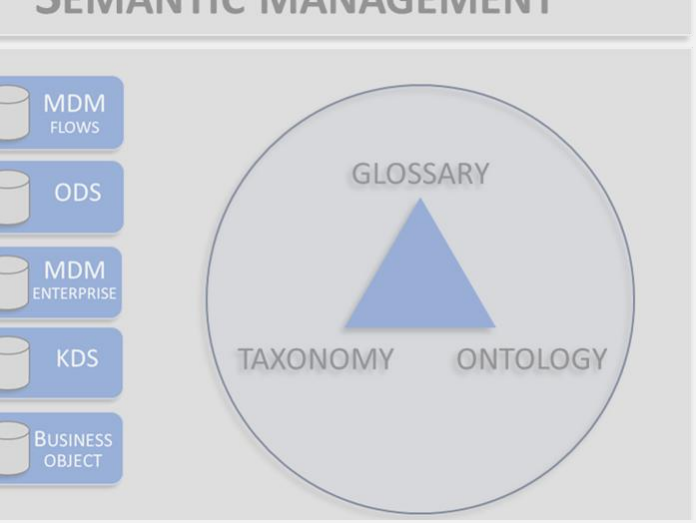

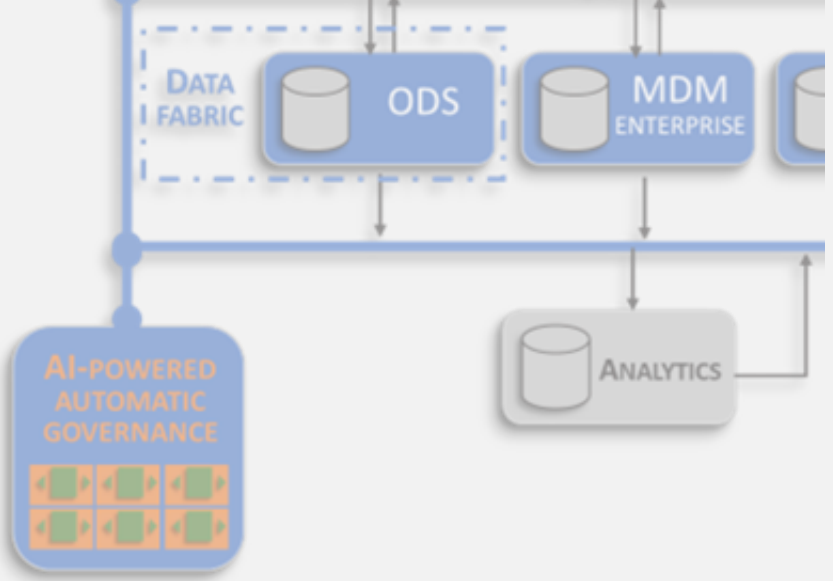

INFORMATION SYSTEM ARCHITECTURE

DATA MESH, DATA FABRIC, ODS, MDM, KNOWLEDGE GRAPH DB, AI GOVERNANCE

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pierre.bonnet@hlfl-consulting.com – November 04, 2023

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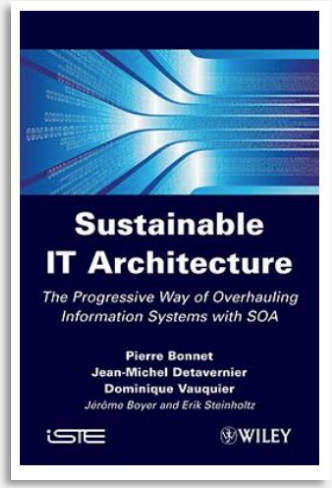
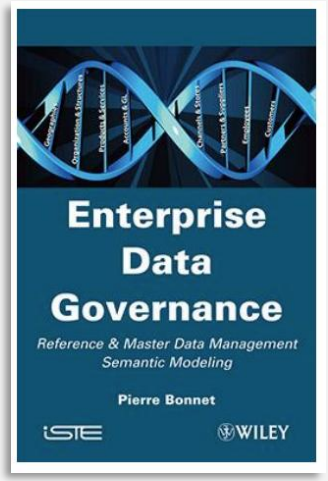
PIERRE BONNET

PIERRE.BONNET@HLFL-CONSULTING.COM



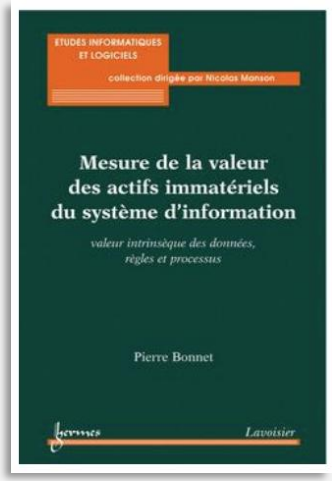
EA + SOA

HOW TO LEVEL-UP TOGAF AND ZACHMAN



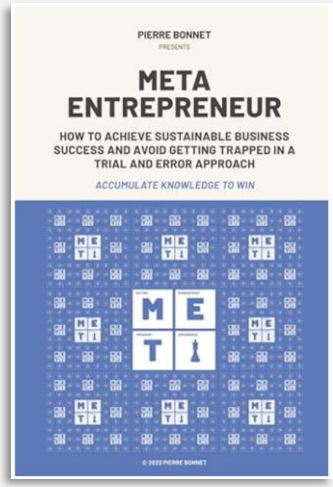
DATA

MODELING AND GOVERNANCE AT THE ENTERPRISE LEVEL



IS RATING

MEASURING THE INTANGIBLE ASSETS OF THE IS: PROCESSES, RULES AND DATA



MINDSET

ENCOURAGING A POSITIVE MINDSET TO FACE THE COMPLEXITY OF THE WORLD BASED ON KNOWLEDGE ACCUMULATION

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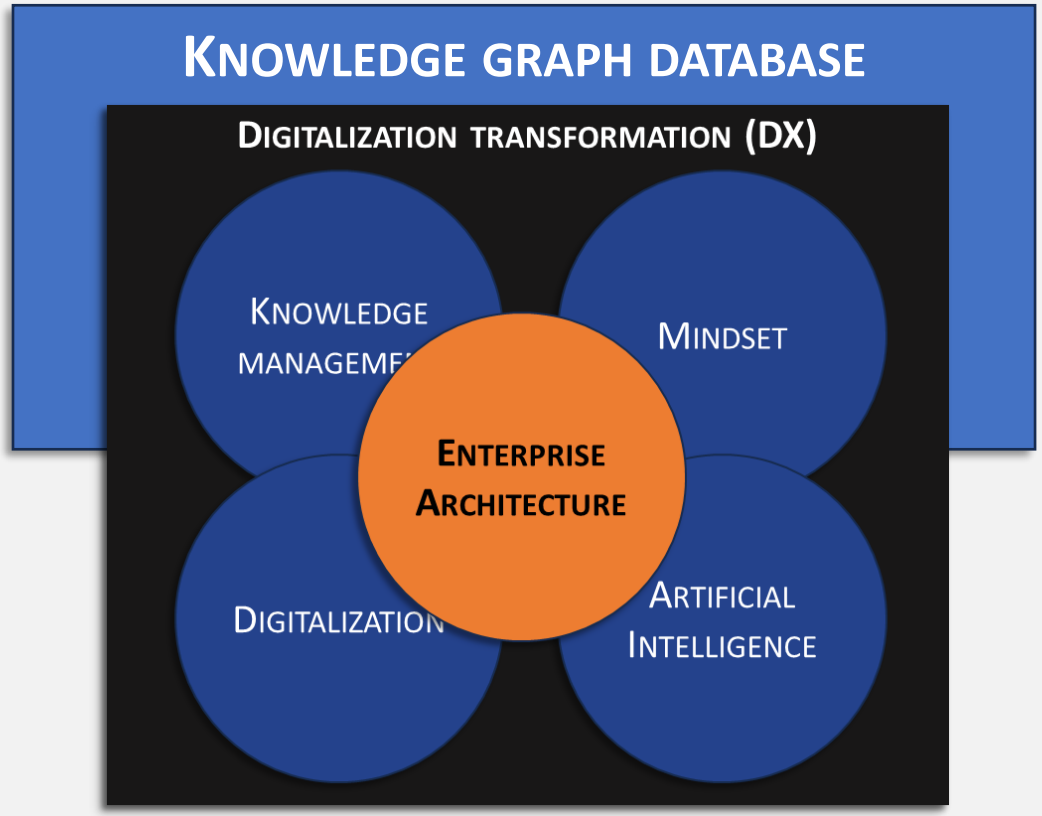

