Solving The Enterprise Data Dilemma

ADAM FAMULARO

Strata Data Conference March 2019

Data Is The “New Oil”

Operational Efficiency

Revenue Growth

Compliance, Privacy & Security

Increased Customer Satisfaction

Improved Decision-Making

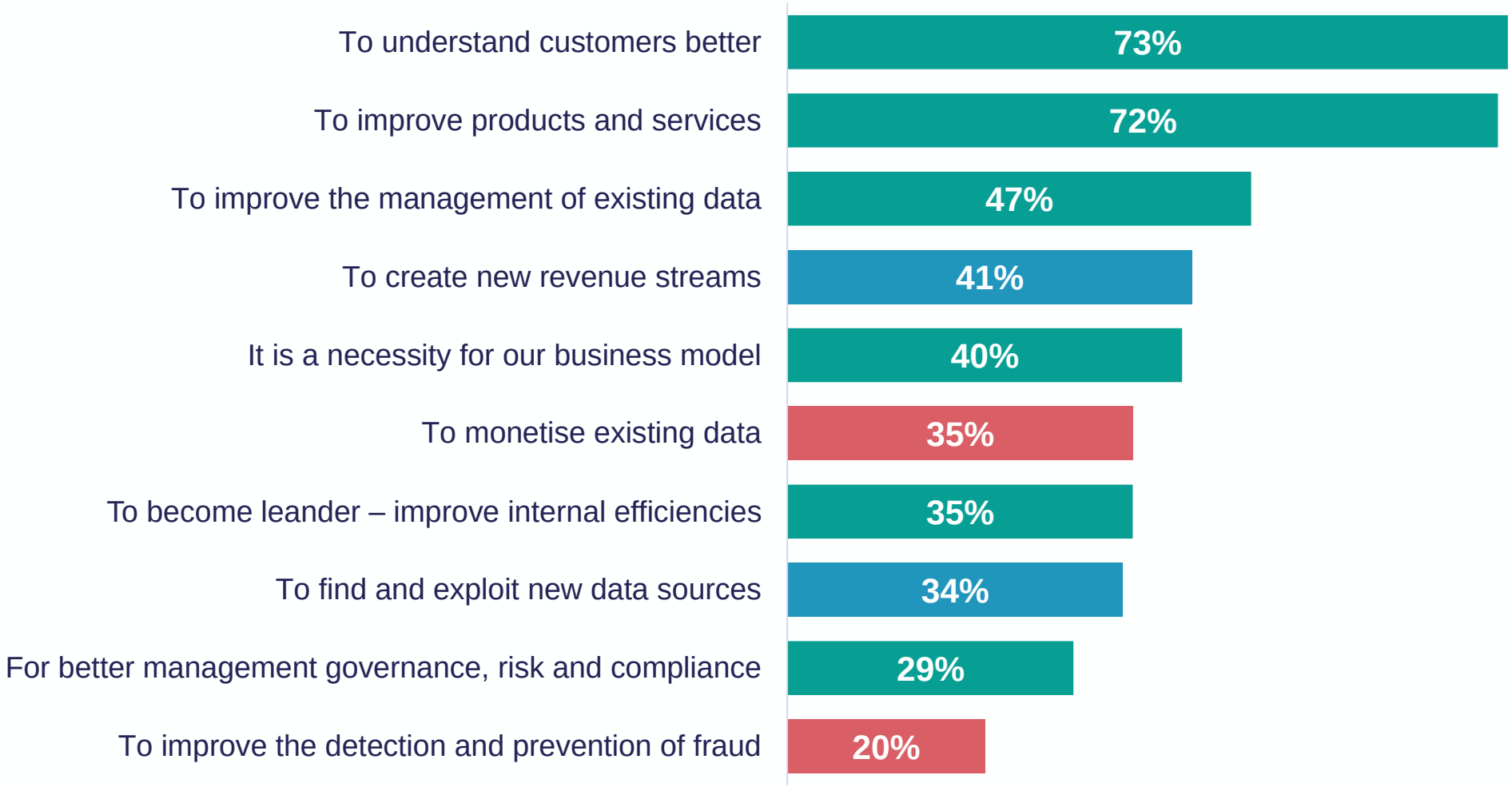
If Mined, Millions In Untapped Potential

Retailers that leverage the full power of big data could increase their operating margins by as much as **60%.**

Estimates suggest that by better integrating big data, healthcare could save as much as **$300 billion a year**.

