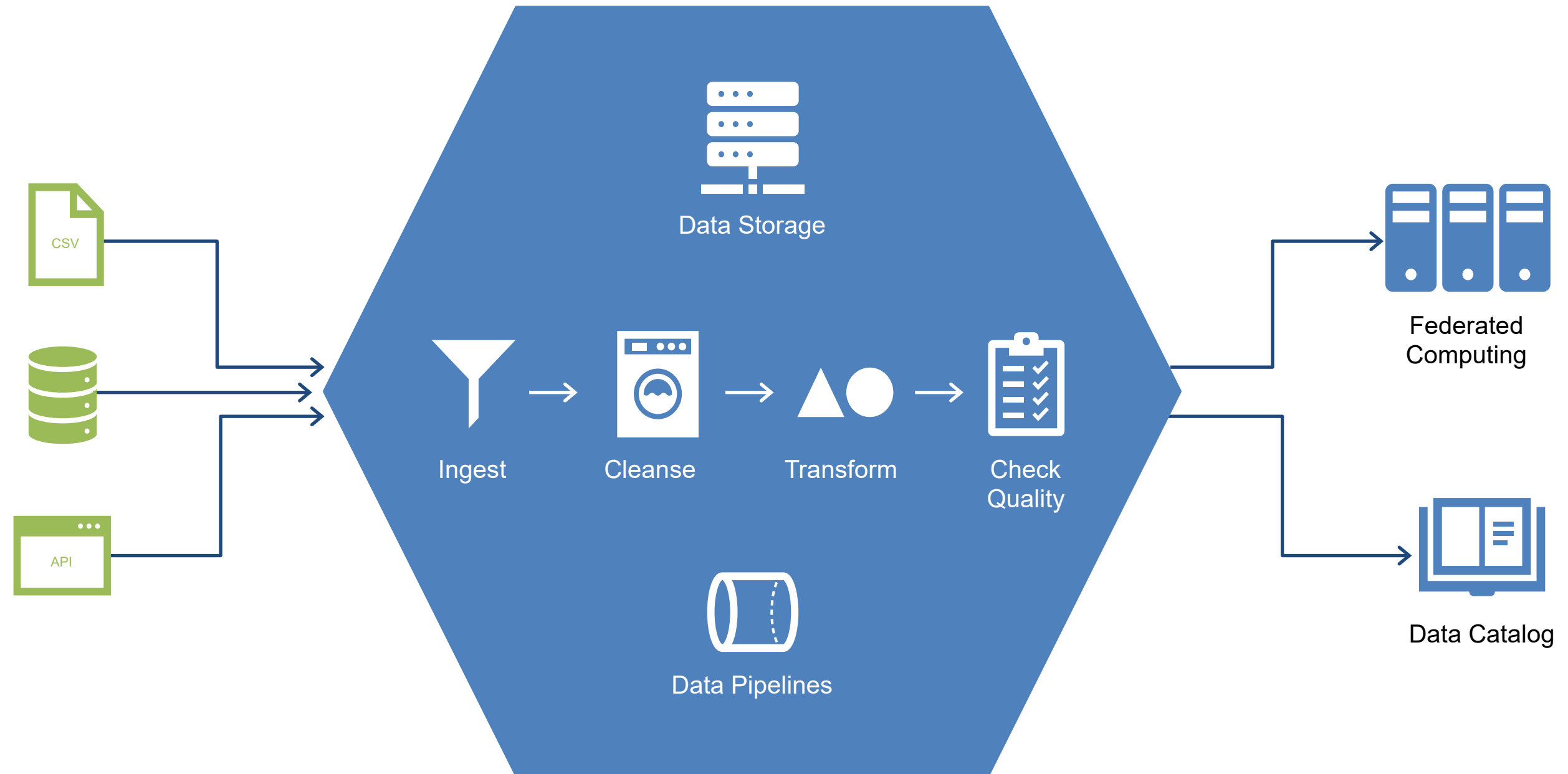
Data Mesh Methodology



Data Mesh



Anatomy of Data Node