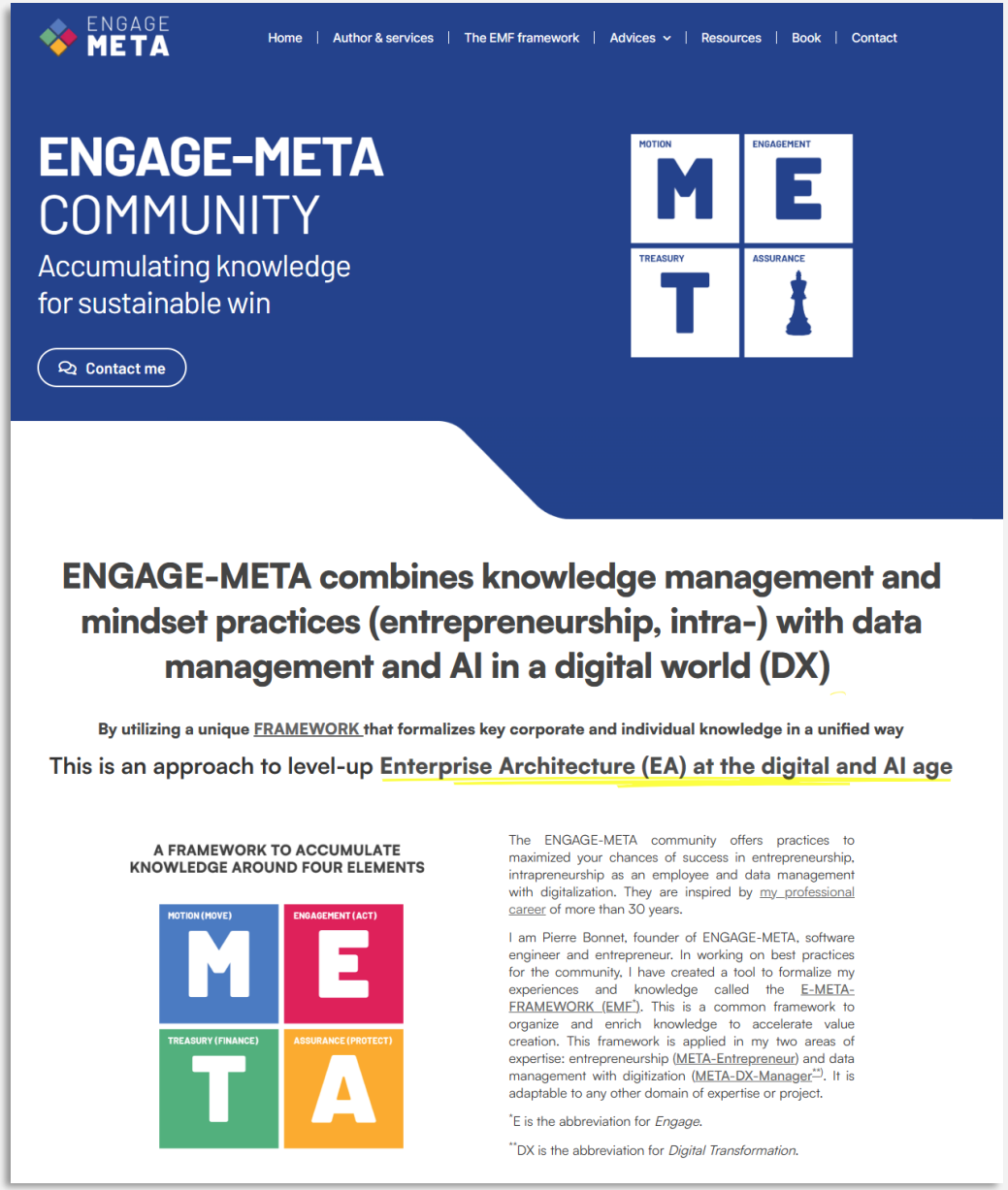

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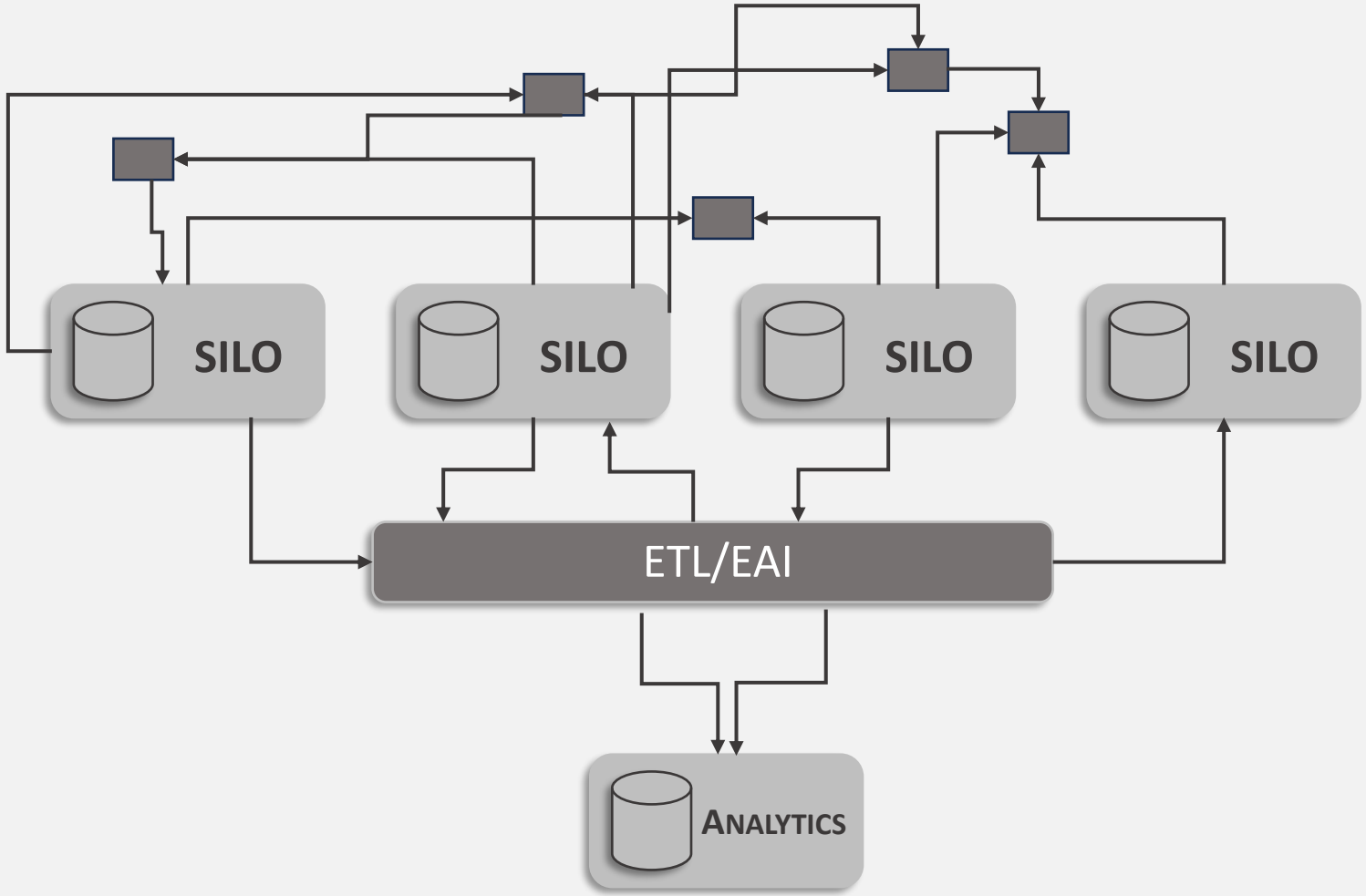
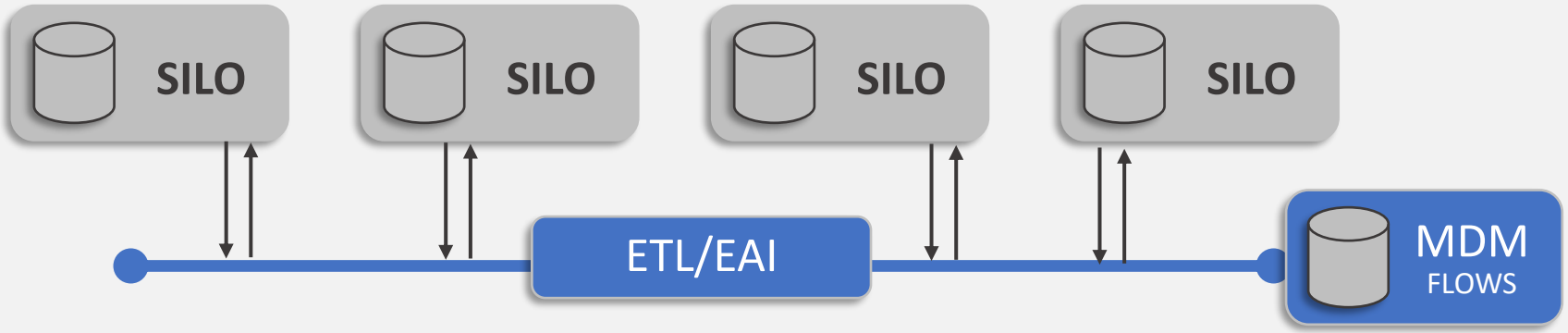
LEGACY WITH NUMEROUS SILOS

HISTORICALLY, INFORMATION SYSTEM ARCHITECTURE OFTEN FOLLOWED THIS FIGURE, WITH NUMEROUS SILOS THAT RESULTED IN DATA DUPLICATION AND COMPLEX INTERCONNECTIONS BETWEEN THEM



