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Skills 101 erwin:

Delivering Trusted Data Products
with Context and Access.

Digital Twins Exist Today

Taking what you do in real life and looking at it with a digital set-up.





How you get there

Policy-as-Code for Governance Execution	Data Observability & Automated Remediation	Self- Maintaining Models & Contracts	Resilience Engineering for DataOps Pipelines	Agent- Mediated Cost Arbitration	Continuous Regulatory Adaptation
Governance for Unstructured & AI Content	Semantic UX for Multi- Persona Access	Agent Access Control for IAM Extension	Trust Ledger	Embedded Ethics Engines for AI Decisions	Data Supply Chain Provenance
MLOps for Model & GenAI Lifecycle	AIOps for Data Platforms	FinOps for Data & AI Workloads	Adaptive Semantic Layer	Self- Correcting Lineage	Zero-Trust Access for AI Agents
AI TRISM & Model Cards	Simulation Engines	Digital Twins	Self-Healing Pipelines	Trust Scores as Execution Gates	Agent Interoperability Standards
Knowledge Graph-Driven AI Memory	Context- Aware AI Assistants	Autonomous Product Assembly	Federated Governance Models	Agentic Workflow Orchestration	Cognitive Contracts for Machine- Readable SLAs
Adaptive Query Optimization	Personalized AI Guardrails	Synthetic Data Governance	Integrated Model & Data Version Control	Agent Identity Fabric	Economic Cost Modeling

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Before we get there. Let's understand the basics.

Data is an Asset

01

Data has intrinsic value and inherent risk. It must be managed with the same rigor as financial, physical, or human capital.

Data Flows and Evolves

04

Data is never static. It is created, transformed, combined, consumed, and retired. Management must account for the entire lifecycle.

Data Must Be Protected

07

Every dataset carries obligations: privacy, security, compliance, and ethical use. Protection must match the level of risk.

Data Requires Context

02

Without lineage, metadata, and definitions, data is just noise. Meaning comes only through context.

Data Scales Problems and Opportunities

05

At small scale, governance can be manual. At large scale, both value creation and risk grow exponentially.

Data Interoperability

08

Data locked in a silo or a single platform loses value. It must move and connect across domains, platforms, and ecosystems.

Data Must Be Trusted

03

Quality, integrity, and timeliness determine whether data can be used. Without trust, adoption collapses.

Data Management is a Human Responsibility

06

Tools support, but people decide. Stewardship, ownership, and accountability are indispensable.

Data Must Be Used Responsibly

09

Beyond protection, data must be handled with fairness, transparency, and ethics. Misuse erodes trust and creates systemic risk.