Data Node

Data Product

Data Contract

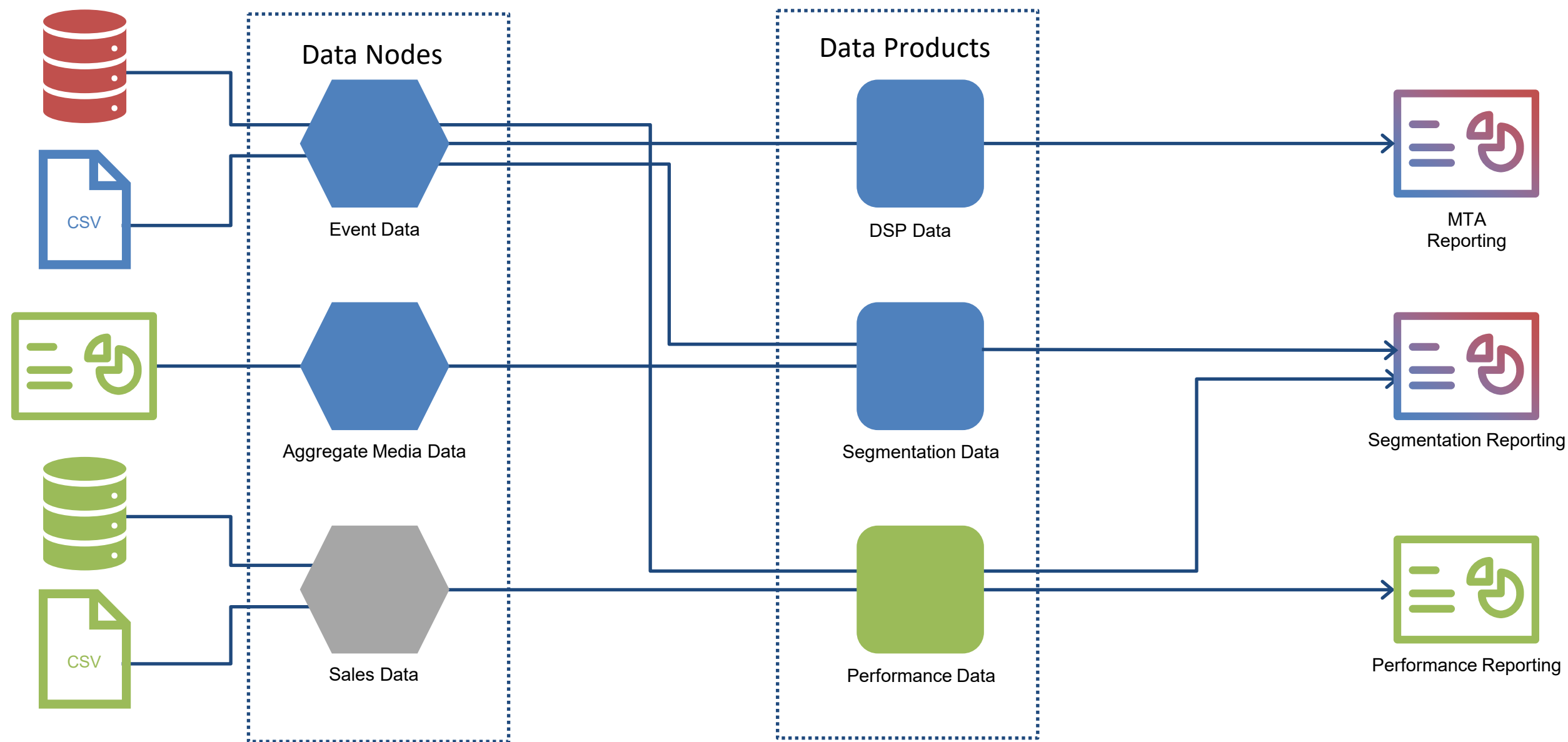
Distributed Computing

Governance