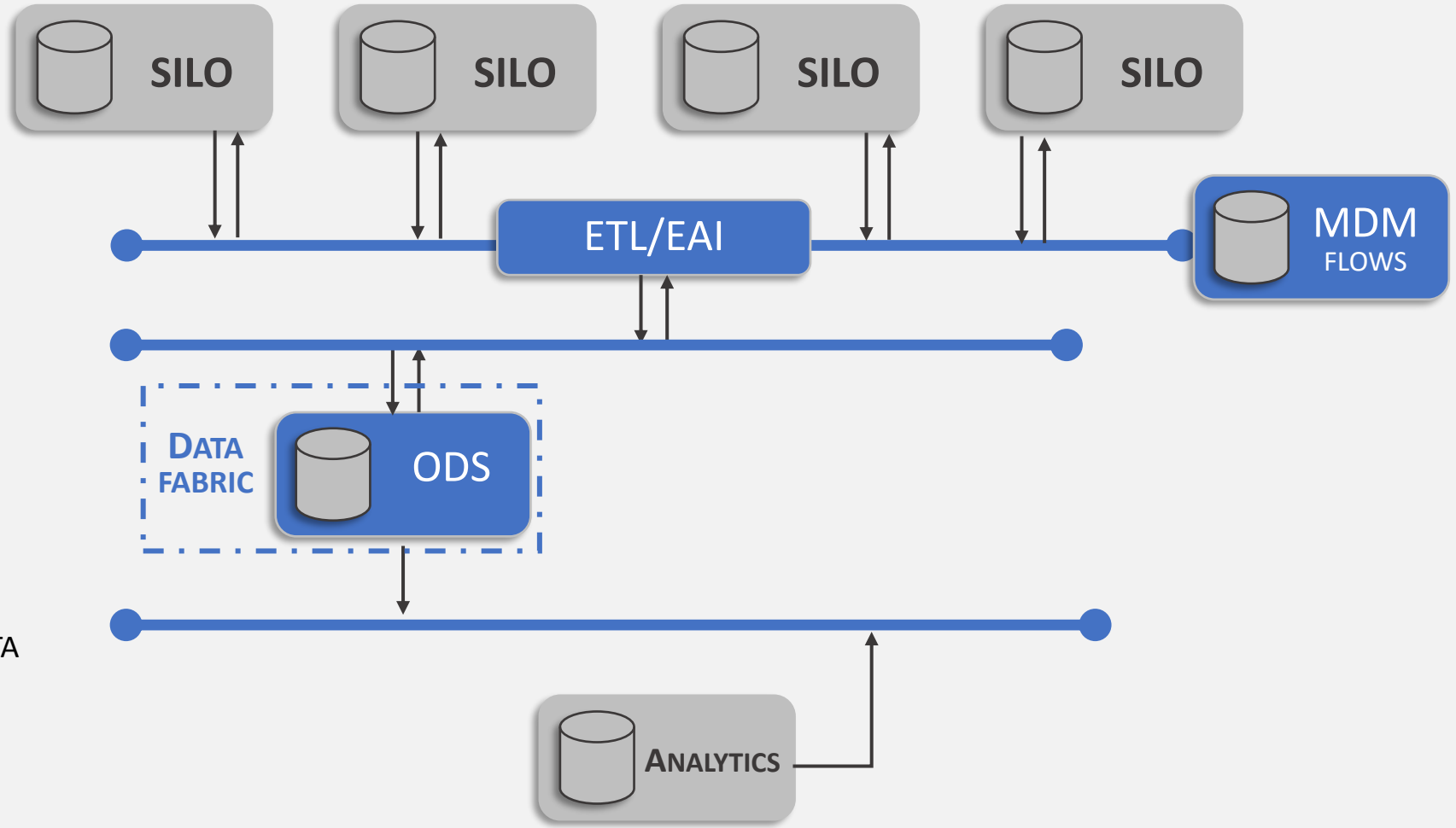
MDM FOR DATA FLOWS



MDM FLOWS

API CONTRACTS, IN/OUT BUSINESS AND IT INTERFACES, INTEGRITY RULES

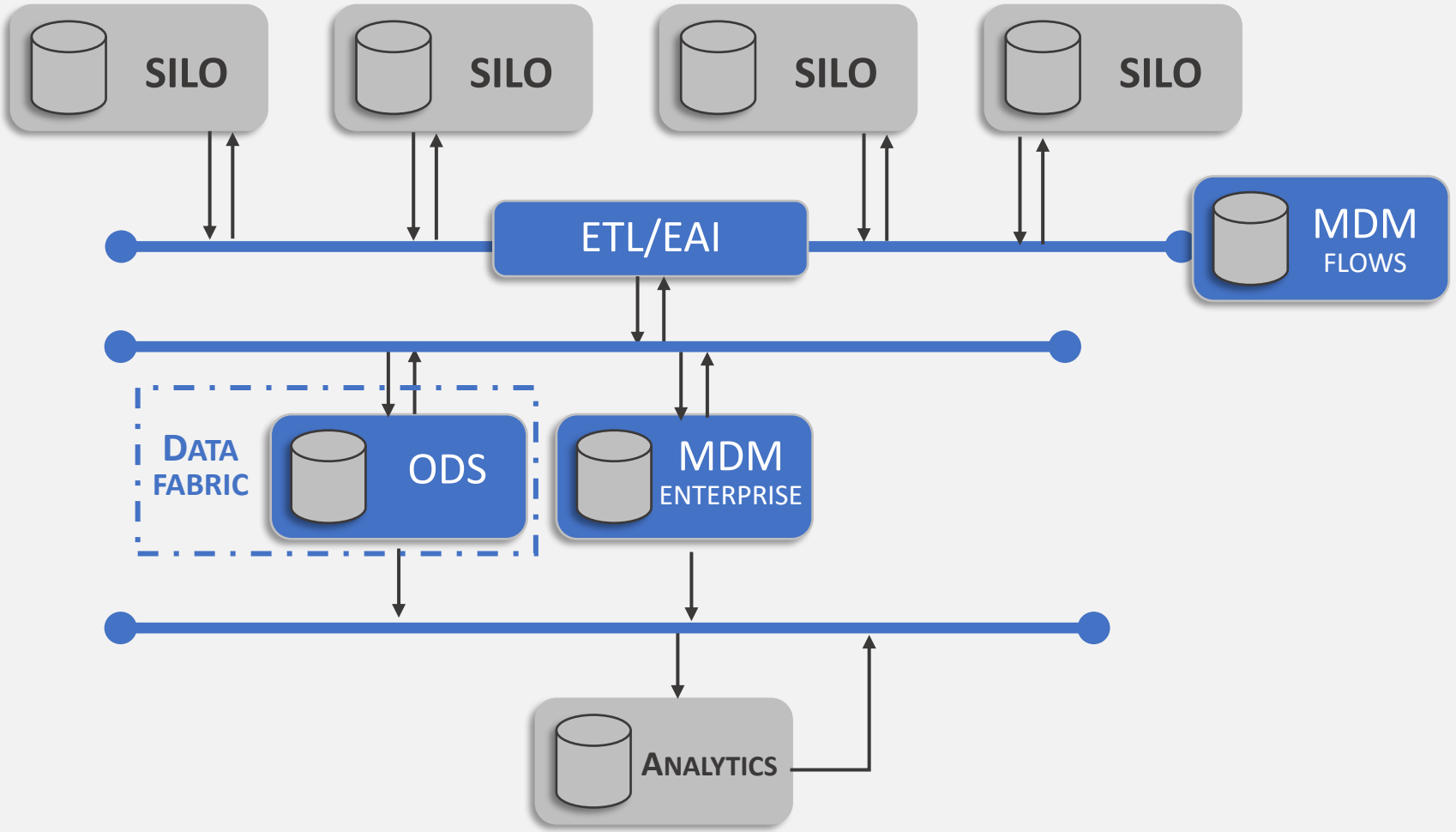
ODS BASED ON A DATA FABRIC



ODS

OPERATIONAL DATA STORE, UNIFIED DATA