Let's talk about the different kinds of data

dark **data**

Data in your org that you don't use

structured **data**

Information housed in a database

data model

The relationships between the data

unstructured **data**

Information not housed in a database

data set

a collection of data

semi-structured **data**

Unstructured data that's been organized

synthetic **data**

A good representation of your data

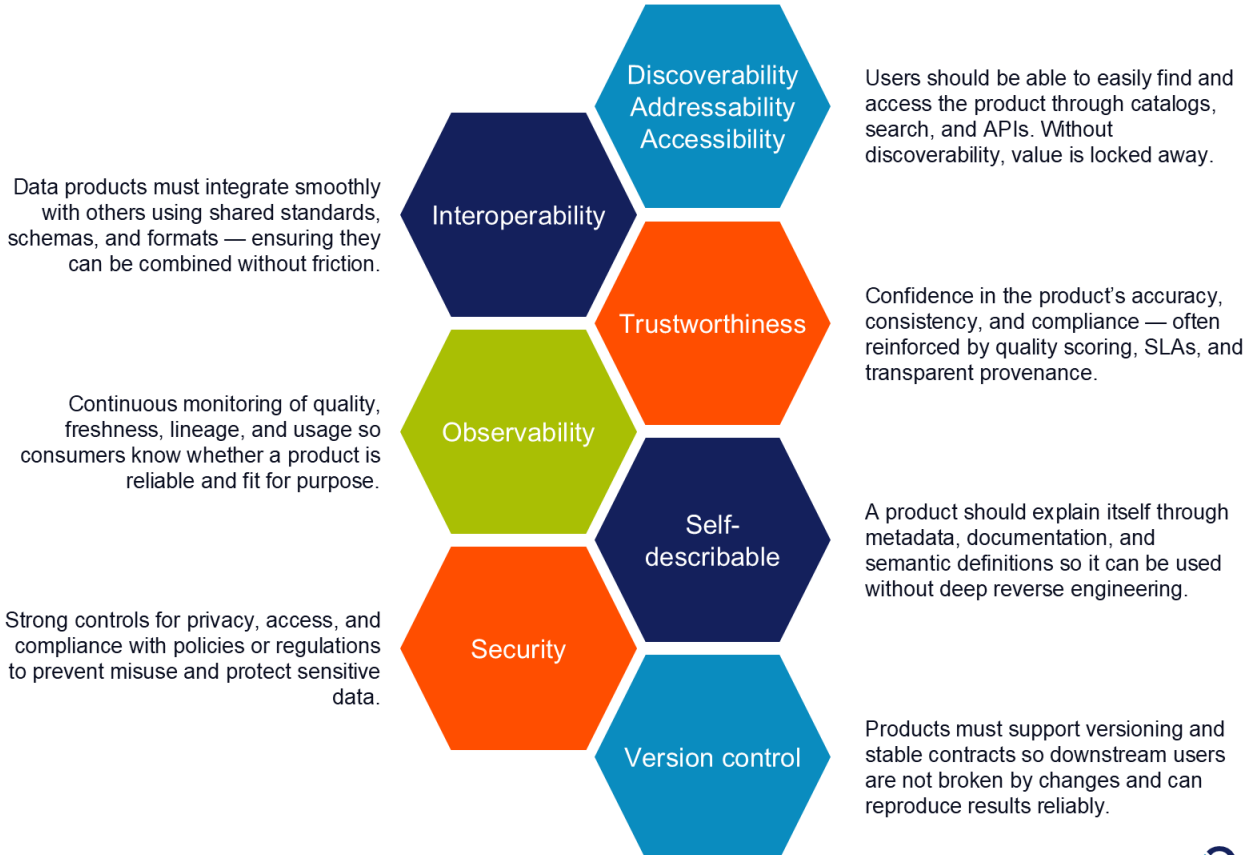
data product

Utilization of data to solve a problem

The argument isn't really
centralized
versus
decentralized
anymore.



Characteristics of a Data Product

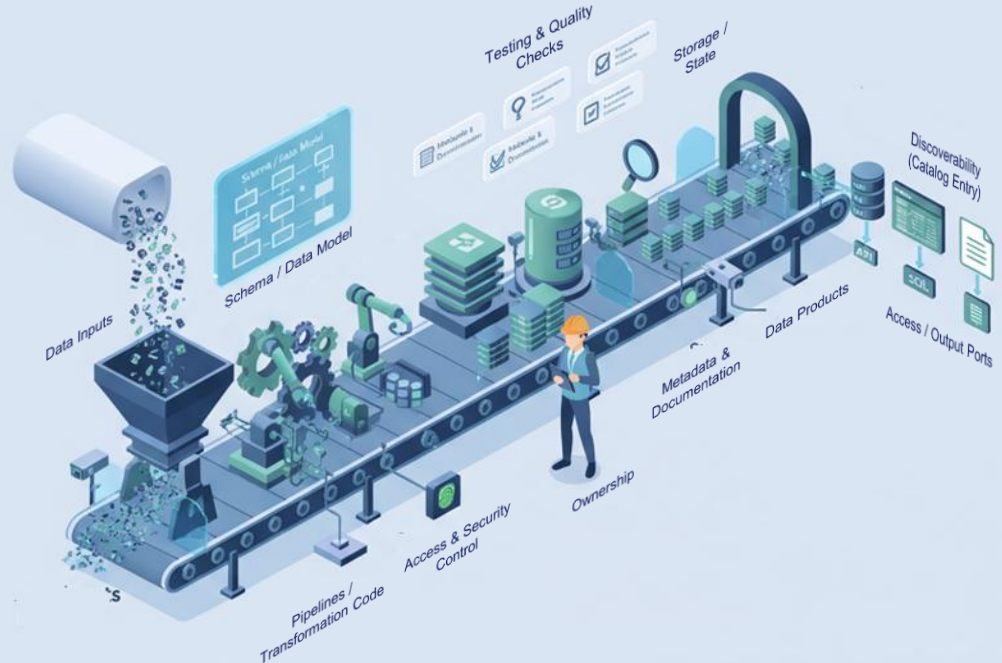


Components of a Data Product

No aligned industry definition exists..

