

RELTIO

# Demystifying Entity Data as a Product

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SVP, Technology

Mike Frasca  
Field CTO

May 2023

# Rules of the Show

- Please keep yourself on mute
- All questions should be asked in chat or take yourself off of mute and ask
- Some of the questions might not be able to be answered due to confidentiality
- Community show will be recorded and posted to Reltio Community

# Upcoming Community Events

## Upcoming Events

[Go to Events](#)

**18**  
MAY

Demystifying Entity Data  
as a Product: An  
Introduction to Data Mesh  
and DaaP for Customer  
Data

📅 Reltio Webinar Events

🕒 May 18, 09:30 - 10:30 (CT)

**25**  
MAY

Real-Time Customer API  
with Reltio Integration Hub  
and MuleSoft

📅 Reltio Webinar Events

🕒 May 25, 10:00 - 11:00 (CT)

**8**  
JUN

Ask Me Anything: How AI  
is Influencing the Future of  
MDM

📅 Reltio Webinar Events

🕒 Jun 8, 10:00 - 11:00 (CT)

**15**  
JUN

MDM: A Nursery for Data  
Governance

📅 Reltio Webinar Events

🕒 Jun 15, 09:00 - 17:00 (CT)

**22**  
JUN

The ABCs of Crosswalks:  
Understanding Their  
Purpose and Use

📅 Reltio Webinar Events

🕒 Jun 22, 10:00 - 11:00 (CT)



# DATA**DRIVEN**23

MODERN DATA MANAGEMENT CONFERENCE

October 3-5, 2023  
Dallas, TX

Save the Date  
<https://www.reltio.com/datadriven/>



# About the Presenters



**Ansh Kanwar** serves as the SVP, Technology for Reltio and is responsible for the engineering of the Reltio Platform.

He has previously been at Citrix Systems, Logmein, and multiple startups in various technology and product management roles and brings 23 years of experience from the SaaS, Cloud Infrastructure, and Enterprise Security spaces. Ansh holds an MS in ECE from UC, Santa Barbara and and MBA from MIT Sloan.



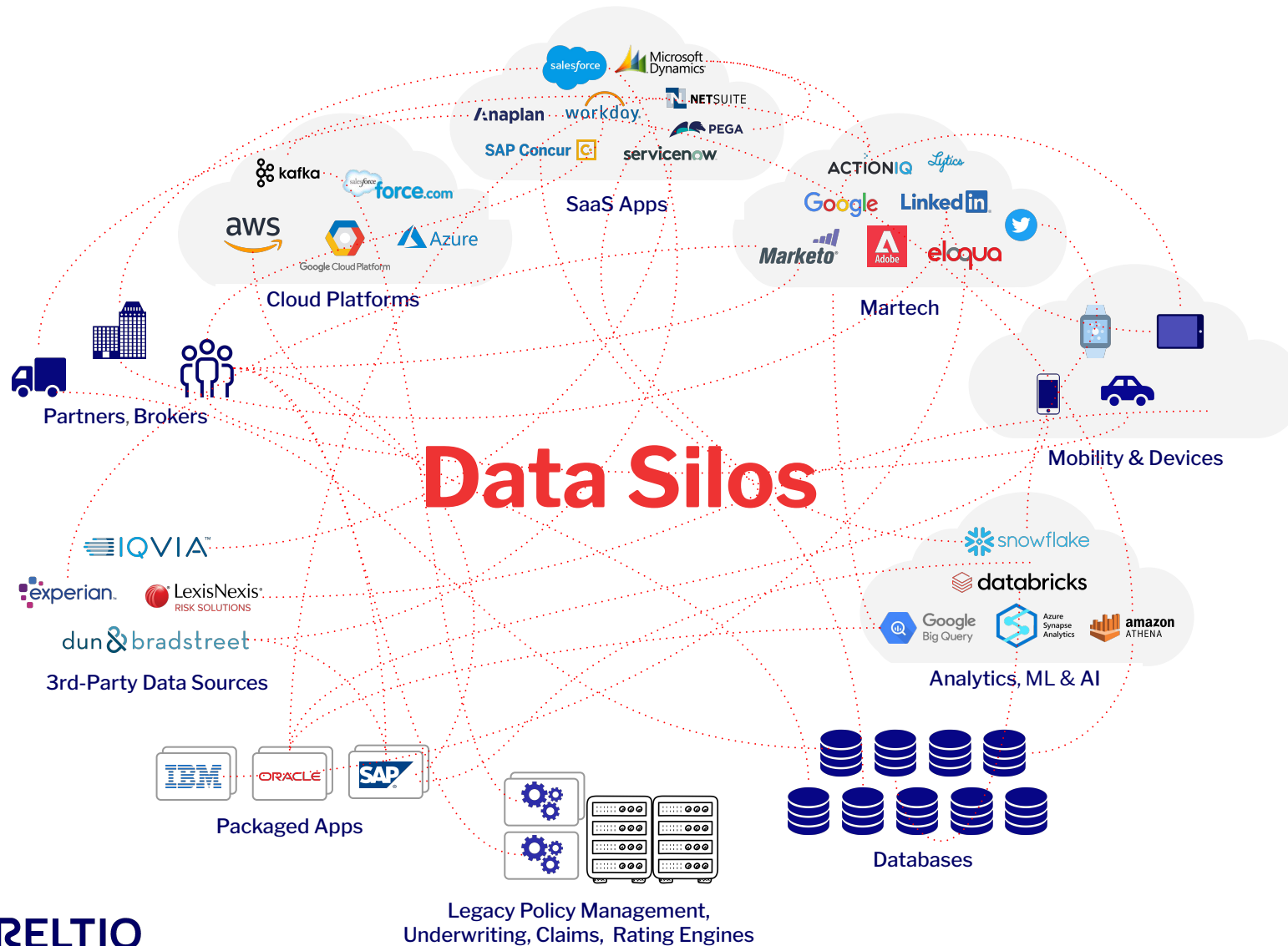
**Mike Frasca** serves as Field CTO at Reltio, responsible for overseeing strategic technical guidance to all customer facing Reltio teams and assisting with long term product strategy and innovation at Reltio.