MODEL, INCLUDING TRANSACTIONAL DATA, OLTP, DATA FABRIC

MDM ENTERPRISE



MDM ENTERPRISE

REFERENCE DATA, MASTER DATA, DATA GLOSSARY (META-DATA)

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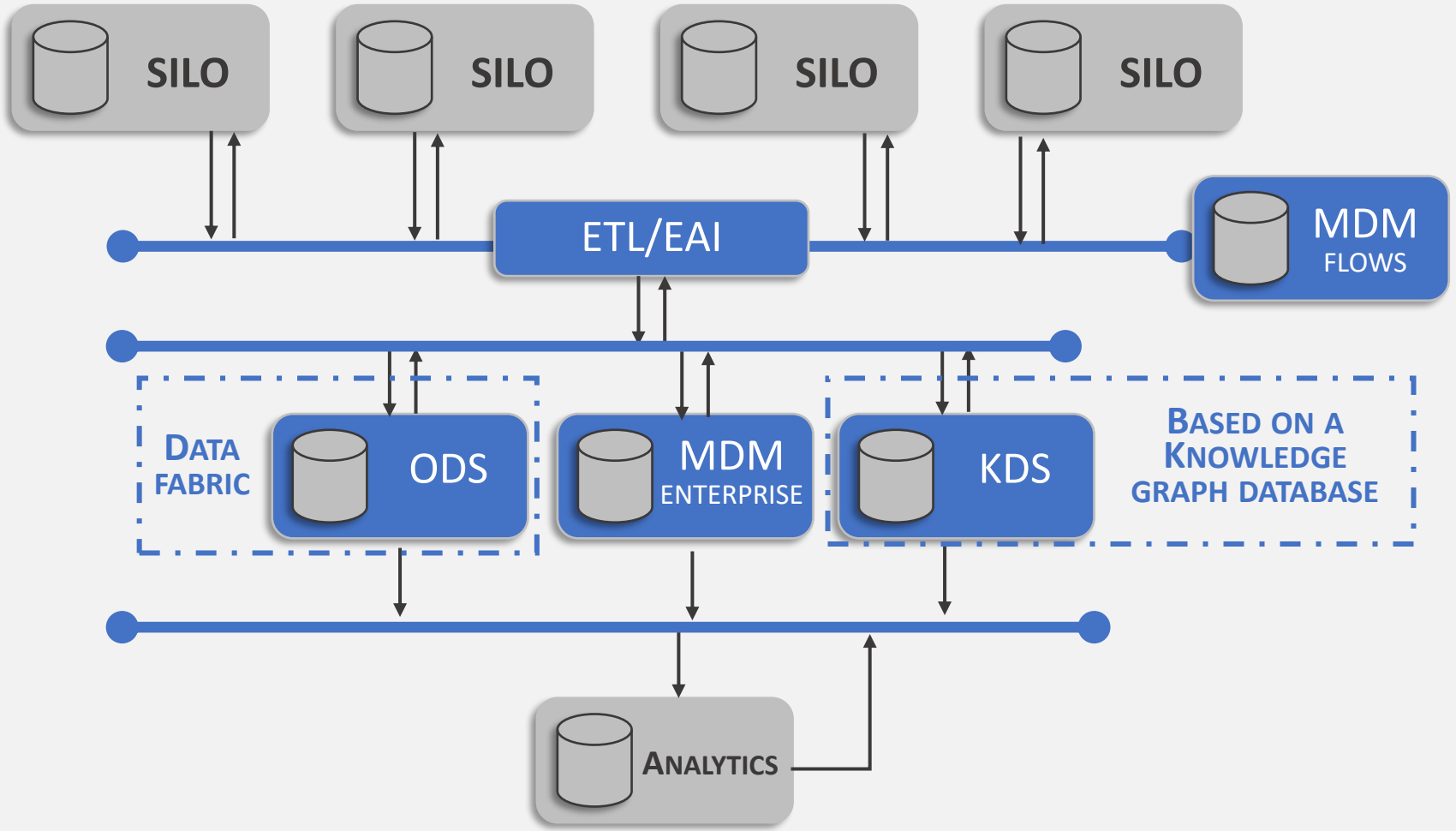
KDS: KNOWLEDGE DATA STORE