“The set of constituent components varies per industry authorities. Therefore, companies reinvent and adjust this concept to their needs.”

- Dr. Irina Steenbeek



Versioning &
Backward
Compatibility



SLAs / Non-
Functional
Guarantees



Synthetic Data
Extensions



Monitoring &
Observability



Trust & Value
Metrics



Compliance &
Ethics Tags



Interoperability
Standards



Lifecycle
Management



Think in Questions Not Architectures

1. **What's a recurring business question?**
(e.g., “What did we sell yesterday, by region?”)
2. **Package the answer**
(data + model + simple access).
3. **Congratulations! You've just stood up a data product.**

The Value of Data Products: Proven Efficiency, Speed, and Trust

30-40%

¹ cost savings vs. custom pipelines.

\$210M

¹ value captured by a single insurer (50% cheaper)

90%

³ faster implementation of new use cases.

2x

¹ faster completion of data programs.

60%

³ fewer defects in data products.

51%

² improved decision-making.

43%

² greater trust in data.

49%

² improved collaboration between teams.

71%

² call business-IT alignment “significant or game-changing.”

33%

³ of orgs are at “repeatable” maturity → urgency to act.

Quest erwin Data Management Platform

to deliver “AI-Ready Trusted Data Products at speed and scale”

Data Product

5 integrated components working together to deliver raw data into a strategic, reusable business-aligned resource for cross-organization collaboration

Dynamic Trust Scores

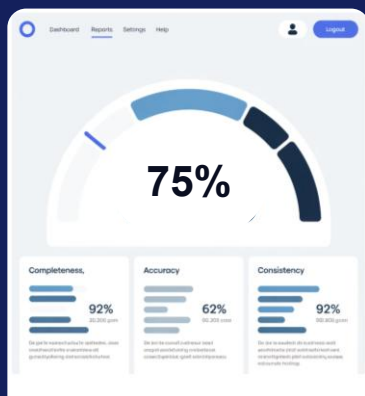
Real-time measurement across nine categories, providing quantifiable trust metrics for data assets.

AI Enabled Innovation

Intelligent automation of data modeling tasks and stewardship tasks, reducing manual overhead while improving data accuracy.

The Trust Score

Central Pillar of Quest erwin Data Product



(Illustrative Purposes)

Multi-Criteria Scoring

Evaluates data products using up to 9 weighted criteria including quality, relevance, usage, and governance completeness

Business Alignment

Customizable scoring framework aligns with specific business goals and risk tolerance levels

User Weightings

are both qualitative and quantitative

Rapid Identification

Enables consumers to quickly identify high-value, AI-ready, and compliant data assets

The Trust Score Calculation

Quest erwin Dynamic Trust Score Calculator Weightings

Configure Scoring



Score Name *
Trust Score

Score Parameters and weightages					
DQ Score	%	User Ratings	%	Asset Completeness	%
40		10		20	
Timeliness	%	Lifecycle	%	Scarcity	%
5		5		5	
Popularity	%	Relevance	%	Datasource	%
5		5		5	

Score Classification		
key	value	%
GOLD	100	%
key	value	%
SILVER	75	%
key	value	%
BRONZE	30	%

