Accelerate Data Product Delivery
from Model to Marketplace

Presenters:
Yetkin Ozkucur & Nadeem Siddique

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Gartner's recommendation

"As analytics artifacts are delivered to consuming users, more must be taken into consideration than just the object itself. **Organizations taking a product approach to analytics delivery will find increased trust across domains and reduced redundancies in development.**"

– Gartner Reference Architecture for Federated Analytics, July 2023

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Data product

Noun. [**dey**-t*uh* **prod**-*uh*kt]

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1. A product that facilitates an end goal through the use of data

– DJ Patil, former U.S. Data Scientist

2. Primary Stakeholders include data modelers, data scientists, data analysts, end data consumers and decision makers

3. IDC Prediction: "**By 2026**, 60% of leading enterprise intelligence companies will have **identified data products**, and 15% will have **attributed business value** to the products with a data valuation methodology

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Three key attributes of data products

Access

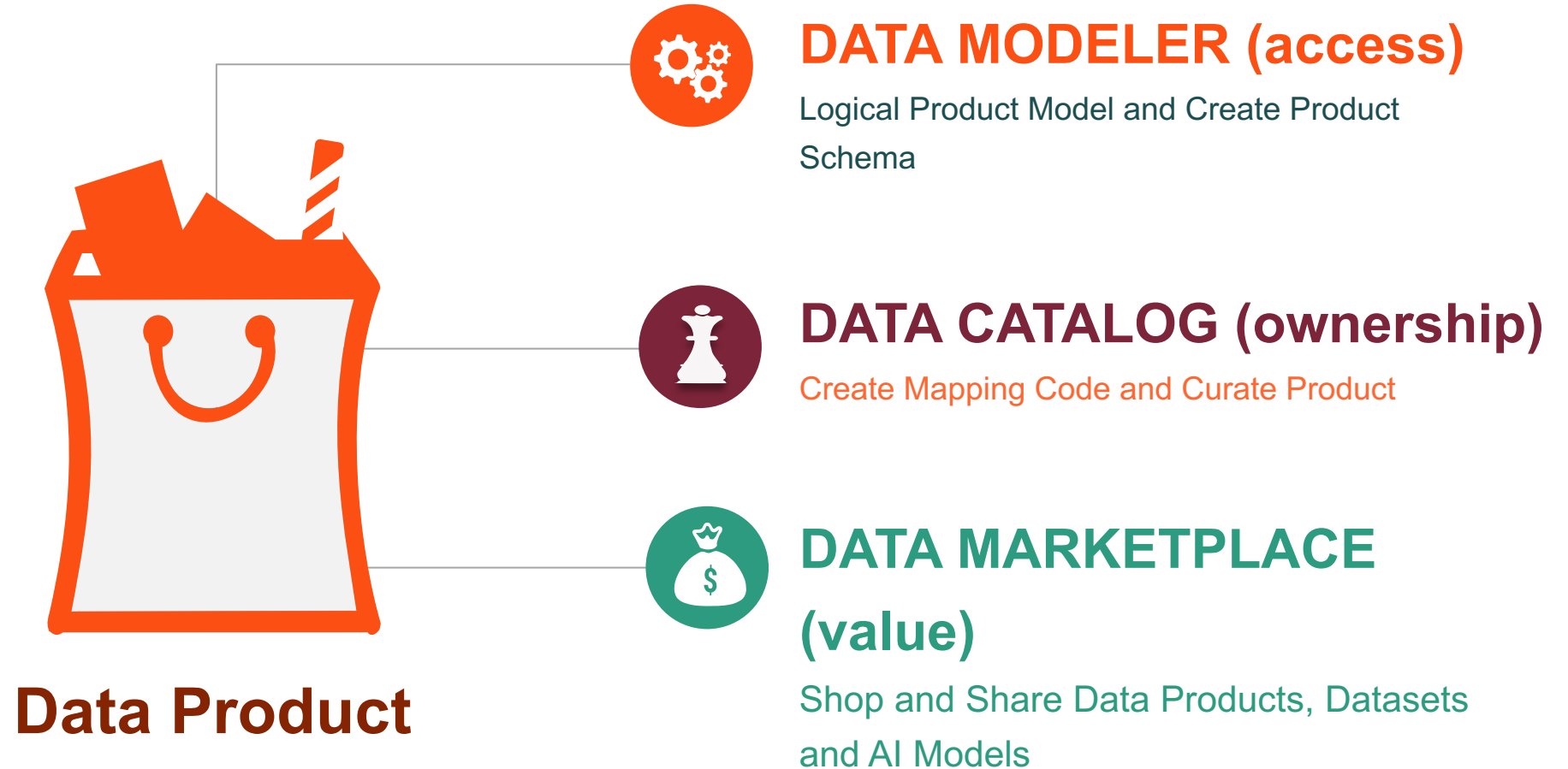Making data products available, discoverable, and reusable