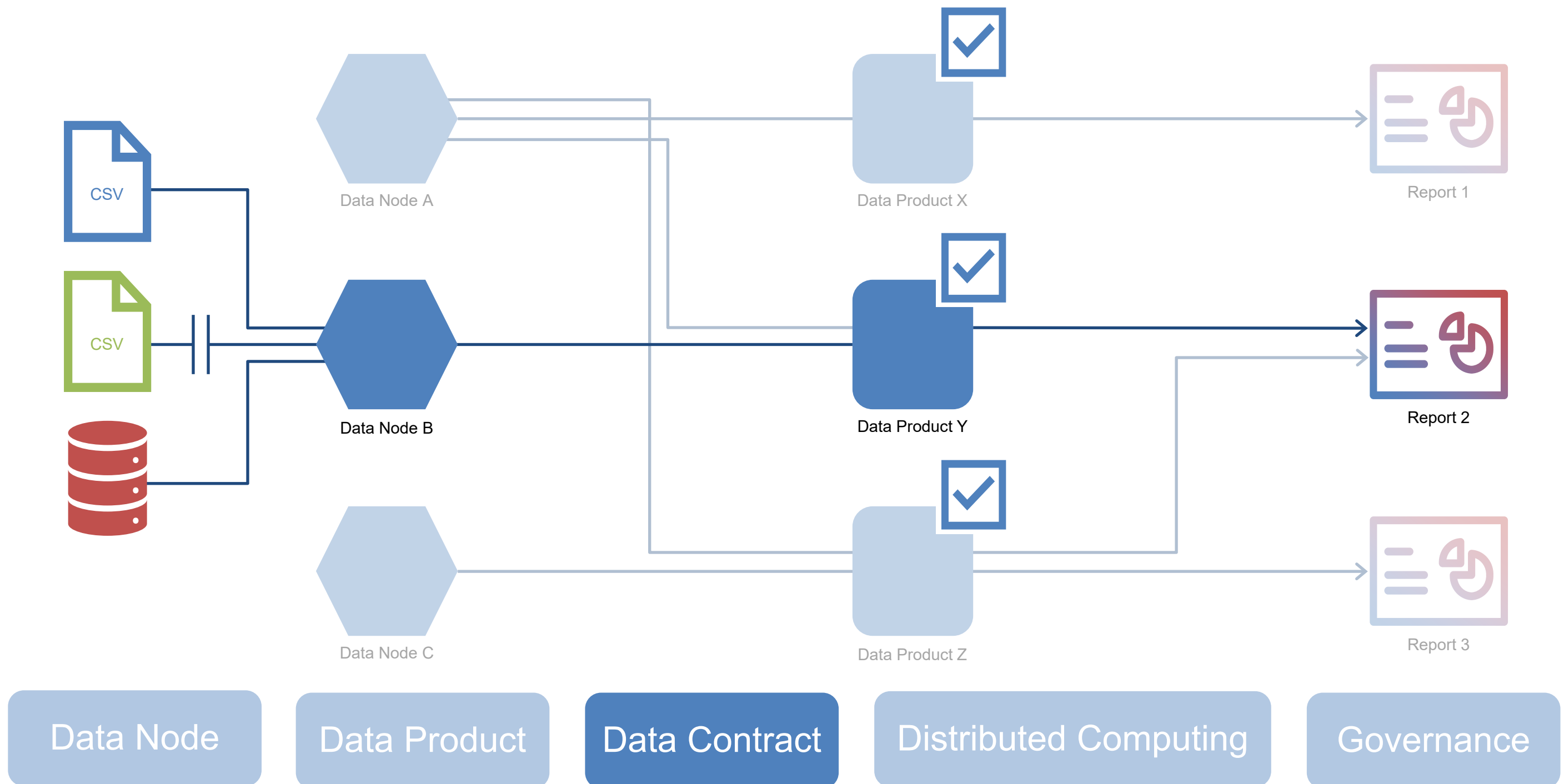
Data Product

No Matter Where It's Located