For a typical Fortune 1000 company, just a 10% increase in data accessibility will result in more than **$65 million in additional net income**.

Key Drivers For Analytics Projects



Source: EY, *Becoming an Analytics-Driven Organization to Create Value*

Poor data is a major obstacle to delivering actionable insight with 50% of companies citing this as a major challenge.

The Enterprise Data Dilemma:
What Data Do We Have and Where Is It?

1000s of undocumented applications and databases

1000s of business terms across different business units

Harvest data

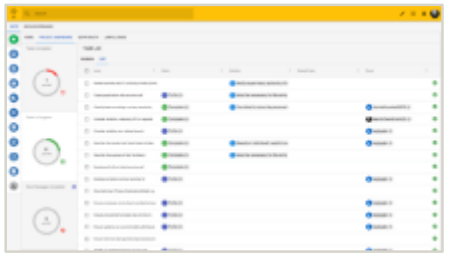
Collect data schema and business terms

Analyze data

Mapping data and attributes

Structure data

Standardize on specific business terms and definitions



Govern data

Develop a governance model to manage standards and set best practices

Visualize data

Enable all stakeholders to see data in one place in their own context

Sample erwin Use Case

JPMorganChase

The Business Problem

- As a result of significant M&A and dramatic business growth, this financial services giant had thousands of undocumented applications and databases sprawled across the enterprise
- They had limited visibility to what data they had, where and how it was stored and how and where it was being used
- This made it virtually impossible to search data across lines of business and regions
- In addition, data lacked business context and was not understandable nor leverageable by business users

The erwin Solution: Enterprise Data Governance

- Implemented erwin Data Governance to provide an enterprise-wide solution for both business and technical data consumers
- This enabled JPMC to:
  - Harvest data from a variety of enterprise sources, regardless of location or data type
  - Automatically generate a visual model for every application and centralize this data in a single repository, providing lineage, usage and impact analysis for audit and regulatory purposes
  - Enrich this data with plain-English context making it intuitive and useful to line-of-business
  - Create a powerful, searchable and relevant index of enterprise data for analytics, reporting and growth initiatives

Key Challenges To Data Success in the Real World

Data Chaos
300 applications, 50 different databases and different schema for each one

Unstructured Control
No contextual governance framework to govern data flows across the enterprise

Data Regulation
No standard business processes around data usage

Laborious Ground Work
Time-consuming, manual data preparation and limited views of data lineage

Audience Poll

WHAT IS THE BIGGEST OBSTACLE FACING YOUR BUSINESS TODAY?

Enterprise data chaos

Immature business processes

No governance framework

Heavy lifting in data prep cutting into analytics output

All of the above

Three-Pronged Strategy for Data Success

Optimizing Data Operations

Automatically harvesting data regardless of format or location and creating a dynamic metadata catalog

Implementing Contextual Governance

Understanding what it means, the rules that apply, what its journey has been, changes that were made, and how it's being used

Improving Analytics Outcomes

Automatically delivering governed, high-quality and relevant data within a business context to every user to achieve the desired outcomes

A Critical “Self-Service” Enabler: Metadata Cataloging

THE ENTERPRISE METADATA LANDSCAPE

DATA MANAGEMENT

Drives the design, deployment and operation of systems that deliver operational and analytical data assets

DATA GOVERNANCE

Delivers these data assets within a business context, tracking their physical existence and lineage and maximizing their security, quality and value.