Value

The business value derived from the data products to drive data valuation

Ownership

Who is responsible to maintain, monetize and nurture the data product through its life

– IDC FutureScape Worldwide Future of Enterprise Intelligence 2024 Predictions

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Composition of a Data Product

Data Product

DATA MODELER (access)
Logical Product Model and Create Product Schema

DATA CATALOG (ownership)
Create Mapping Code and Curate Product

DATA MARKETPLACE (value)
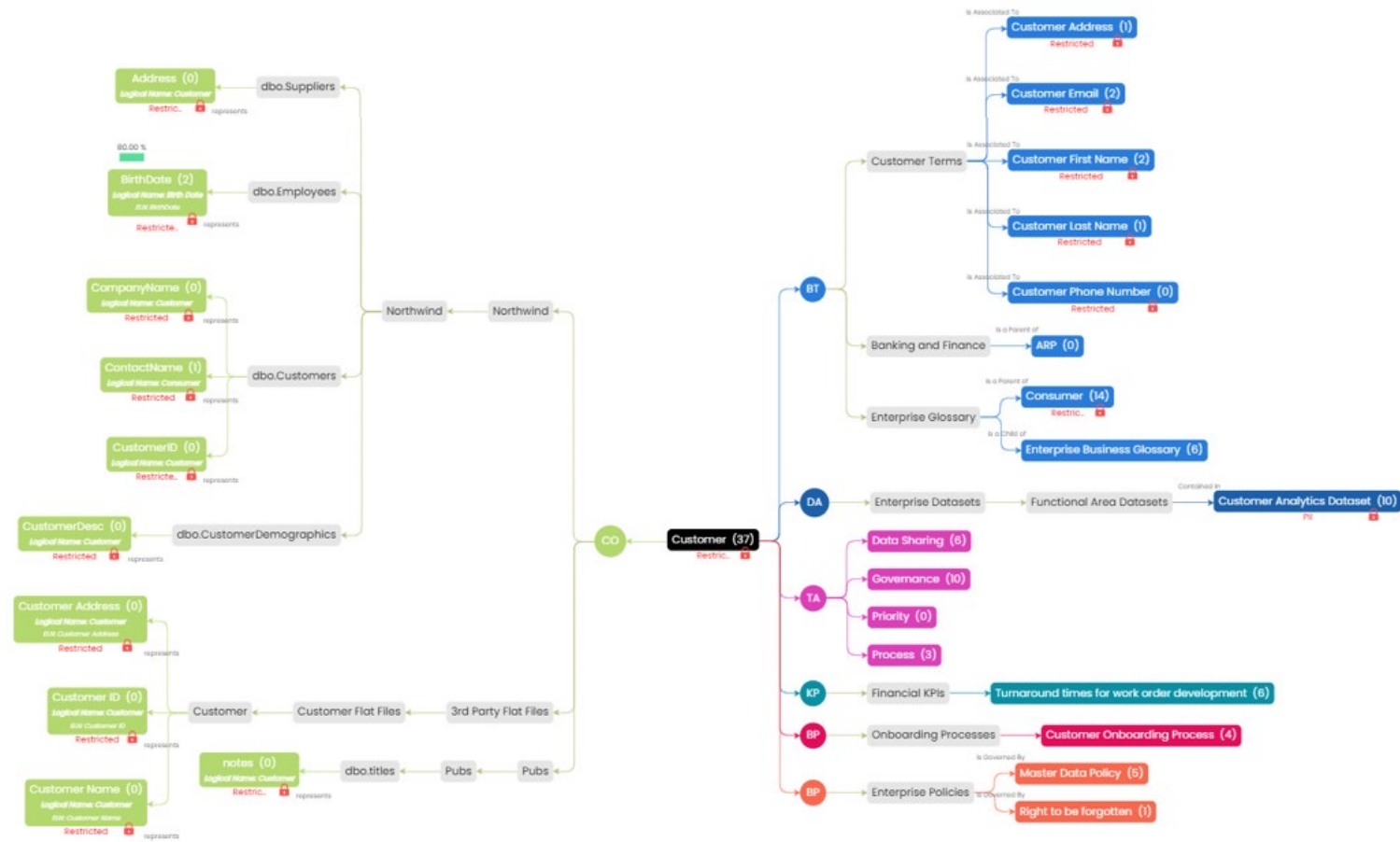Shop and Share Data Products, Datasets and AI Models