Prior to joining Reltio in 2016, Mike led the technical side of MDM implementation teams at multiple consulting firms and was a principal architect at IBM and Initiate Systems. He has worked on some of the most complex MDM implementations and led data architecture designs used by Fortune 100 companies today.

This will be a good session if

- Learn about Data Mesh and Data as a Product (101 level)
- Learn about DaaP capabilities present in Reltio
- How to deliver Entity/Customer DaaP quickly and effectively using Reltio

# Getting to data-driven excellence is not easy



- Critical data is locked in legacy systems
- Point-to-point integrations move incomplete and inaccurate data from app to app, often creating duplications
- Business processes are highly inefficient as they need to span data silos
- Identifying and using the right data to drive key initiatives is challenging.



# Distributed Data Architecture/Patterns

Solving for what ?

... the **data lake architecture have common failure modes** that lead to unfulfilled promises at scale.

## Monolithic, Centralized

DW/DLs take pride in “big” data - the opposite of operational systems which have moved to domain specific boundaries.

## Coupled pipeline decomposition

Ingest-process-serve is orthogonal to “meaning”, to change one “domain” means touching all stages of the pipeline

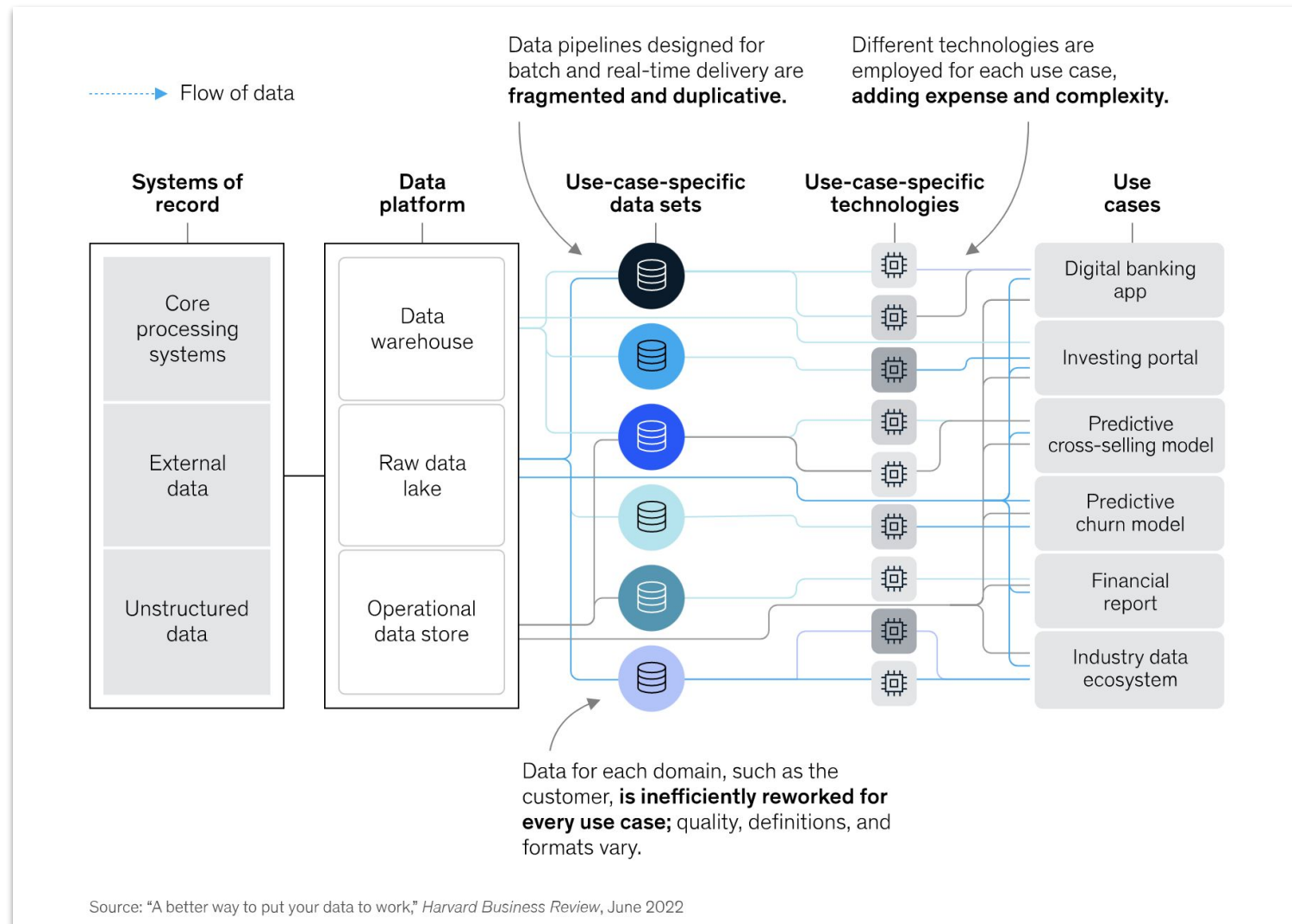
## Hyper specialized ownership

Central data teams - not just the data - are siloed from the organizational units. Have to learn the domain before engaging with it.

-Zhamak Dehghani

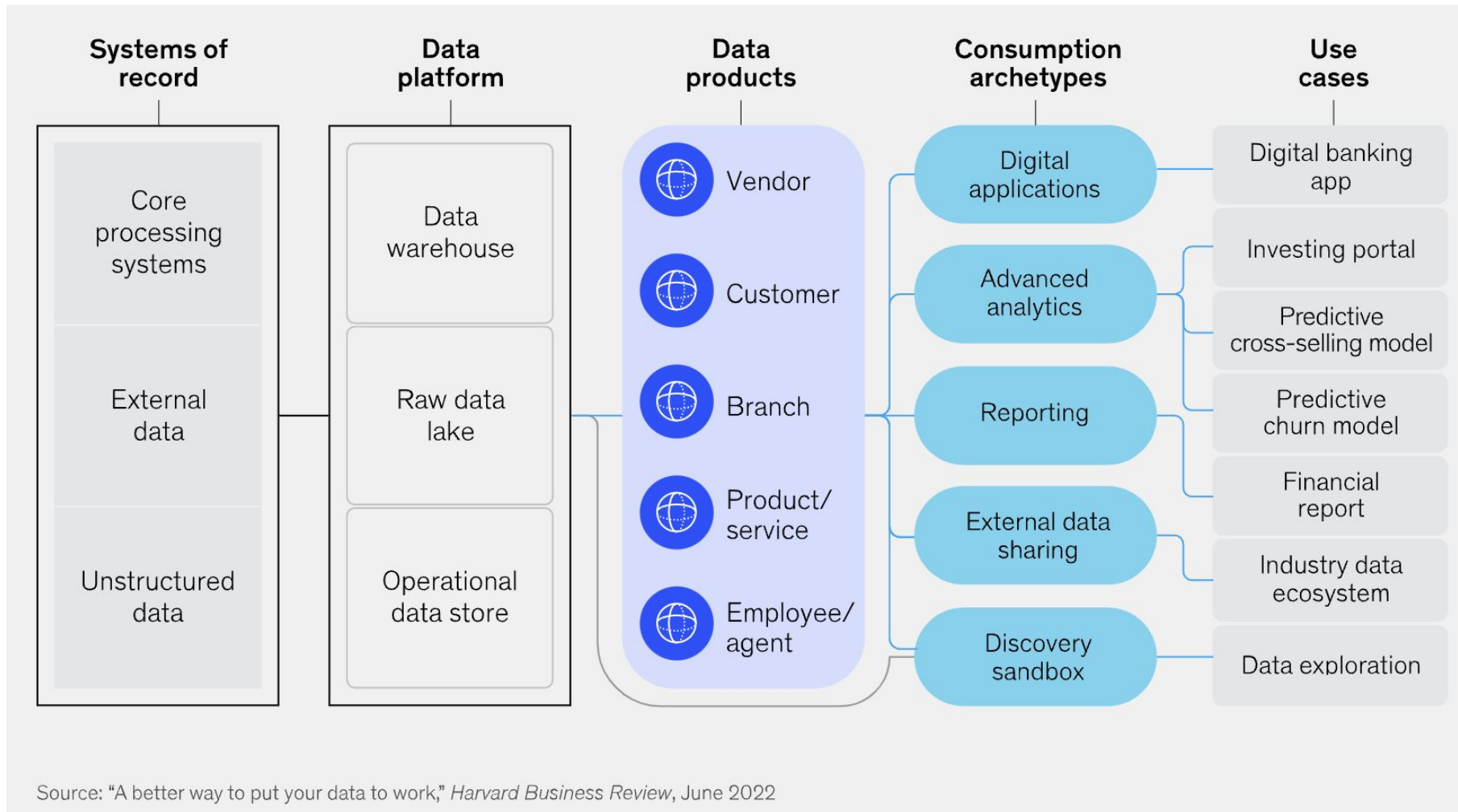
How to Move Beyond a Monolithic Data Lake to a Distributed Data Mesh  
<https://martinfowler.com/articles/data-monolith-to-mesh.html>