KDS

KNOWLEDGE DATA STORE,
KNOWLEDGE GRAPH DATABASE,
ONTOLOGY, AI PROMPTS,
KNOWLEDGE ACCUMULATION

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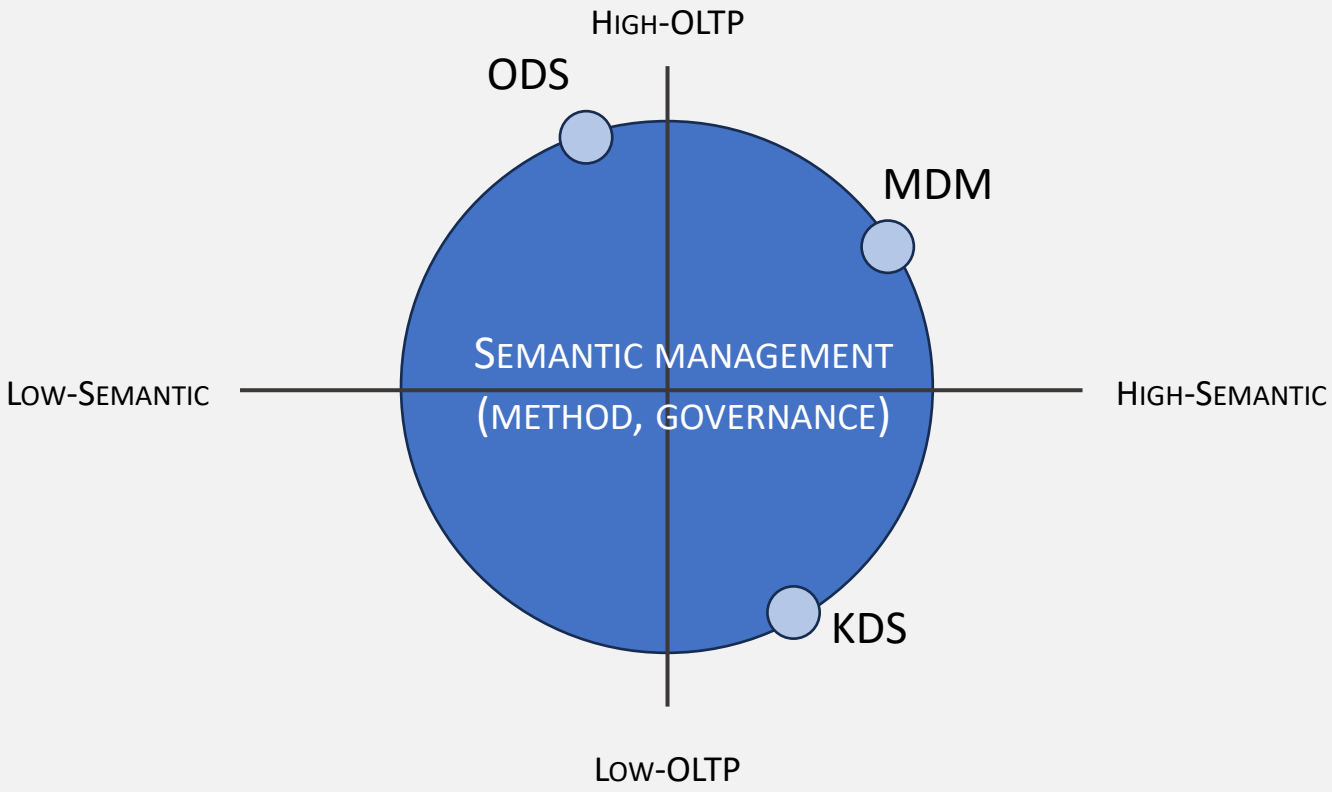
OLTP, Semantic and Graph



Technical position OLTP-Semantic

Method and governance
regardless the technical position

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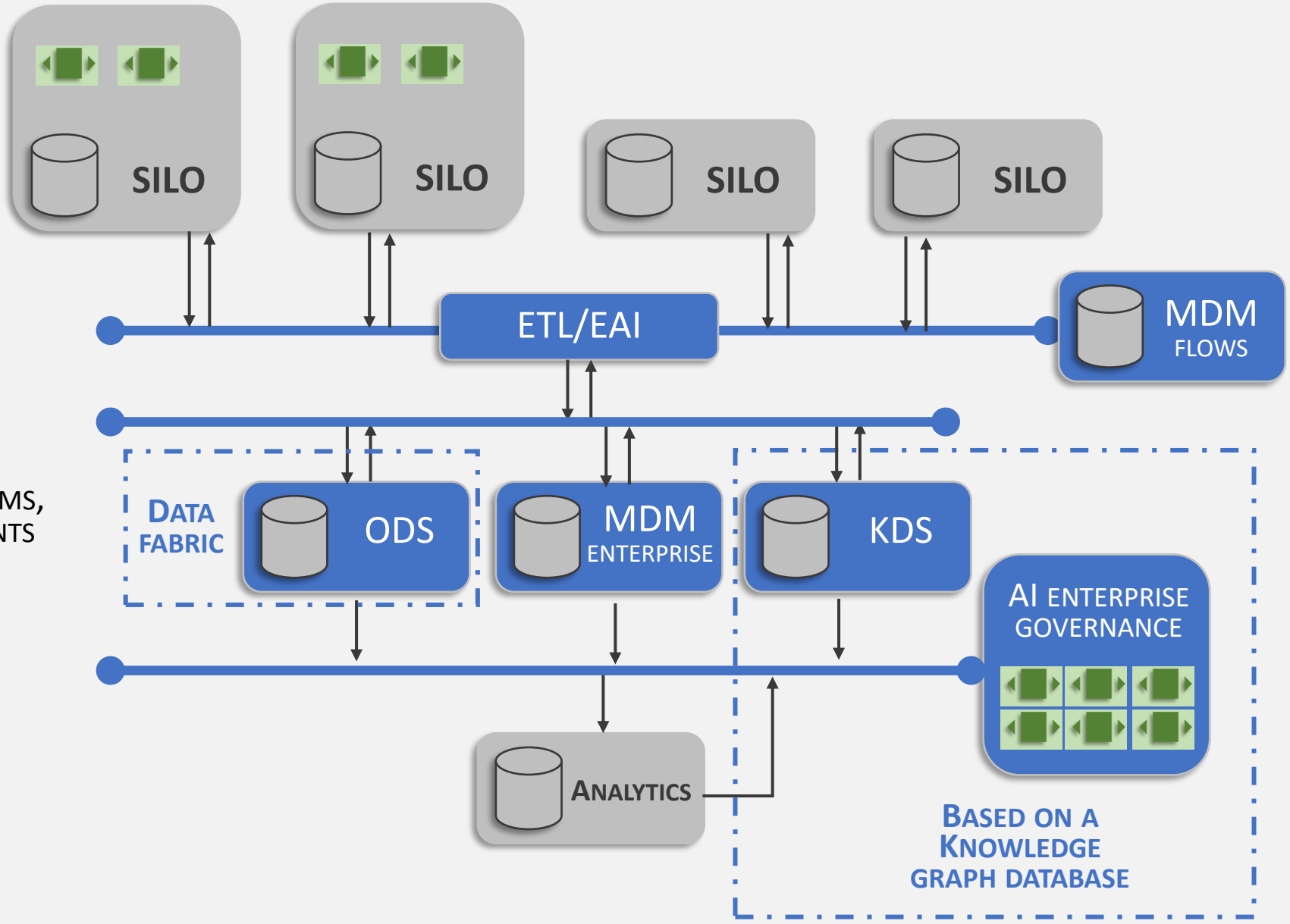
AI ENTERPRISE GOVERNANCE