The role of data modeling

- Sets the table by structurally collecting business requirements for data

- Conceptual, logical and physical modeling

- Uniform definitions, descriptions and sensitive data information to be used in data product curation
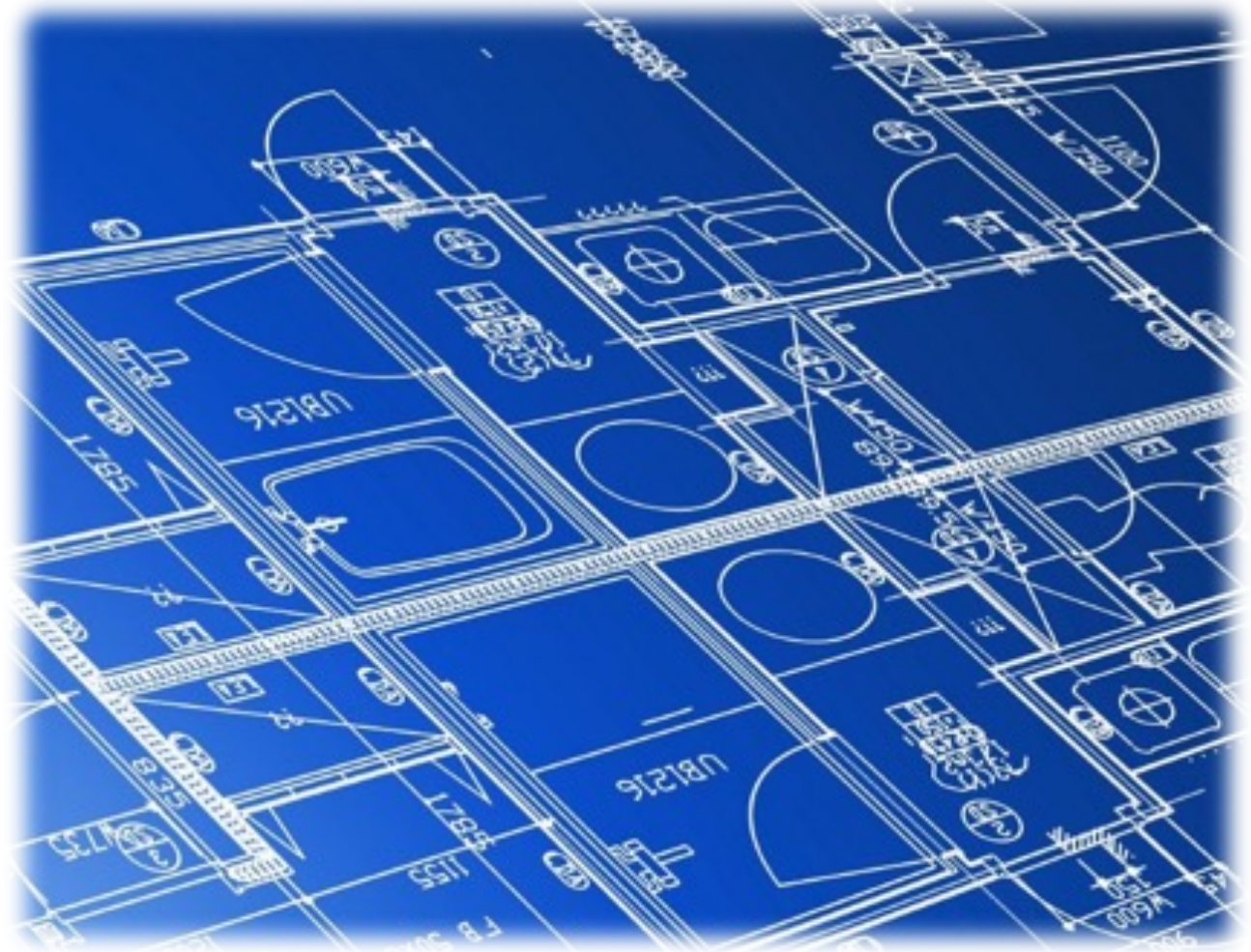
The benefits of data catalog automation