# Traditional approaches are inefficient



Source: How to unlock the full value of data? Manage it like a product  
June 14, 2022  
<https://www.mckinsey.com/capabilities/quantumblack/our-insights/how-to-unlock-the-full-value-of-data-manage-it-like-a-product>

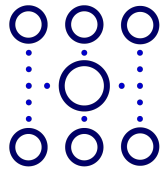
# Data Products reduce duplication of effort



Source: How to unlock the full value of data? Manage it like a product  
June 14, 2022  
<https://www.mckinsey.com/capabilities/quantumblack/our-insights/how-to-unlock-the-full-value-of-data-manage-it-like-a-product>

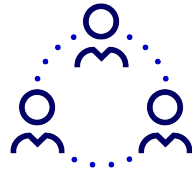


# Destination: Data as a strategic capability



## BREAKING DOWN SILOS

Unlocking data and  
getting to a single  
source of truth



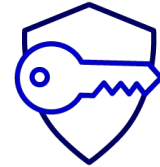
## DATA EMPOWERMENT

Operationalizing  
data across the  
enterprise



## CLOUD-BASED DATA INFRASTRUCTURE

Enabling speed  
and agility



## TRUST & SECURITY

Safeguarding  
customer data,  
structured  
auditable changes

**Culture**

# Treat data as a product

**RELTIO**



# Data as a Product

“Domain **data teams** must apply product thinking [...] to the datasets that they provide; considering their **data assets as their products** and the rest of the organization’s data scientists, ML and data engineers as **their customers**.”

- Zhamak Dehghani

<https://martinfowler.com/articles/data-mesh-principles.html>  
<https://martinfowler.com/articles/data-monolith-to-mesh.html>



# Data as a Product

Data as a product is the concept of applying key **product development principles** - Identifying and addressing unmet needs, agility, iterability, and reusability - to data projects.

<https://www.getcensus.com/blog/what-does-data-as-a-product-really-mean>

# Data Mesh

## Four Core Principles

### Domain Ownership

- Domains offer bounded context
- A team owns a domain
- host and serve datasets in consumable manner
- from Push to Pull
- responsible for quality

### Data as a Product

- Discoverable
- Addressable
- Trustworthy (SLO, provenance, lineage, quality)
- Self-describing - syntax, semantic, samples
- Global standards, inter-operable
- Secure

