

Beyond Platforms.

Modern Data Sharing Architectures.

IVI Summit 2023 | «Co-Creating the Digital World; beyond 2027»

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 **software**^{AG}

Software AG

Turning an organization into a «Truly Connected Enterprise»

Design Time



Business transformation

- Business Process Management
- IT Portfolio Management
- Enterprise Architecture Management

ARIS

Alfabet

Run Time



APIs, integration & microservices

- Application integration (ERP, CRM, SaaS²,...)
- Hybrid Integration (on premise – cloud)
- API¹ management

webMethods

StreamSets



IoT & analytics

- Internet of Things (IoT) & Industrial IoT (IIoT)
- Industrial Analytics

Cumulocity IoT

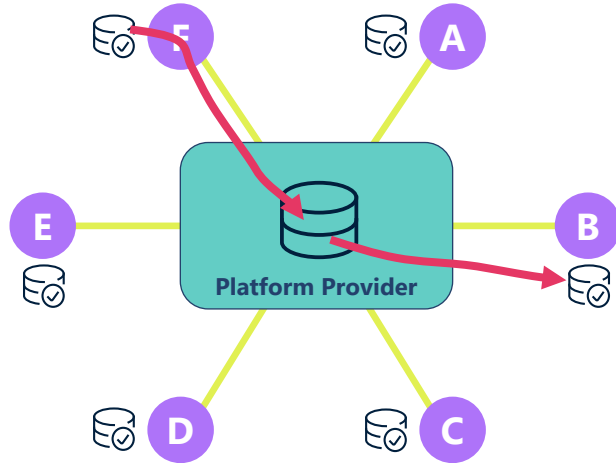
TrendMiner

1) application programming interface 2) software as a service

Technical Architectures

Data platforms, data spaces, and (data) ecosystems

Data Platform

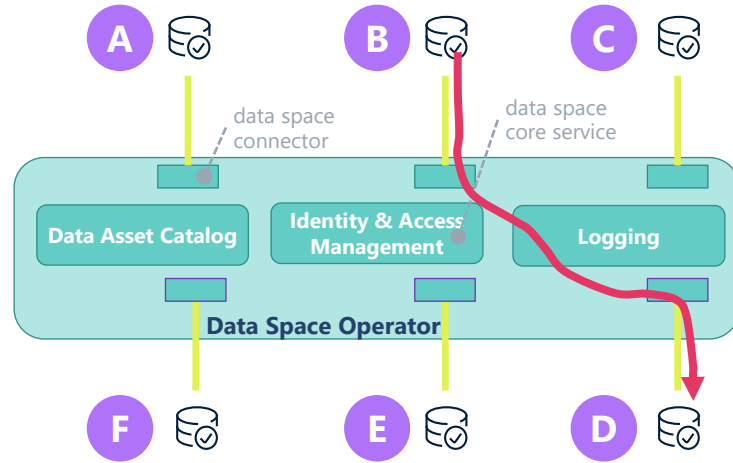


lead concepts:

«API»

A **(product) platform** is a set of elements (components, roles, processes, relationships, and interfaces) with a uniform architecture serving an organization as the basis for products and services for different customers.

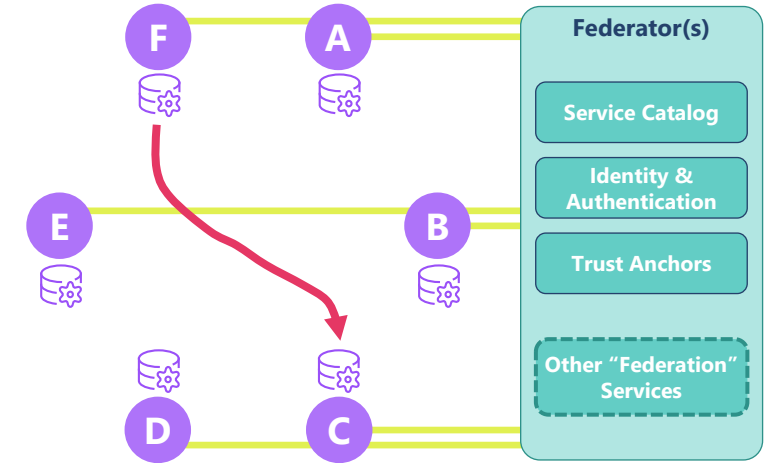
Data Space



«data asset»

A **data space** is a coordinated set of (i) technical standards, (ii) organizational policies, and (iii) core services under a (iv) specified governance model to enable and facilitate data exchange between its participants.