- Generation of source-to-target data mappings and ETL code to gather data

- Automated generation of data lineage for data consumers

- Automated data profiling and data quality scoring to build data trust

- Integrated business context and governance guidance for consumers

The value of data marketplaces

A one-stop shop for data products

Shop

Datasets, AI models, and data products all in one location

Share

Addresses data sharing concerns through data governance and audit trails

Compare

Dataset reviews with a similar feel to a consumer shopping experience

Data value scoring speeds discovery and aids in valuation and monetization

- User-defined, weighting of data quality scores, data consumer rankings, and governance curation completeness

- Automated assessment applying gold, bronze and silver tiering of value

- Based on *Infonomics* concepts developed by Doug Laney

Solving hard problems with data products

The Problem(s)	Data Product Components	Potential Insights
Where should a bank build their next physical location?	**Internal datasets** • customer addresses • Loan histories	Identify which locations are underutilized or overburdened to adjust staffing accordingly
Should it be an ATM or a full branch?	**External datasets** • home values per zip code • School demographics	Improve the customer experience by staffing bi-lingual employees
How should it be staffed?	AI models	Plan strategically, i.e., evaluate the potential ROI in opening new location branches or ATMs
	Associations to a Customer Segmentation data product	
	Business terms, rules and policies	

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Data Product Delivery
A data marketplace view

7 steps from model to marketplace

Value

EFFECTIVE · MANAGED · PROACTIVE · REACTIVE

Shop — Make trusted, governed data widely accessible

Score — Automate data value scoring

Observe — Raise data visibility and integrate data quality

Govern — Apply business rules and policies

Curate — Enrich with business context

Catalog — Search & find data easily

Model — Design data architecture

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INPUT DATASETS (7 steps)
- **Model**, the blueprint
- **Catalog**, where the data resides
- **Context**, rules, policies, definitions
- **Owner**
- **Sensitive data**: PII, PHI, Confidential
- **Data Lineage,** where the data coming from
- **Data Quality** profiling, business rules
- **Data Score**, popularity, value, processes