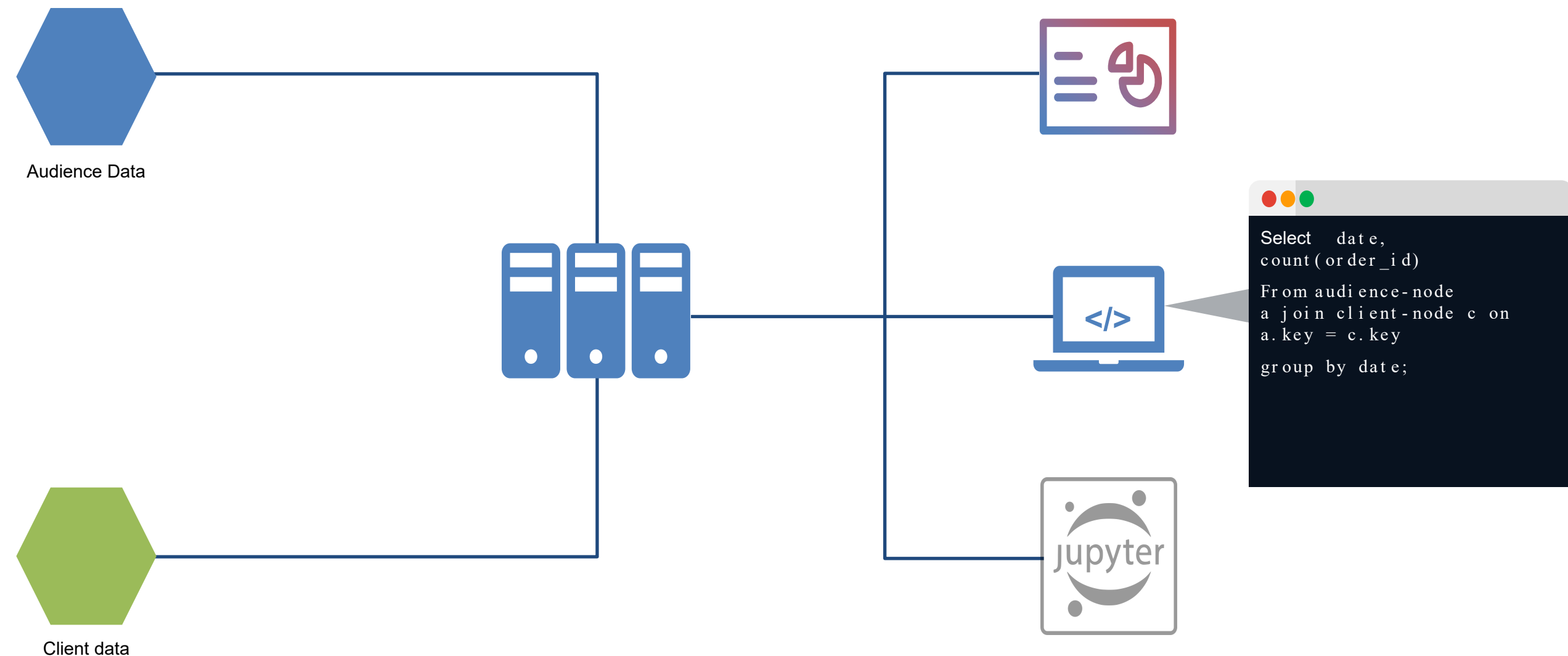
- Data Node
- Data Product
- Data Contract
- Distributed Computing
- Governance