HARVESTED METADATA REPRESENTS:

“Data at Rest” - Data Stores and Data Models

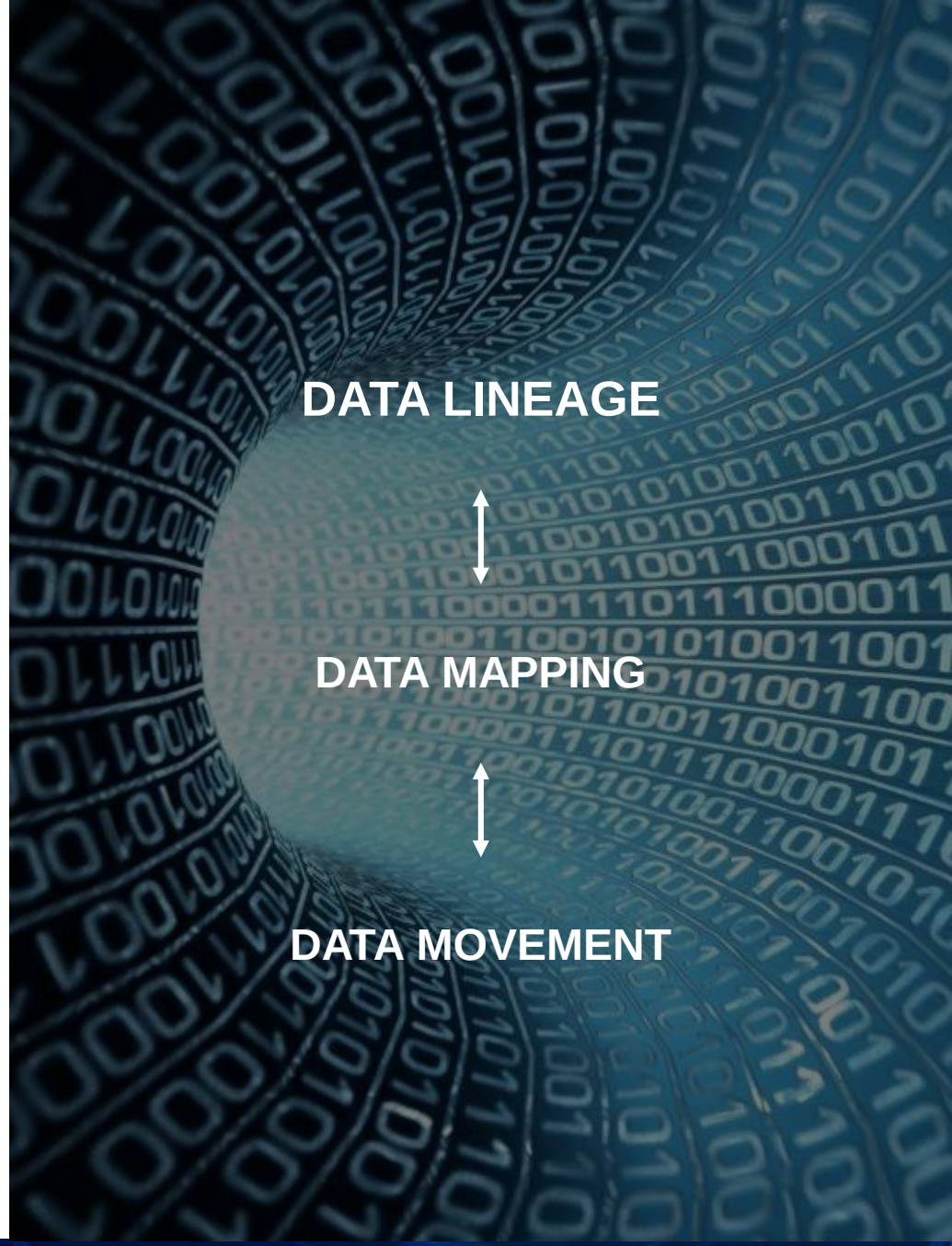
“Data in Motion” - Data Movement Processes