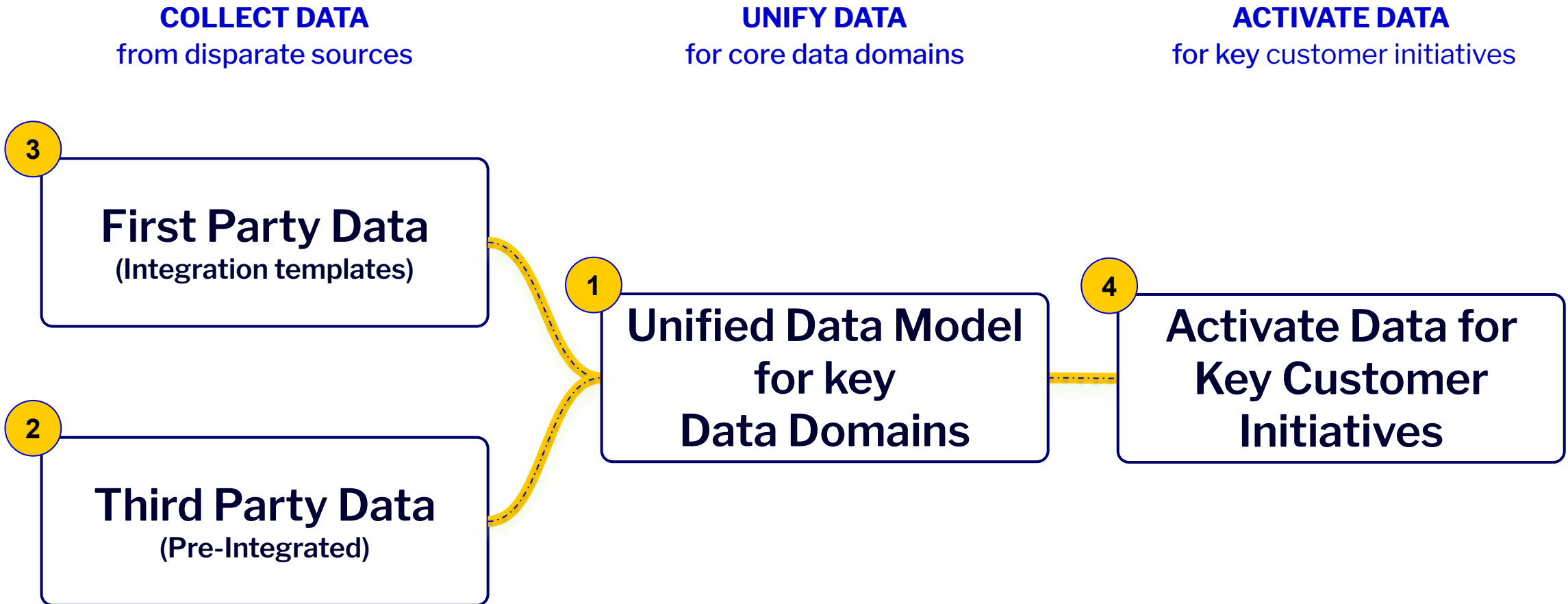
### Self-serve Data Platforms

- Data infrastructure plane - storage, access, query engine etc.
- Data Product Developer plane - lifecycle management of DP
- Supervision and Integration plane - browsing, discovery, security policies
- Enforcement of data contracts.

### Federated Governance

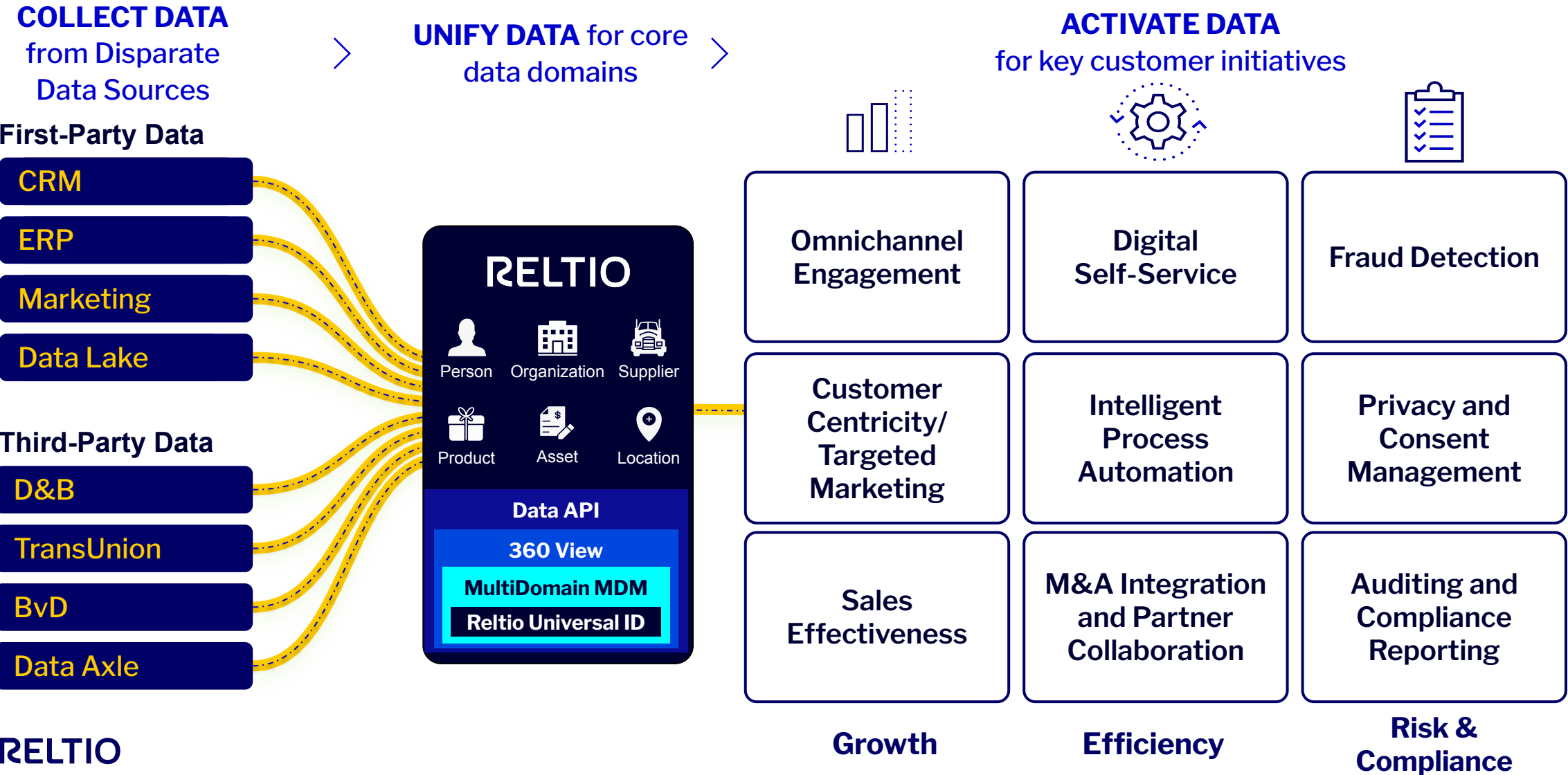
- Goal - effective mesh operation
- Define global standards such as SLOs or quality standards
- Governance guild is composed of Domain Owners and practitioners
- Privacy and compliance policies