CREATION OF SMART ALGORITHMS,
AUTOMATED-DECISION ENDPOINTS



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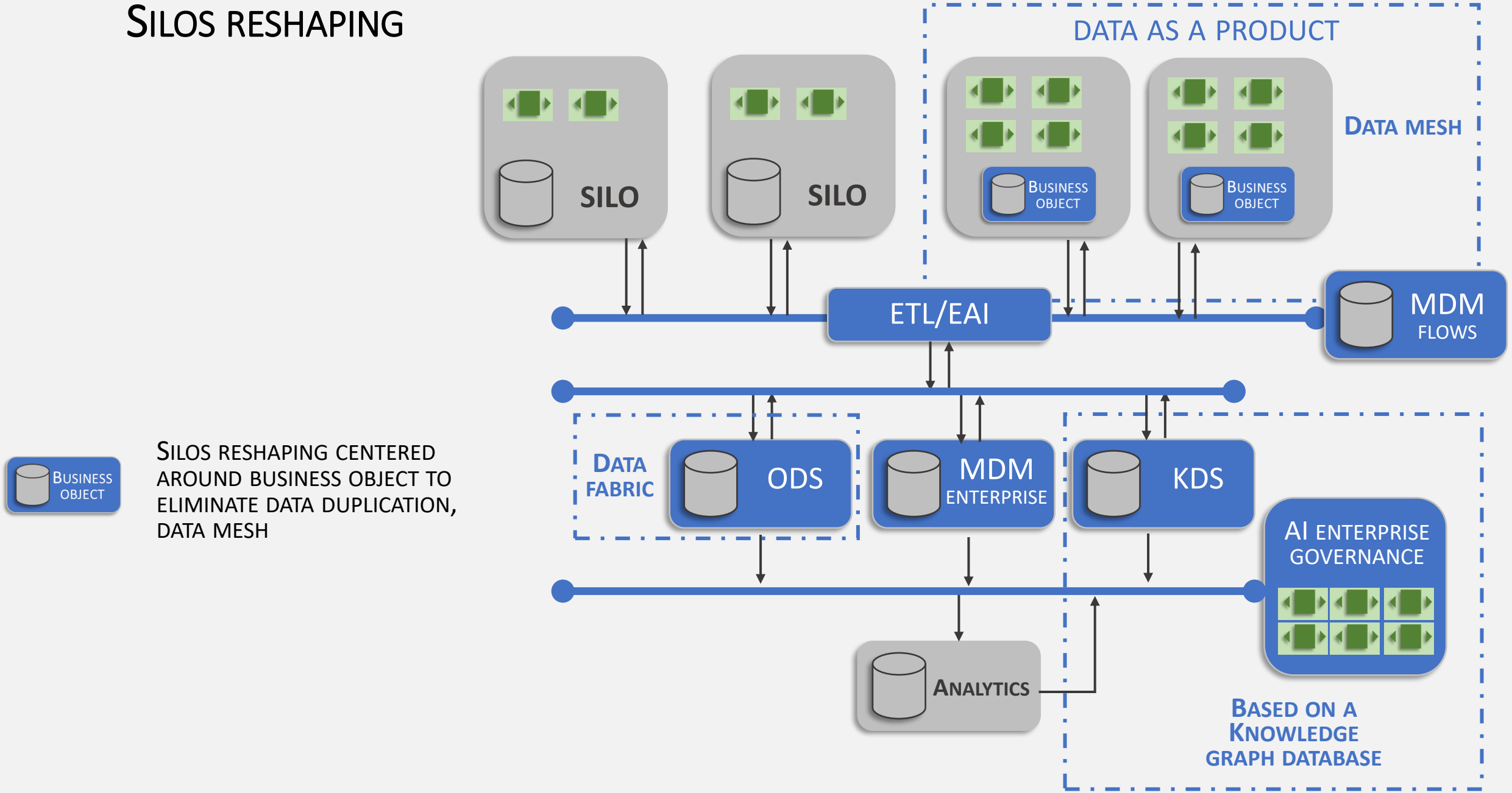
SILOS RESHAPING