Natural Language Data Mapping To Harness “Data In Motion”

Link And Sync With Data Governance
Automated Lineage Capture
Business-Oriented Visualizations

Business-Driven Data Integration
Standardized & Reusable Mappings
Easily Understood Transformations

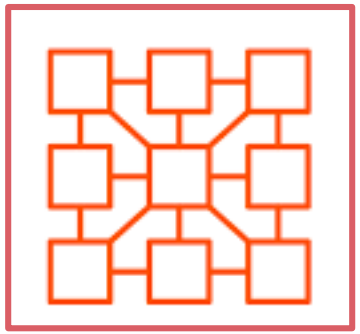
Round-Trip Engineering Across Platforms
Multi-Platform Code Generation and Migration
Automated Data Mapping Discovery



Sample erwin Use Case

NASDAQ®
Intelligent Data Hub

- Building an intelligent data hub to provide access, management and stewardship over data assets
- Assembling a comprehensive set of business terms and taxonomy for the business to provide a common understanding
- Harvesting technical data assets from various existing physical data stores
- Automatically managing ever-changing physical assets
- Checking data quality against business rules and specifying remediation plans
- Understanding the impact of regulation, environmental and index timings on key application and data assets



Intelligent Automation:
Creating A Sustainable Operating Framework

Improved Visibility

- A holistic view of data movement
- Technology independent
- Discovery and categorization of critical data elements
- Accelerated compliance and audit response

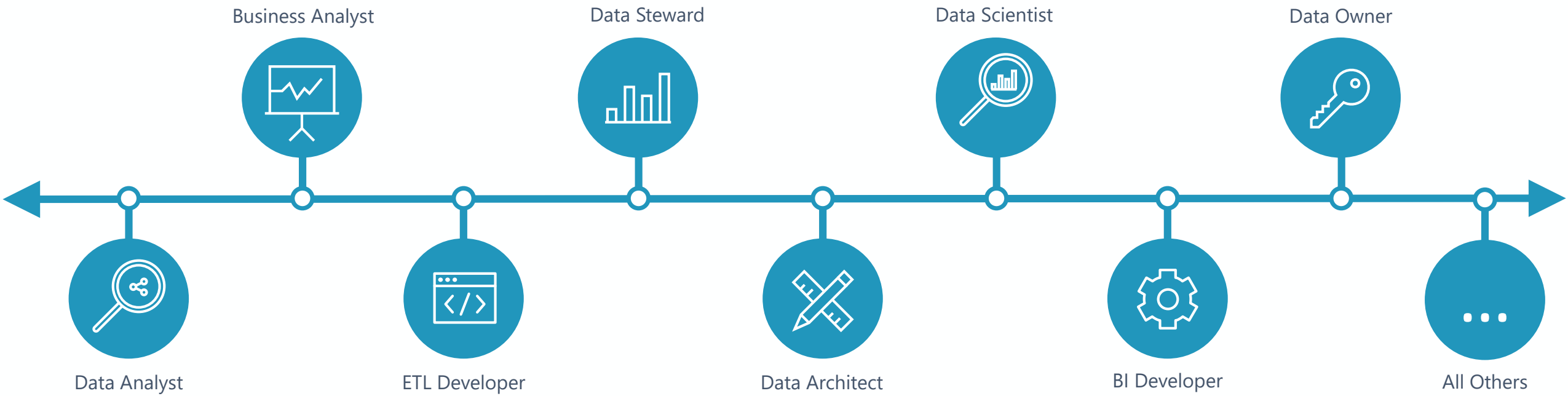
Code Automation & Lifecycle Integration

- Metadata-driven engineering of data management code
- Automated deployment and maintenance of data management infrastructure