Data Contracts: No Surprises when Data Changes



Work with Data from Anywhere

Without Moving it, Using Distributed Computing Workbench



Data Node

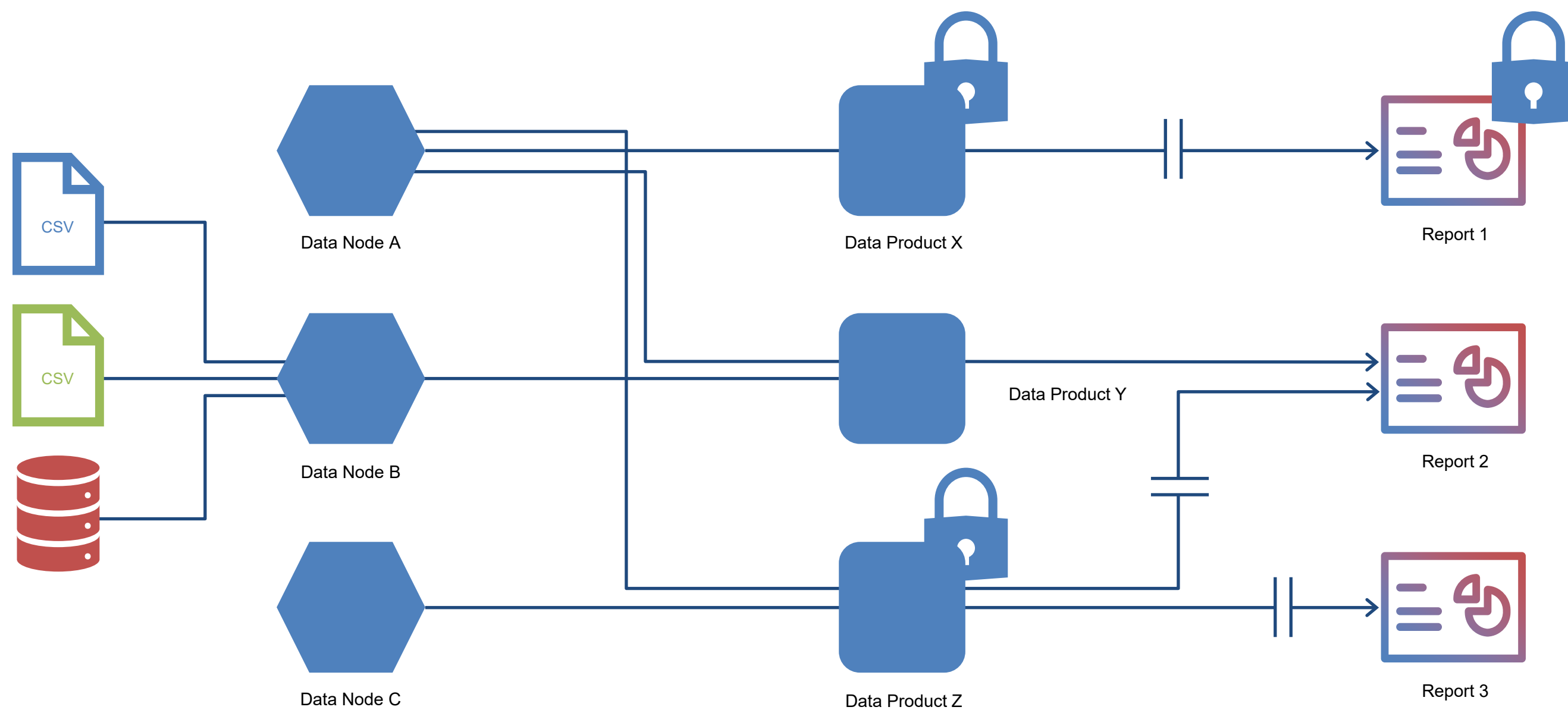
Data Product

Data Contract

Distributed Computing

Governance

Federated Security & Access Control