Enable Scoring as: ☒ Key ☐ Value ☐ Both

Scenario 1

DQ Score	50
User Ratings	20
Governance Completeness	30

Scenario 2

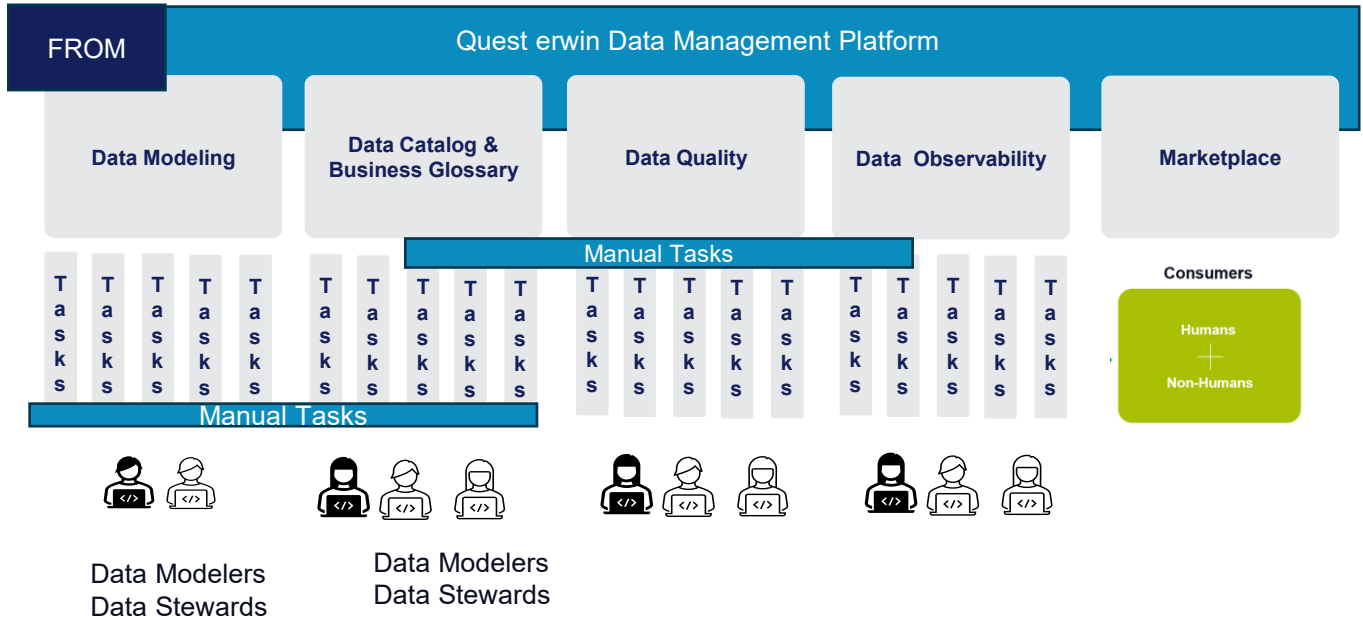
DQ Score	50
User Ratings	10
Governance Completeness	20
Timeliness	5
Lifecycle	5
Popularity	10

Weightages and additional parameters can be adjusted by customers

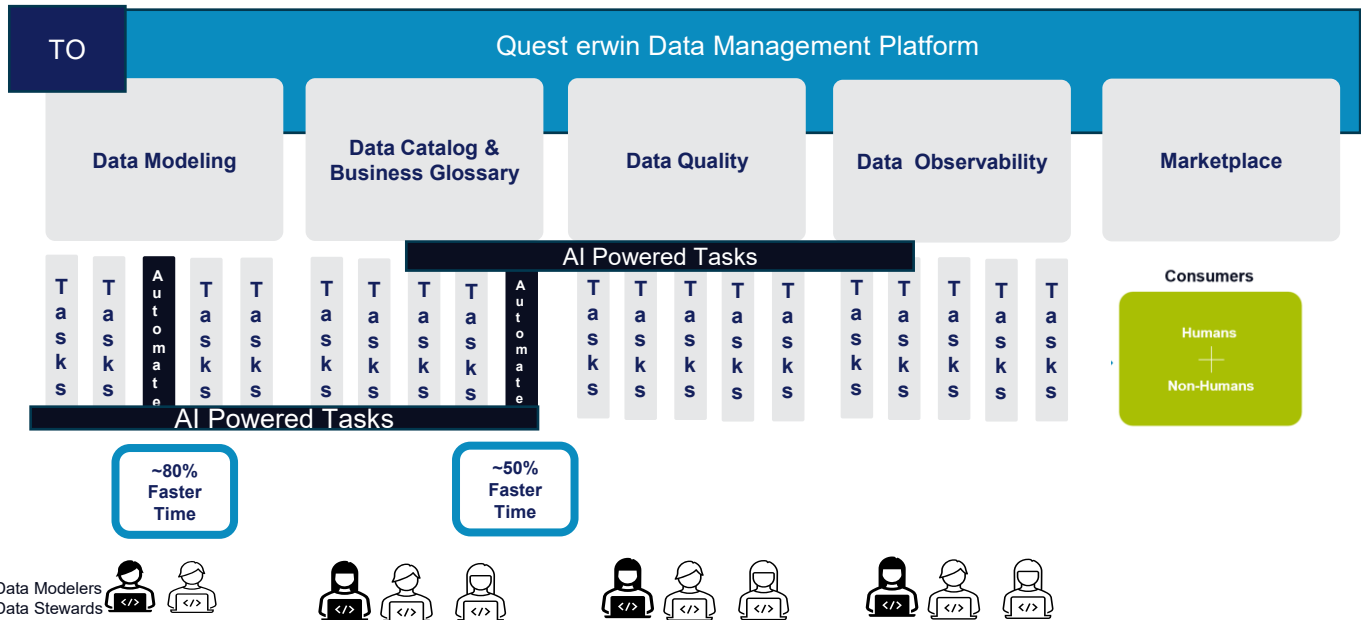
The Dynamic Trust Score “governs” the Data Product. As data changes so does the Trust Score. (like a credit score)