(Data) Ecosystem



«service»

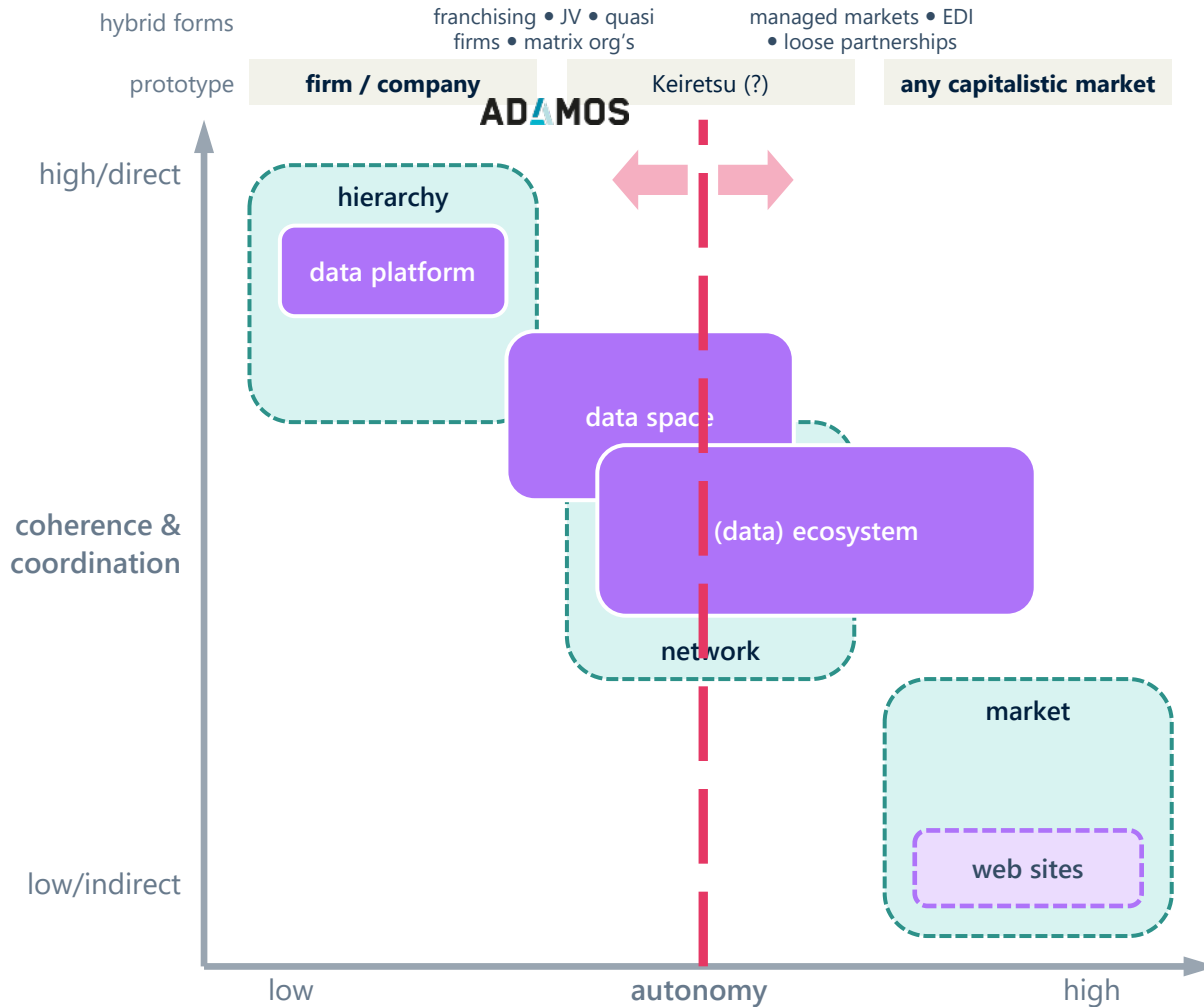
An **ecosystem** is the alignment structure of the multilateral set of partners that need to interact in order for a focal value proposition to materialize.

data warehouse (DWH) • data lake • data lake house • cloud data warehouse • data mesh • data hub • industry platform • one/two-sided platforms

Source: Strnadl & Schöning (2023). Data platforms, Data Spaces, and (Date-) Ecosystems. in: Weber (Ed.), Data Governance. Springer