# Conceptual Data Flow





# We unify multiple sources of data into a single source of truth

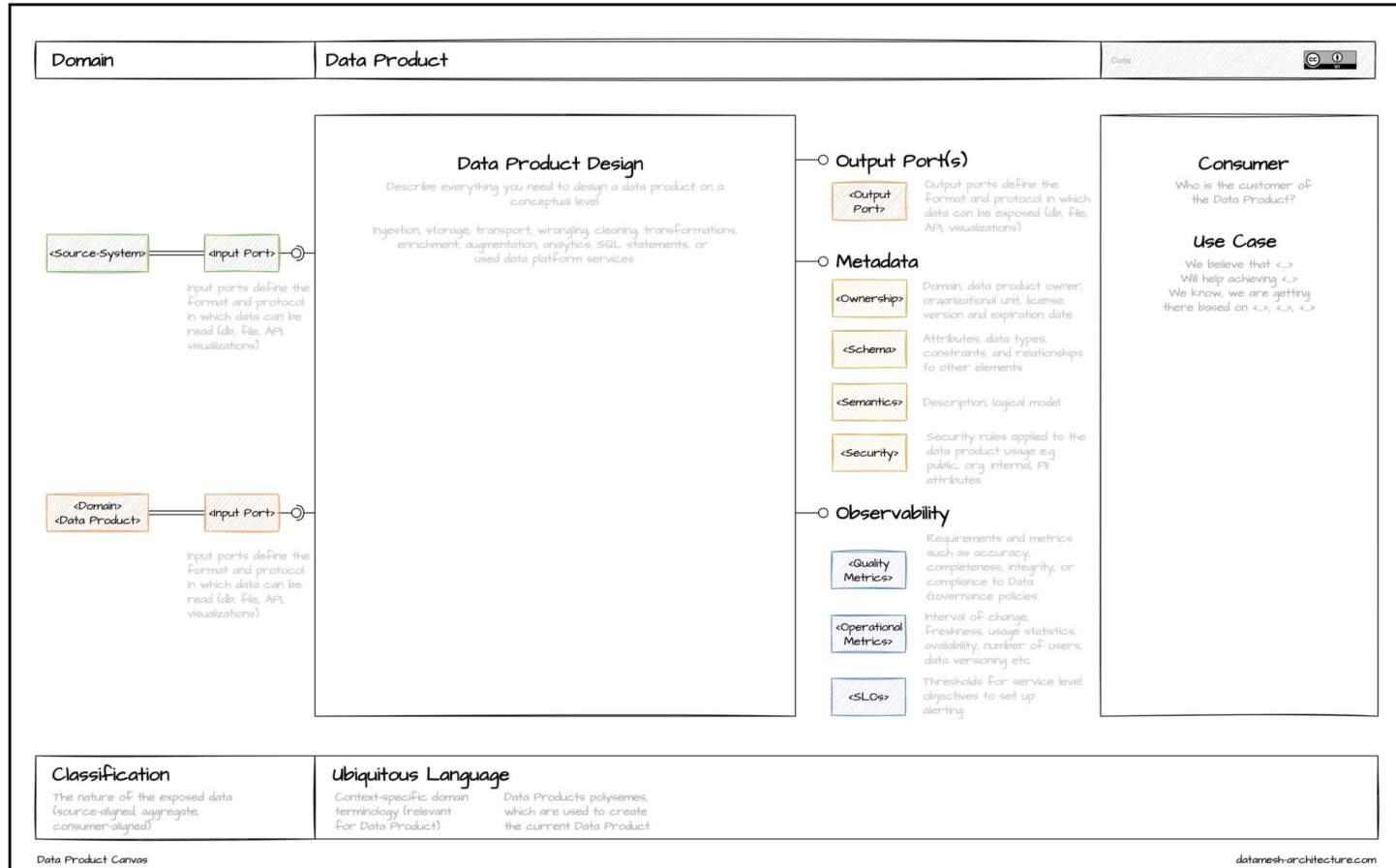


# Data as a Product *in Reltio*

How to delight your customers ?	What it means?	How to implement with Reltio?
Domain Data as a product	Domain teams publish data they are responsible for.	Intrinsically domain/entity driven
Discoverable	Each domain data product must register itself with this centralized data catalogue for easy discoverability.	Metadata is connected to a data catalog.
Addressable	unique address following a global convention that helps its users to programmatically access it	Domain Datasets exposed via APIs and ReltioID
Trustworthy & truthful	provide an acceptable Service Level Objective around the truthfulness of the data	Quality, Provenance Sources, DQ dashboards
Self-describing	Data schemas are a starting point to provide self-serve data assets.	Canonical data model, Velocity Packs
Global standards, inter-operable	correlate data across domains and stitch them together in wonderful, insightful ways	Reference Data Management and Rulesets
Secure	the access control is applied at a finer granularity, for each domain data product.	Clear ownership, Fine grained access control

Bonus: Data Product updated in real time !