Video – market place..

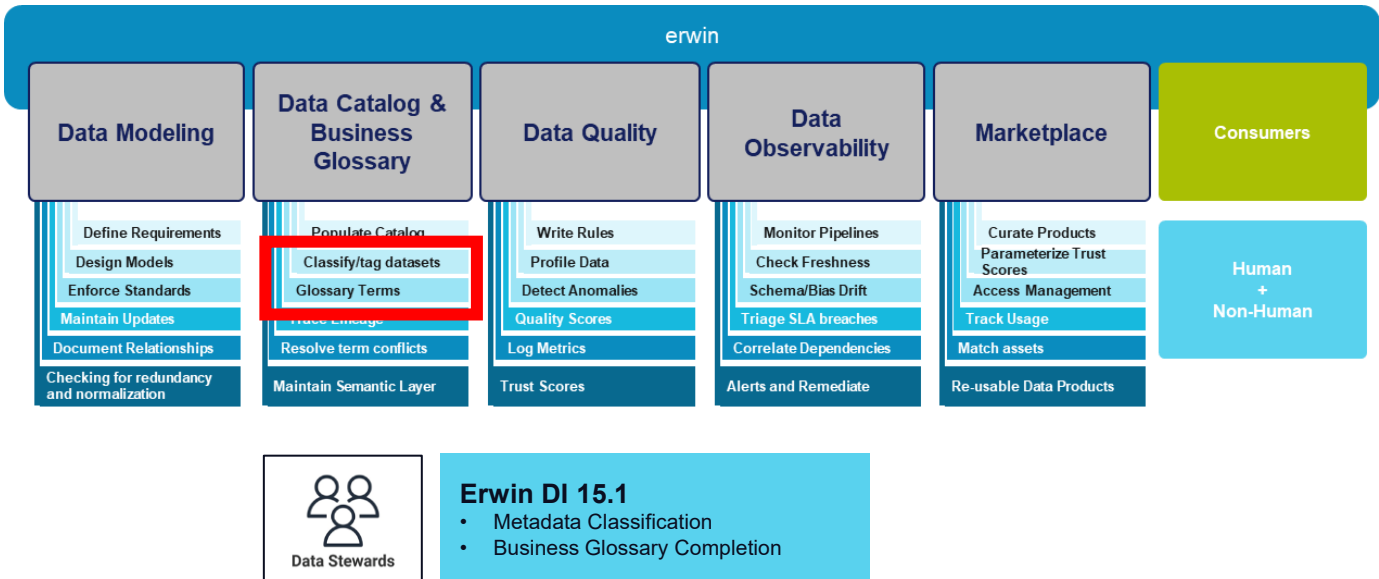
Data Professionals do many repetitive and time-consuming tasks to create and deliver data products to the marketplace



AI-Enabled Innovation – Automating tasks and workflows to speed the delivery of data products