Metadata Lifecycle Management & Integration

- Automated scanning and integration of metadata assets
- Scheduling and versioning of metadata updates

Optimized Data Now Feeds the Value Chain



INTELLIGENT AUTOMATION

Enhanced Capability → Increased Efficiency → Effective Collaboration

Sample erwin Use Case

Data Governance-as-a-Service

- Global utility company needed one-stop data access and lineage from enterprise data lake fed by ERP, CRM, BI, ticketing and customer service systems
- Includes delivering IOT data from one million smart energy meters to responsible departments – from field services to marketing to accounts receivable – to improve service, develop incentives and enhance financial reporting
- Assembling a comprehensive set of business terms and taxonomy
- Implementing erwin DG for comprehensive metadata management, data harvesting and automated data lineage capabilities

E.ON's goal: save 30 percent on external data management costs and reduce data discovery time by 50%

Enabling an Enterprise Data Governance Experience

Any Data
Anywhere

Collaboration
& Organizational
Empowerment

Integrated
Ecosystem

Visibility
Across Domains

Risk Mitigation &
Regulatory
Peace Of Mind

Data Governance in the Context of the Business

DATA IN CONTEXT	What do we have?	What does it mean?
Where did it come from?	Is it secure?	What rules or restrictions apply?
How accurate is it?	Who is accountable?	Who is using it?
How is it used?	How can I access it?	Where is it?

VISIBILITY, CONTEXT, CONTROL & COLLABORATION UNLOCK BUSINESS VALUE

Sample erwin Use Case

The Business Problem

- Fast growth through acquisition led to duplicate data across functions
- Lack of data quality and multiple sources of truth across the business
- Need to understand what data is available throughout the organization and who has access

The erwin Solution: Enterprise Data Governance

- Develop stakeholder ownership and decision mechanism across commercial executives, management and users.
- Improve data discovery and ease of use for commercial data assets within the company's internal analytics marketplace.
- Establish simple and consistent rules and decision rights over all targeted commercial data.
- Implement clear and purposeful access control while ensuring data integrity and availability to all users

Our Prescription: 7 Steps To Better Analytics Outcomes With Integrated Data Management & Governance

Integrating data management and data governance is still a new concept for many organizations, but the advantages are clear.

1

Discover Data
Identify and integrate metadata from various data management silos.

2

Harvest Data
Automate the collection of metadata from various data management silos and consolidate it into a single source

3

Classify Data
Connect physical metadata to specific business terms and definitions and reusable design standards.

4

Analyze Metadata
Understand how data relates to the business and what attributes it has.

5

Map Data Flows
Identify where to integrate data and track how it moves and transforms

6

Govern Data
Develop a governance model to manage standards and policies and set best practices.

7

Socialize Data
Enable stakeholders to see data in one place and in the context of their roles.