Organizational Architectures

Network economy dynamics through the lens of social systems theory

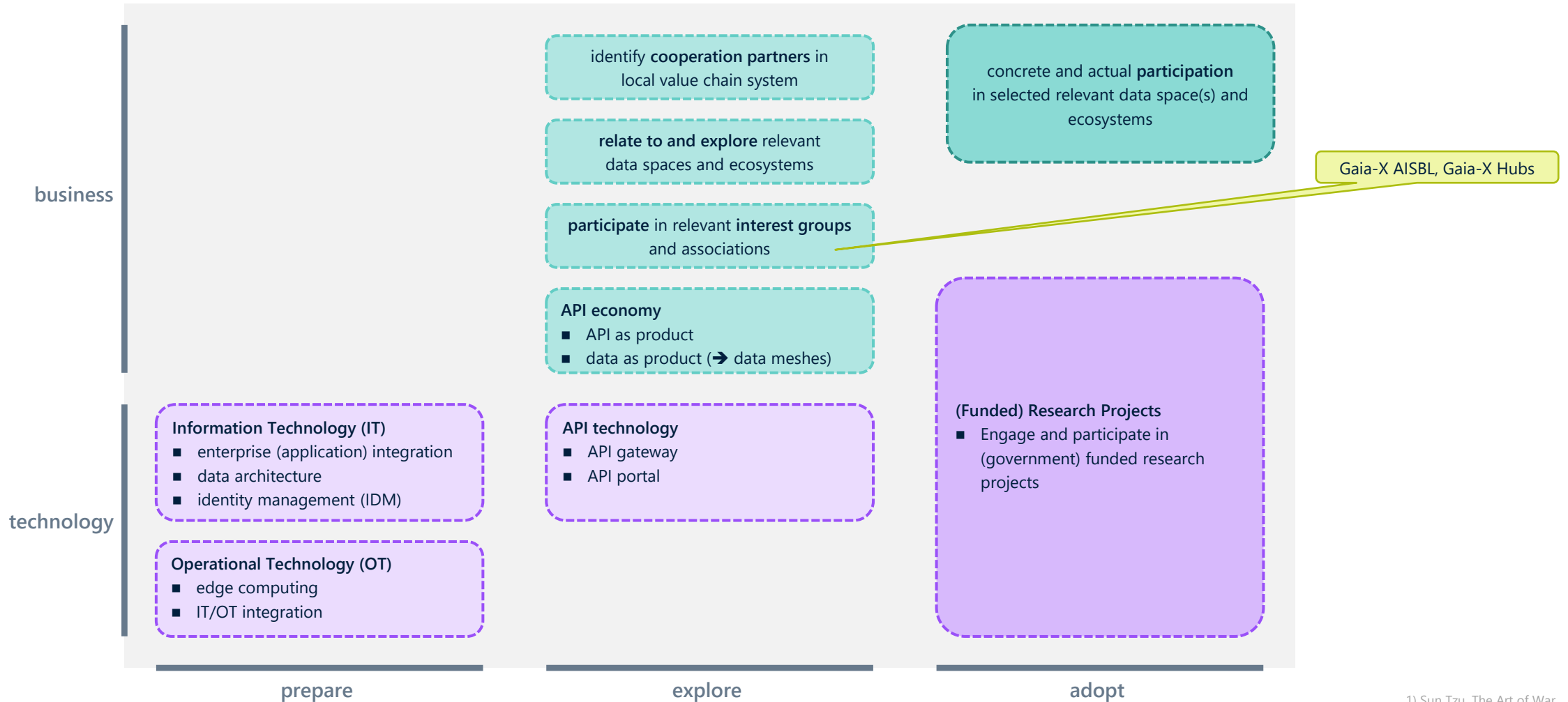


	coordination form key characteristics					
	normative basis	lead difference	operating medium	relationships of actors	modus of variation	modus of interaction
firm	employment right to direct	position	power	one-sided dependency	rational competition of programs	<ul style="list-style-type: none"> indifference mistrust
network	complementing exchange	relation	knowledge	mutual dependency	temporal competition to be faster	<ul style="list-style-type: none"> interest trust
market	contract property rights	price	money	independent	social competition regarding preferences	<ul style="list-style-type: none"> indifference opportunism

Source: Willke (1998): Systemtheorie III: Steuerungstheorie. Stuttgart: Lucius & Lucius (UTB 1840), 135-41.

Potential Strategies & Tactics

«Strategy without tactics is the slowest route to victory. Tactics without strategy is the noise before defeat»¹



Source: Strnadl & Schöning (2023). Data platforms, Data Spaces, and (Date-) Ecosystems. in: Weber (Ed.), Data Governance. Springer

1) Sun Tzu. The Art of War.