Data Node

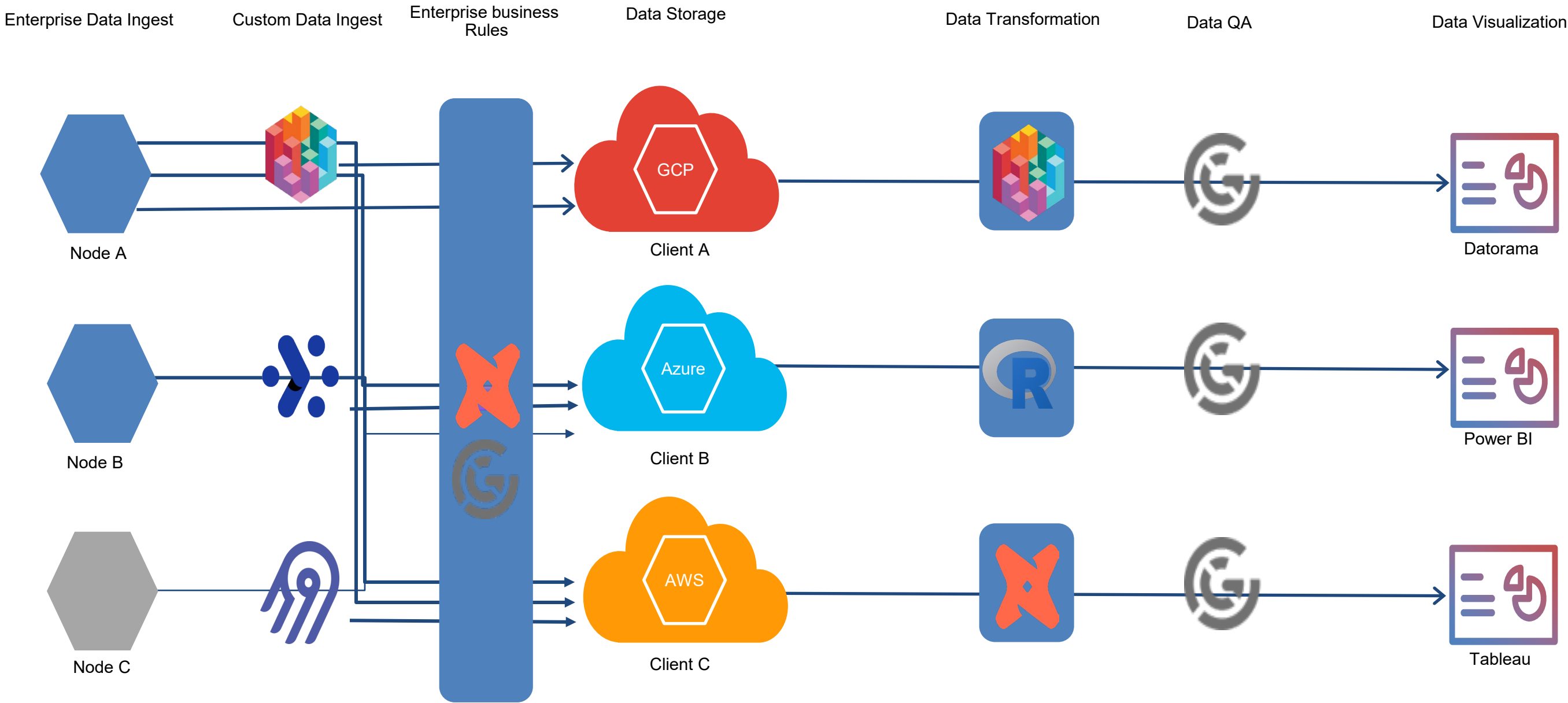
Data Product

Data Contract

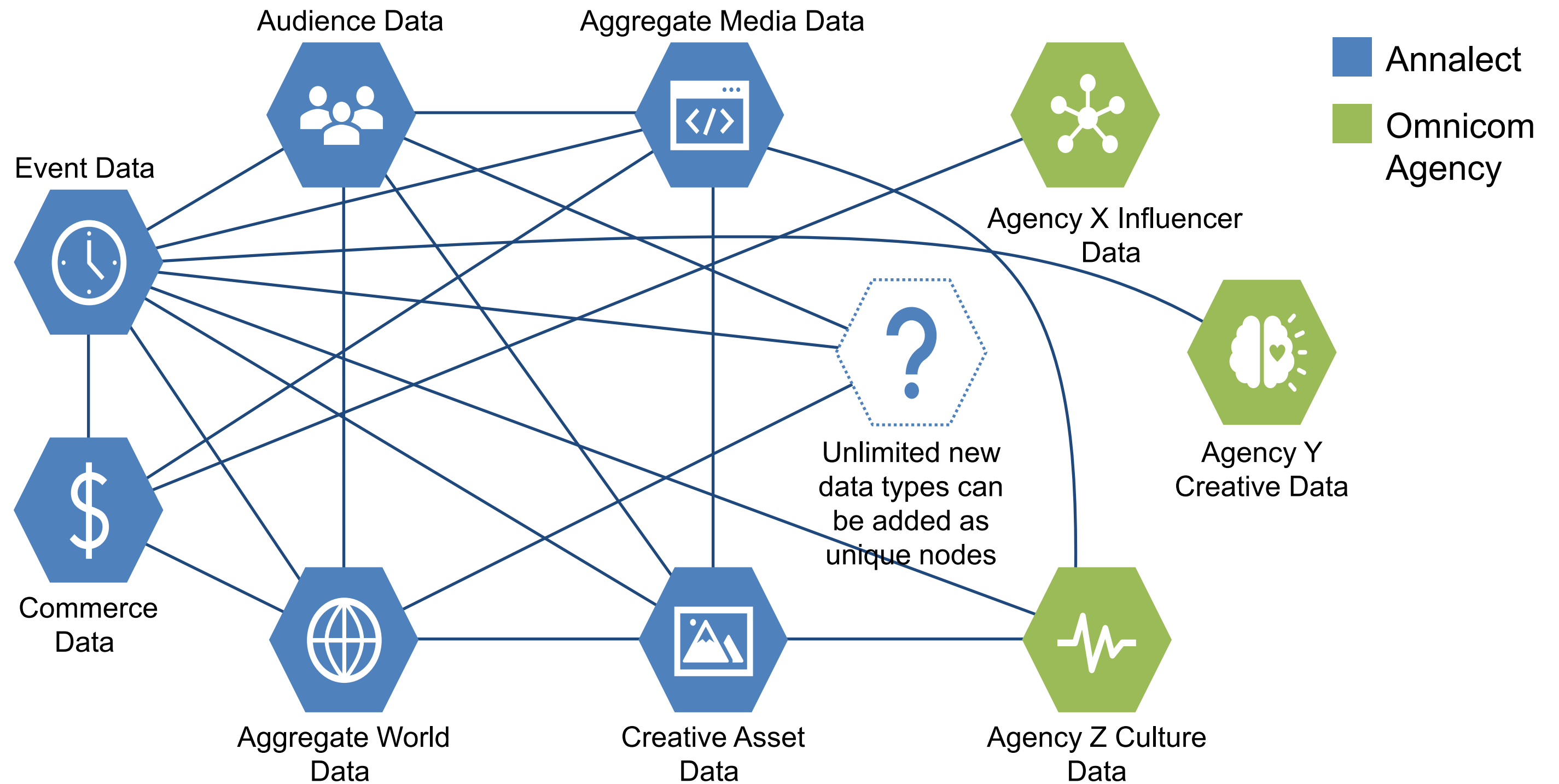
Distributed Computing

Governance

Data Mesh is not a Tool, It is a Methodology



Data Nodes across Omnicom/Partner Ecosystem





Conclusion – Embracing the Data Mesh Journey

Key takeaways

- Data explosion requires new approaches
- Monolithic architectures are reaching their limits
- Cultural shift to data as a product is crucial
- Data Mesh offers a decentralized, scalable solution



Our Blog Post



Annalect's journey in Data Mesh

THANK YOU!