Some **jobs to be done** by Data Professionals today



AI Enabled Innovation: We're already delivering today with erwin DI 15.1

Onboard & Classify
1 Data Source

Metadata Classification

FROM
~30 to 60 days

TO
With AI Assisted Automation
~3 to 6 days

Impact
**10 to 20x in
time savings**

To create 1 Term =
~ 20 words

Business Glossary Definition Updates

FROM
~5 to 10 minutes

TO
With AI Assisted Automation
~3 to 5 minutes

Impact
**>50% time
saving** per term



Dynamic Trust Scores



Completeness

- Metadata Classification
- Business Glossary Definition Updates

Score Parameters and weights					
Sum of the weights must be equal to 100					
Score	%	Weight	%	Score	%
11	100	100	100	11	100
3	100	100	100	3	100
3	100	100	100	3	100

Score Classification					
Score	%	Score	%	Score	%
11	100	11	100	11	100
3	100	3	100	3	100
3	100	3	100	3	100

Assumptions

- Data Classification example: 5 data sources with 200 tables and columns
- Business Glossary 1 term = 1 paragraph. Each paragraph has 20 words. To create each term takes 5 to 10 minutes. 20 terms its 200 minutes.

Automated Data Product video

AI is requiring enterprises to change how they manage their data > new need for speed and scale

Challenges to managing data as a silo

Data Modeling

- Disparate
- Siloed
- Managed separately
- Lack of integration
- Slow
- Users are primarily internal - and humans

Data Catalog & Business Glossary

Data Quality

Data Observability



Benefits of Data Products

Data Modeling

Data Catalog & Business Glossary

Data Quality

Data Observability

Data Marketplace

1. Higher Data Quality and Reliability – with clear ownership and **trusted for value**
2. Faster Time-to-Value – Accelerate decision making
3. Cost Efficiency and Scalability – lowers TCO up to 30-50% (McKinsey)
4. Data Democratization and Reusability – fosters self-service across the business
5. Enhanced Governance and Compliance – built in metadata, lineage
6. Improved Collaboration and Ownership – clarify ownership and reduce friction among team

Gartner

Managing data as a product transforms raw data into a strategic, business-aligned resource - unlocking efficiencies, accelerating insights, and empowering smarter decisions across an organization - Ascend

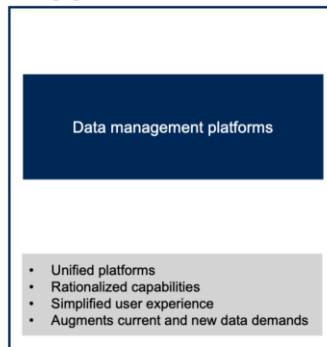
AI is Disrupting the Traditional Data Management Landscape – Market is “Converging”

State of Data Management Market

Current state



Emerging state



Source: Gartner
828808

Gartner

Organizations have deployed 12 data management point solutions

Mandatory Platform Features:

- Unified platform
- Metadata management
- Data Quality
- Data governance and policy execution
- Platform based pricing

Common Features:

- Multi-persona user experience
- Flexible data access
- Data Products and Marketplace
- Data observability
- Data Ops
- Fin Ops
- AI Model Integration

With a data management platform, data teams can benefit from the reduced operational complexity, drive data engineering productivity, save on license costs and improve ROI.

“

A system is not the sum of the behaviors of its parts; it is rather the product of their interaction.

The performance of a system depends on how the parts work together; not how they operate individually.

”

- Russell L. Ackoff, World Renown Organizational Theorist

Quest erwin Data Management Platform for the fast delivery of your Trusted Data Products

Delivering Trusted AI-Ready Data Products at
Speed and Scale with Dynamic Trust Scores

Data
Modeling

Data Catalog
& Business
Glossary

Data
Quality

Data
Observability

Marketplace

→ AI Automation of critical steps with Copilot-like interface →

Quest

Explore interactive demos – Built for AI-Ready Data Teams

Discover how erwin powers GenAI and automation eliminate manual tasks in data cataloging, model certification, and governance - accelerating your path to trusted, AI-ready data products.

Interactive
Product Demos

AI

Interactive demos



See the full story your data has to tell

Transform static data models into dynamic, contextual mind maps that connect technical structures with business meaning. Trace lineage, surface policies, and give AI and analytics teams the clarity they need - fast.

Go Deeper



SQLBits 2025

Data Modelling: The timeless foundation of modern data platforms

19 June | 12:40 - 13:30
Room 5

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