SILOS RESHAPING CENTERED AROUND BUSINESS OBJECT TO ELIMINATE DATA DUPLICATION, DATA MESH

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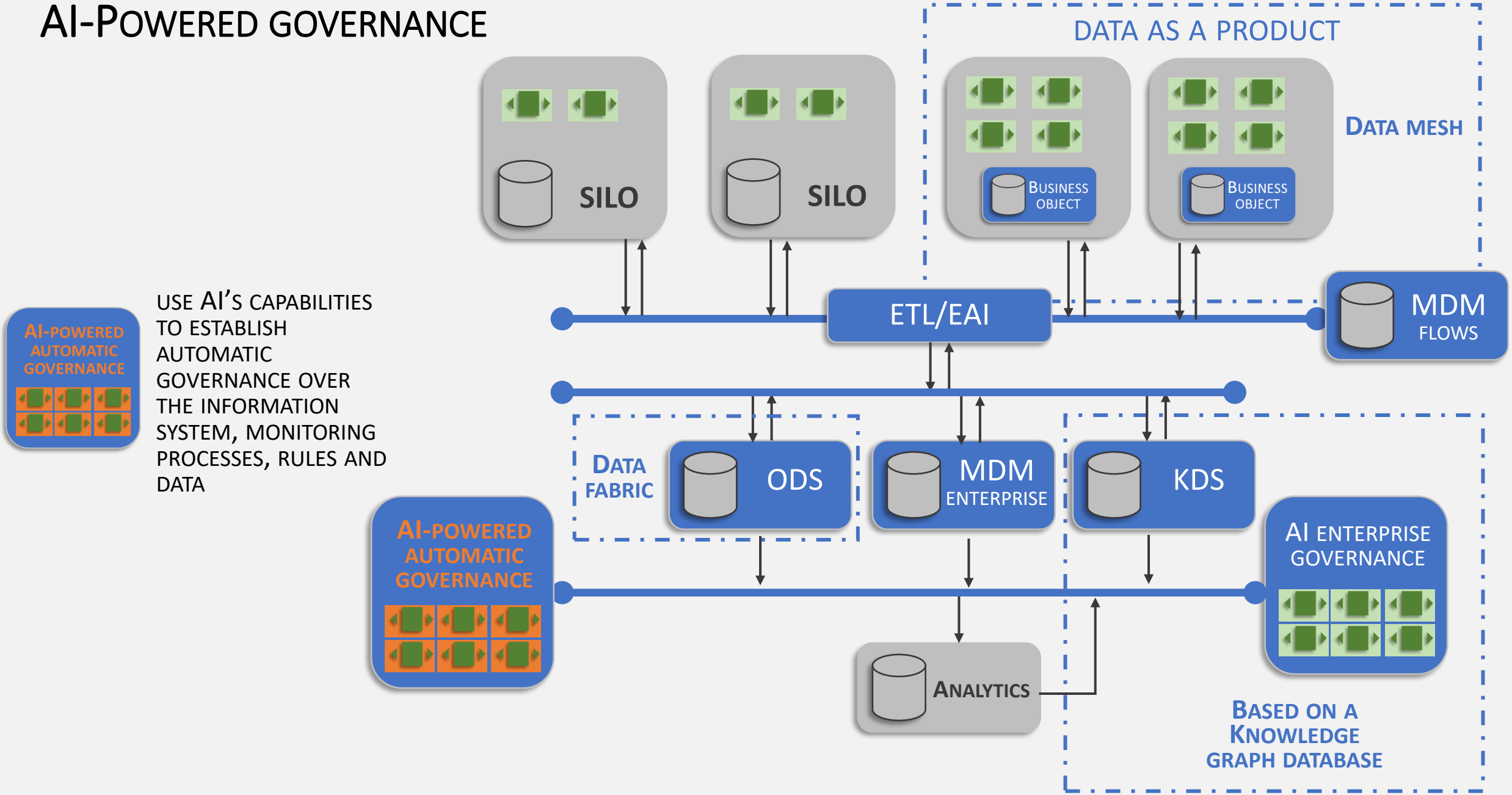
AI-POWERED GOVERNANCE



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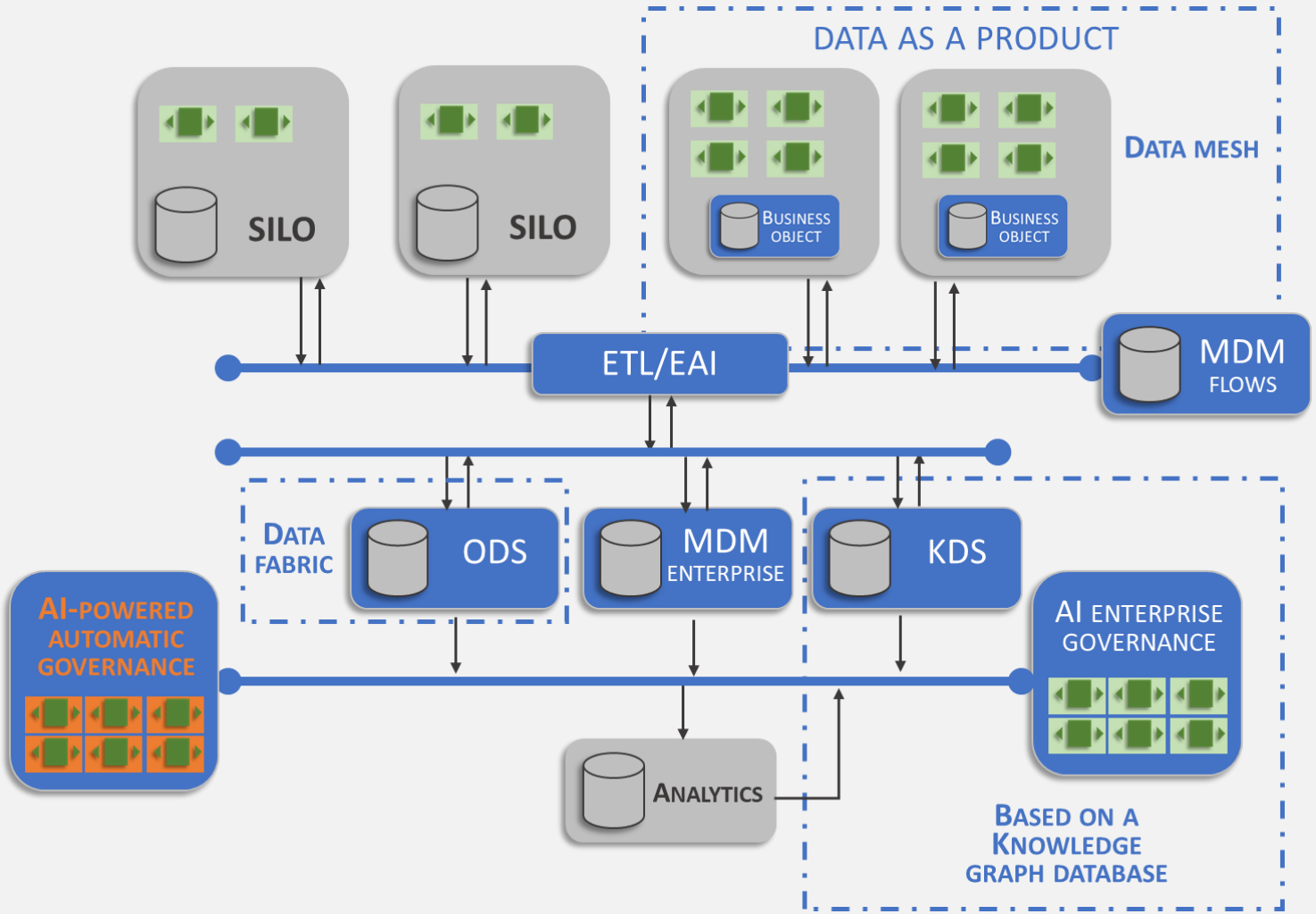
BLUE-PRINT



MDM FLOWS — API CONTRACTS, IN/OUT BUSINESS AND IT INTERFACES, INTEGRITY RULES

ODS — OPERATIONAL DATA STORE, UNIFIED DATA MODEL, INCLUDING TRANSACTIONAL DATA, OLTP, DATA FABRIC

MDM ENTERPRISE — REFERENCE DATA, MASTER DATA, DATA GLOSSARY (META-DATA)

KDS — KNOWLEDGE DATA STORE, KNOWLEDGE GRAPH DATABASE, ONTOLOGY, AI PROMPTS, KNOWLEDGE ACCUMULATION

BUSINESS OBJECT — SILOS RESHAPING CENTERED AROUND BUSINESS OBJECT TO ELIMINATE DATA DUPLICATION, DATA MESH

AI ENTERPRISE GOVERNANCE — CREATION OF SMART ALGORITHMS, AUTOMATED-DECISION ENDPOINTS

AI-POWERED AUTOMATIC GOVERNANCE — USE AI'S CAPABILITIES TO ESTABLISH AUTOMATIC GOVERNANCE OVER THE INFORMATION SYSTEM, MONITORING PROCESSES, RULES AND DATA