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AI Model Governance

Govern Input/ Stamp /Monitor Output
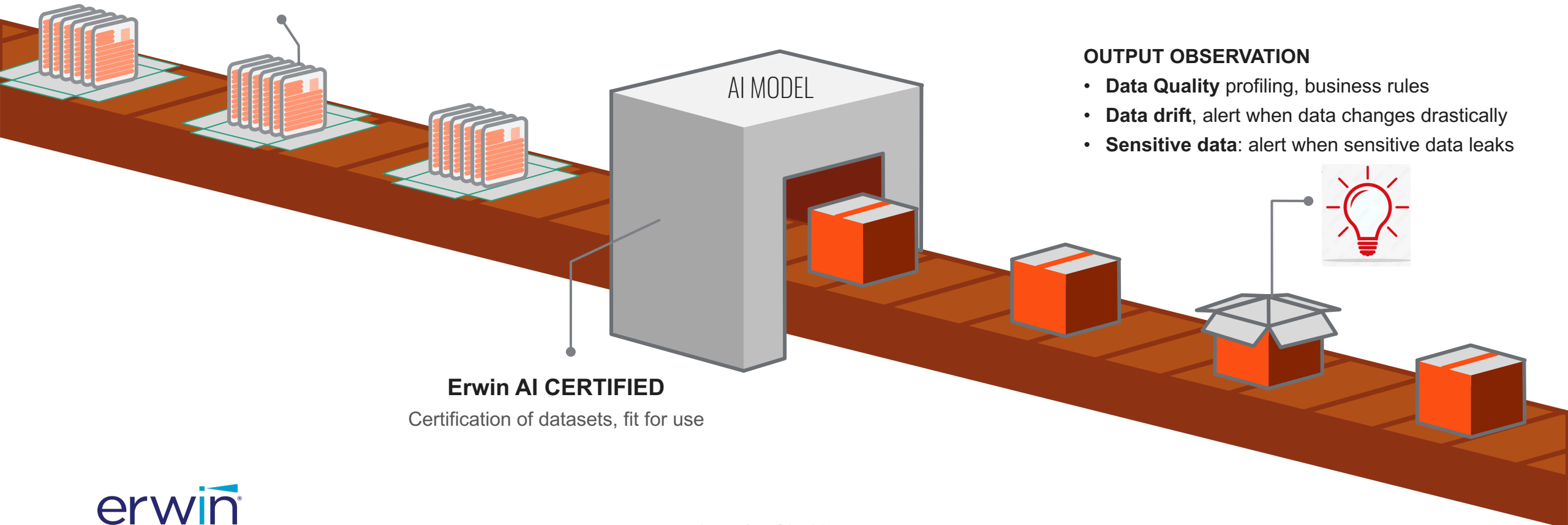
OUTPUT OBSERVATION
- **Data Quality** profiling, business rules
- **Data drift**, alert when data changes drastically
- **Sensitive data**: alert when sensitive data leaks

AI MODEL

Erwin AI CERTIFIED

Certification of datasets, fit for use

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Thank You

Want to learn how erwin can help you?

Experience
Data Intelligence

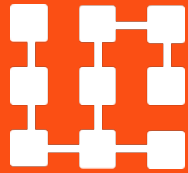**See first-hand the impact erwin can make in a hands-on "day-in-the-life" session for your company.**

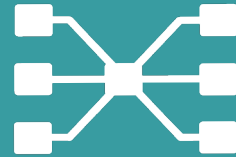**To get started, visit www.erwin.com and request a demo here**

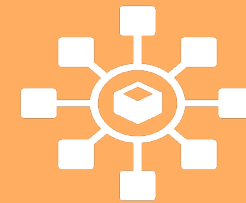erwin
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Today's erwin portfolio

Data Marketplace

| Data Modeler | Data Catalog | Data Quality | Data Literacy |

Data Lineage

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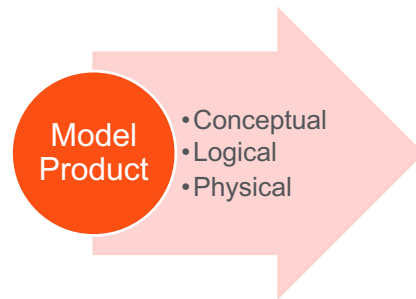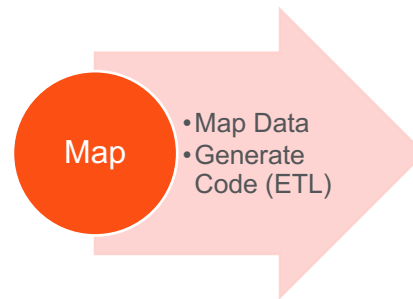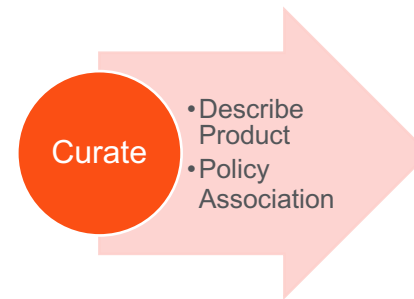
Accelerating model to marketplace delivery

Business requests data product to the data architect

Data architect models the data product and generates the code

Business provides the guardrails and promotes to marketplace

Model Product
- Conceptual
- Logical
- Physical

Map
- Map Data
- Generate Code (ETL)

Curate
- Describe Product
- Policy Association

Shop & Share
Promote Product

Where does data preparation fit in?

- Combine data marketplace capabilities with data prep tools like Quest Toad Data Point to deliver blended data from multiple sources easily

- Use scheduling capabilities to keep provided datasets refreshed