erwin
the data governance company
Q & A

erwin, Inc. Snapshot

Founded March
2016

Strategic **M&A** to expand portfolio and footprint

R&D for new technologies, including data governance and NoSQL

3,500+
customers with more than 50,000 users

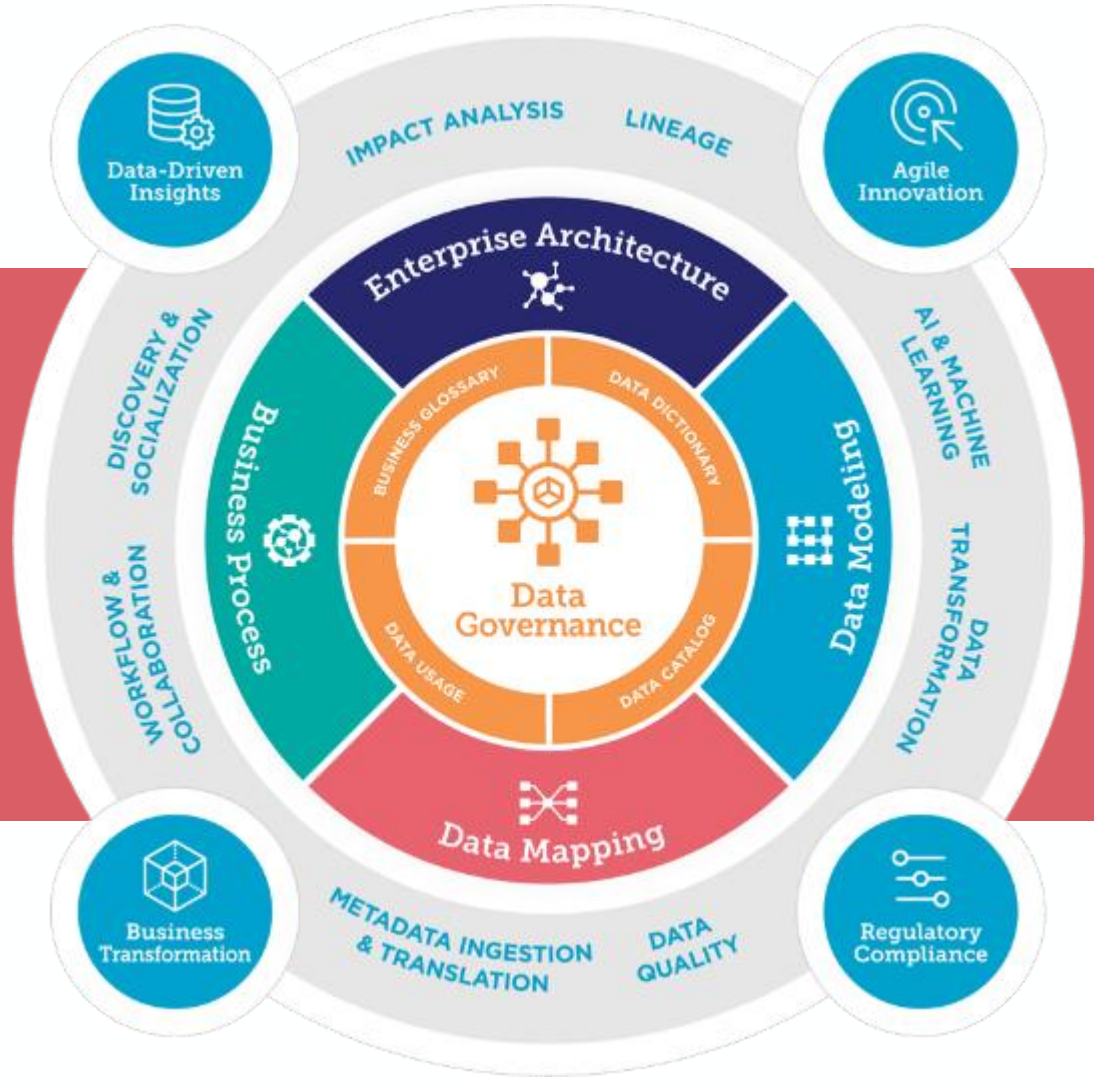
250+
employees in 7 offices around the world

Industry-leading
NPS
satisfaction scores

IDC Innovator 2019 · DBTA 100 · SR BIGDATA 10 2017 10 Fastest Growing Bigdata Companies · information management 50 · CIO Review 20 Most Promising Database Technology Solution Providers - 2016 · BIG DATA 50 · The Channel Co. CRN Emerging Vendors 2018

The erwin **EDGE** Platform

The industry's most connected, role-based data management and governance solution