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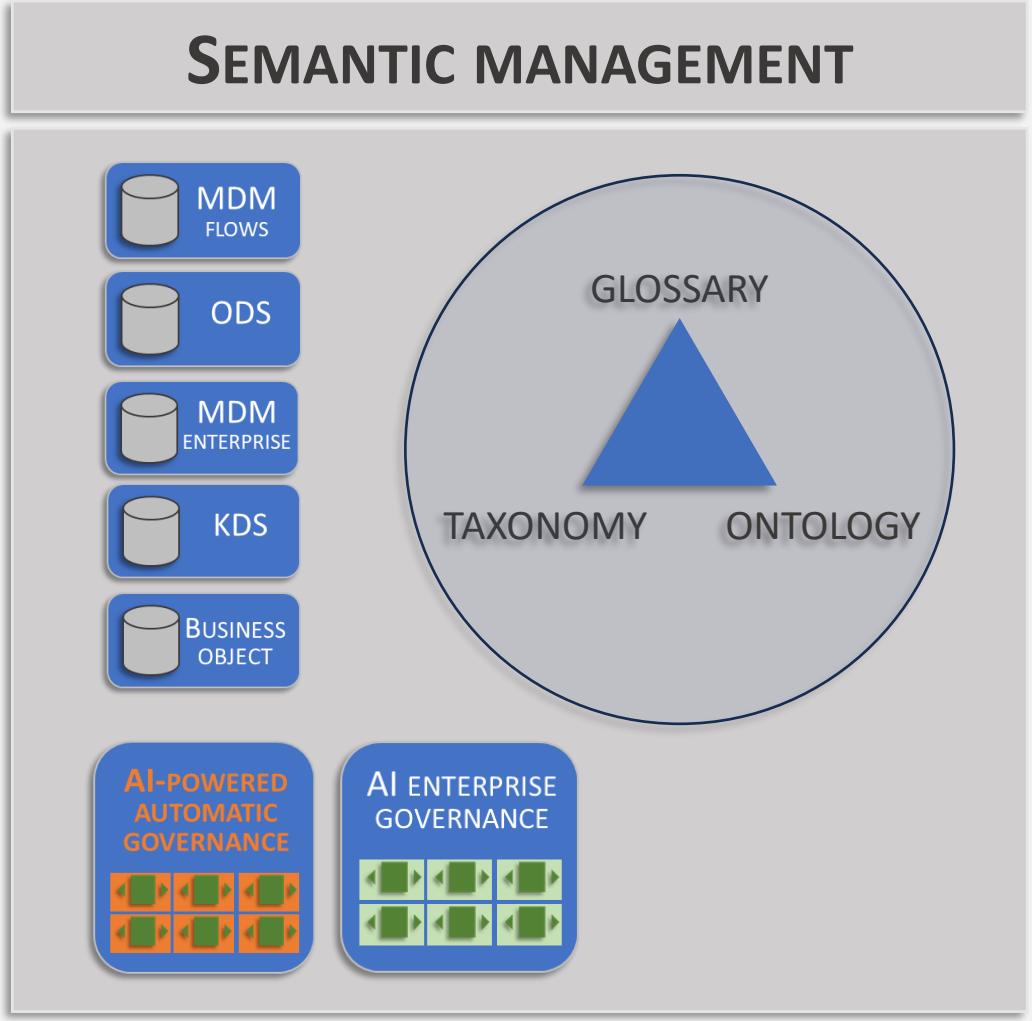
Key takeaways

Semantic management

- MDM for data flows
- ODS (Data Fabric)
- MDM enterprise
- KDS (Knowledge Graph Database)
- Data as a product (Data Mesh)

Artificial Intelligence

- AI Enterprise Governance
- AI-powered automatic governance



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More videos

THANK YOU!

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This video about Enterprise Architecture

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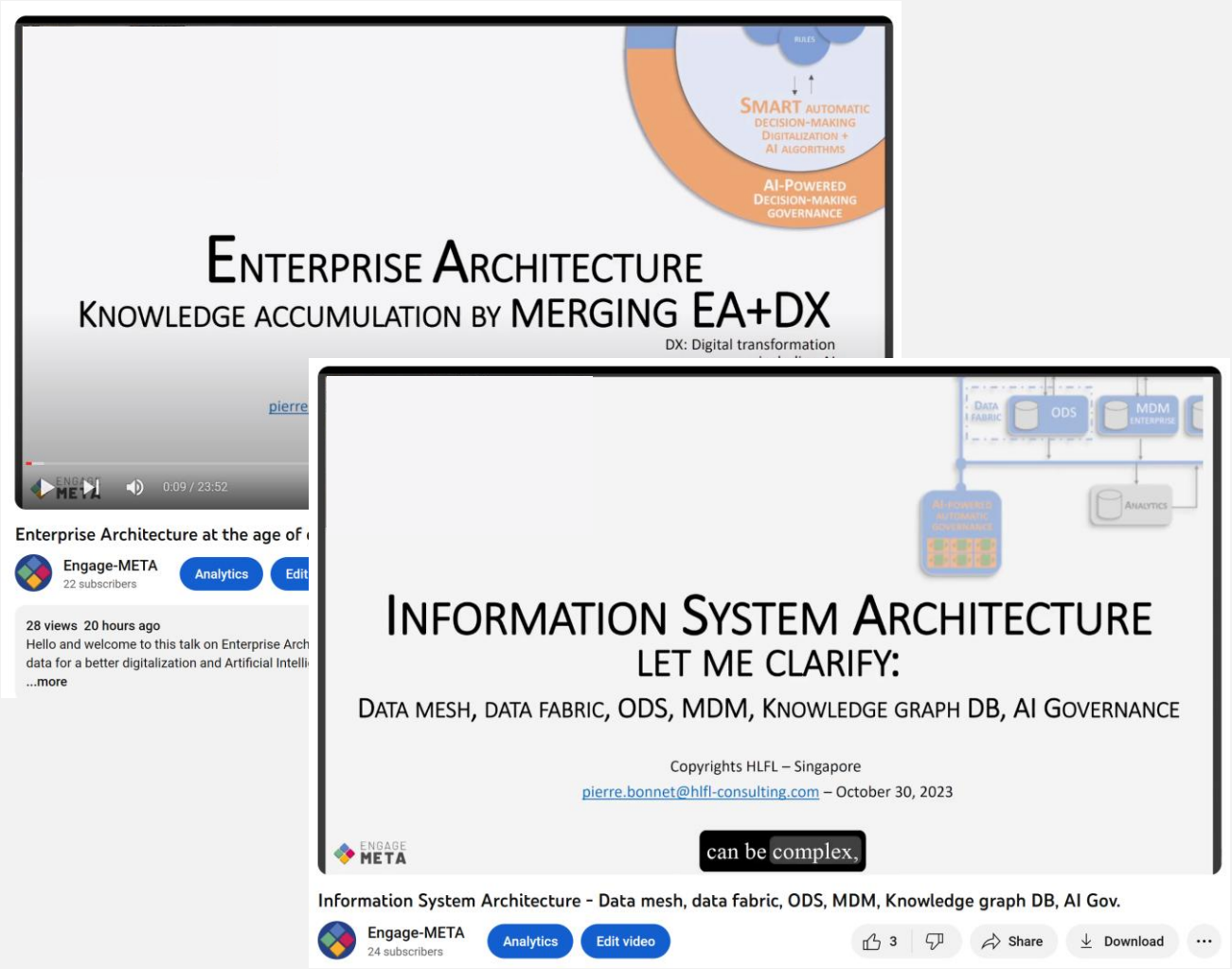

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