# Using a data product canvas



- Start with the key initiatives you need to power - Use cases / business outcomes
- Identify the consumers of the data and validate use cases & validate with them
- Define data consumption requirements and outputs
- Define metadata and governance policies
- Define and implement - data quality, operational metrics and SLOs
- Identify first party inputs and input formats
- Define data enrichment sources

The Global Home for Data Mesh

Getting Started with Data Mesh

Common Data Mesh Misconceptions

Data Mesh Resources

**User Journey Stories**

Community

Data Mesh Days

Who We Are

Our Sponsors

## User Journey Stories

Learn about data mesh deployments from the awesome companies listed below, as well as by watching our [Data Mesh Journeys YouTube playlist](#). The list is only a handful of the 100+ companies we know are deploying data mesh, so don't be one of the silent ones – let the world know you are innovating! The direct links to the user journey stories below are categorized as A for article/post, S for slides, V for video, and P for Podcast.

We are always on the lookout for new user journey stories. If you have one to add or would like to present at one of our meetups, email [community@datameshlearning.com](mailto:community@datameshlearning.com) or reach out to DML staff on Slack.

ABN AMRO [A1](#) [A2](#)

Adevinta [V1](#) [A1](#) [A2](#) [A3](#)

Adidas [A1](#) [A2](#) [A3](#) [A4](#)

AO [V1](#)

<https://datameshlearning.com/>

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# Reltio in the age of Data Virtualization

Clean connected data is the foundation

“Core data is information about customers, vendors, locations, assets, and suppliers, among other things i.e. **data that every organization runs on.**

...MDM is evolving from a reluctant to an indispensable spend. That is because every organization is becoming a data-driven organization, which means they need high-quality, actionable information to make sound business decisions, satisfy their customers, and create more enterprise value.

Poor data equals poor decision-making.

**We deliver core data as a product to our customers.”**

-Manish Sood  
CEO & Founder

# Why deliver data as a Product

“so that data users can easily discover, understand and securely use high quality data with a delightful experience; data that is distributed across many domains.”

- **Zhamak Dehghani**

Data Mesh Principles and Logical Architecture

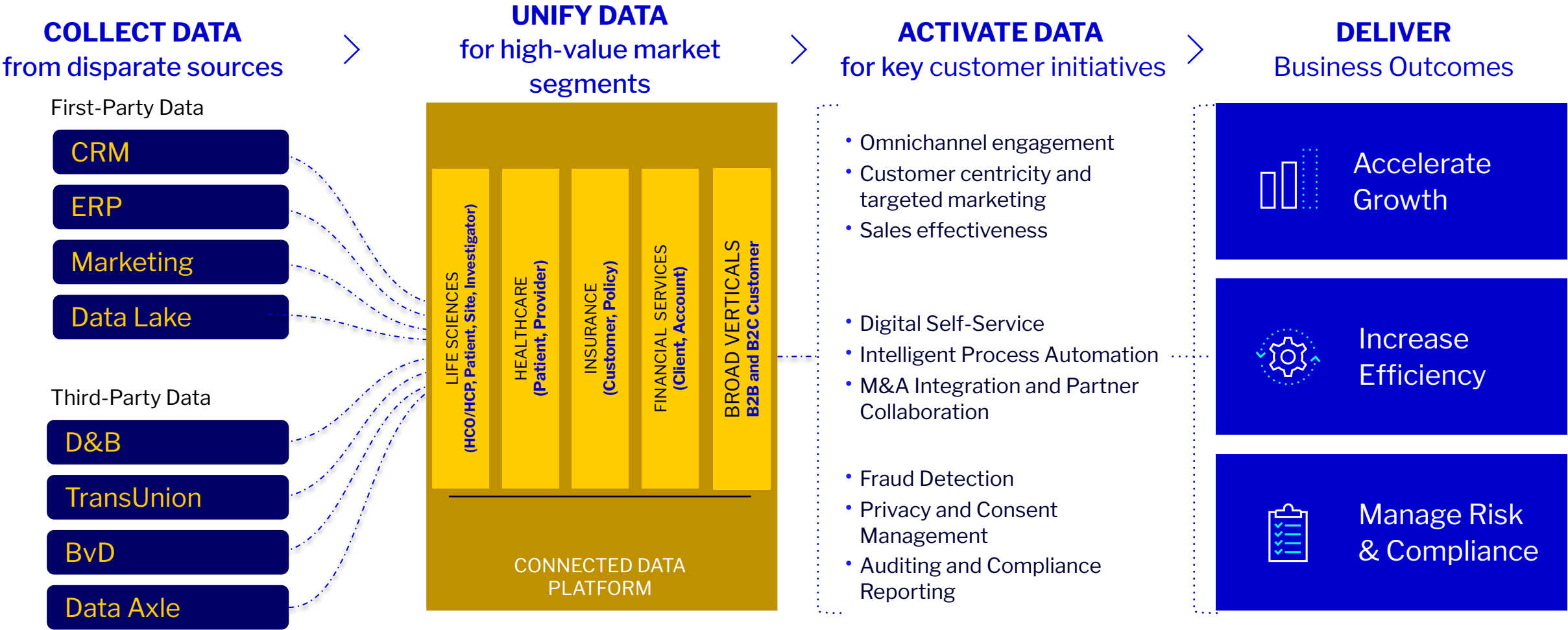
<https://martinfowler.com/articles/data-mesh-principles.html>