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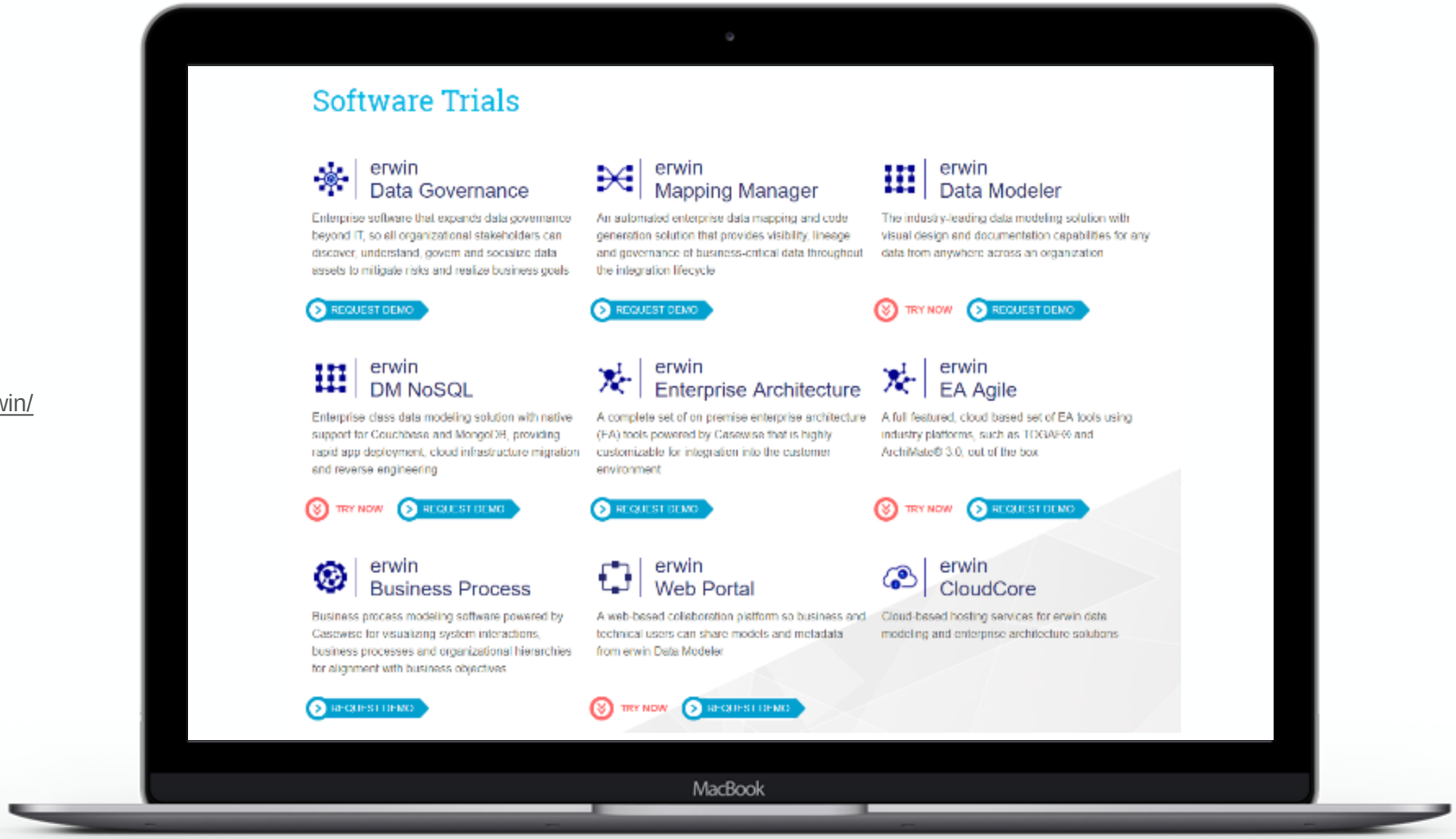

erwin.com

Why erwin?

We’re the only software provider to own every critical piece of the data management and governance lifecycle, so enterprises can understand and trust their data for faster speed to insights.

With automated data preparation, enterprise modeling and data governance, erwin helps you find actionable business insights to fuel compliance, innovation and transformation initiatives.