# Comparing Data Products to Digital or Physical Products

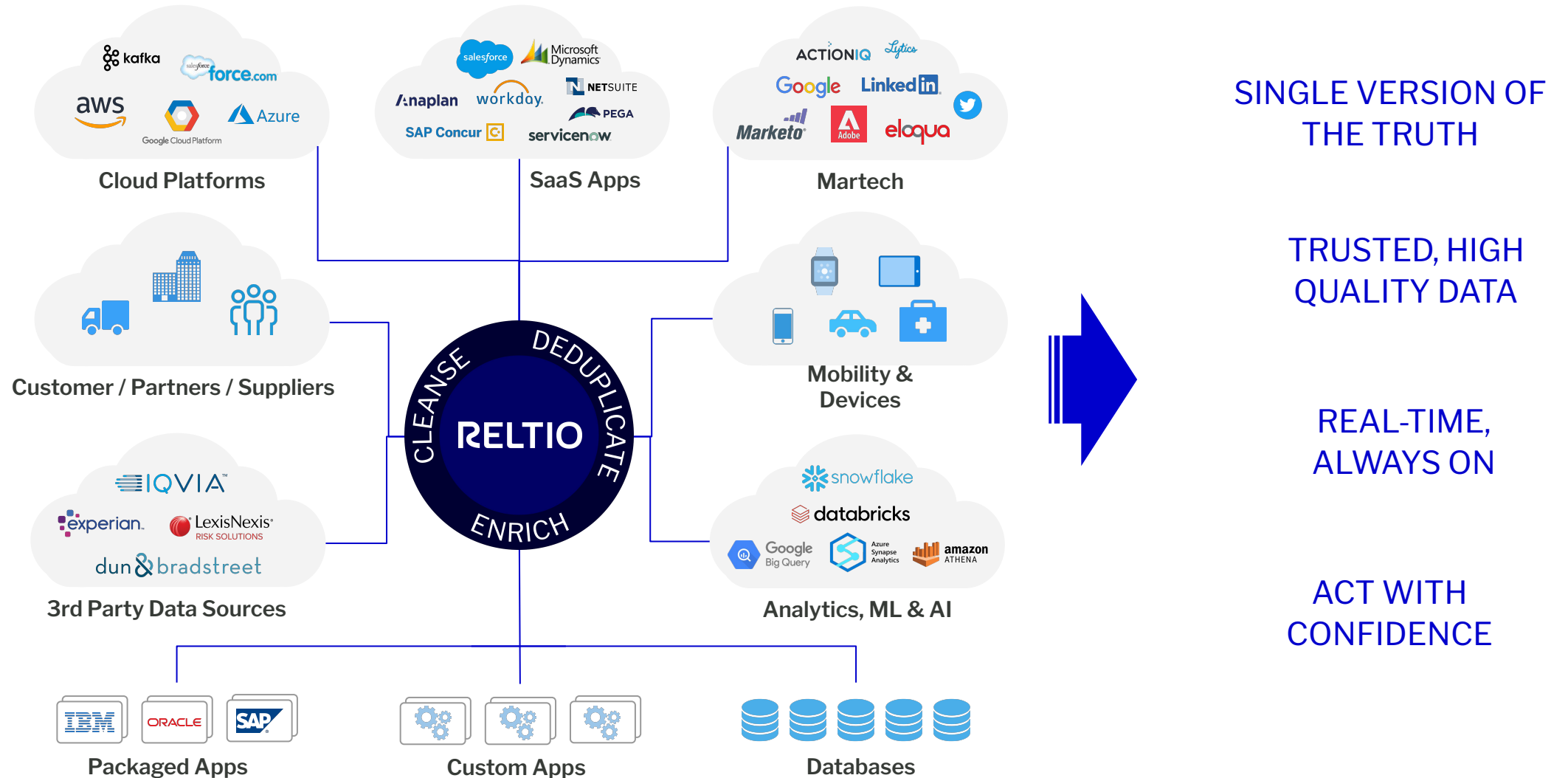
	<b>Digital product</b> <i>Example: Computer app</i>	<b>Physical product</b> <i>Example: Car</i>	<b>Data product</b>
<b>Product features</b>			
<b>Customization of base product for different users</b>	App enables users to personalize the layout, color schemes, and content displayed and to select plans and pricing structures that meet their needs	Car buyers may purchase a variety of special options (eg, leather upholstery, tinted windows, antitheft systems)	Data products can be wired to support different systems that consume data, such as advanced analytics or reporting systems
<b>Delivery of regular product enhancements</b>	Automatic downloads of new functionality	New models  Engine modifications that boost fuel economy	New data  Support for additional consumption archetypes
<b>Production efficiency</b>			
<b>Reuse of existing processes, machinery, and components</b>	Software developers reuse blocks of code	Automakers use a common chassis on vastly different cars	Organizations reuse blueprints and modular technologies for consumption archetypes across products

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# Activating core data to drive business impact



# Reltio enables you to manage your core data as products





# Mapping to Business Value - Example

