

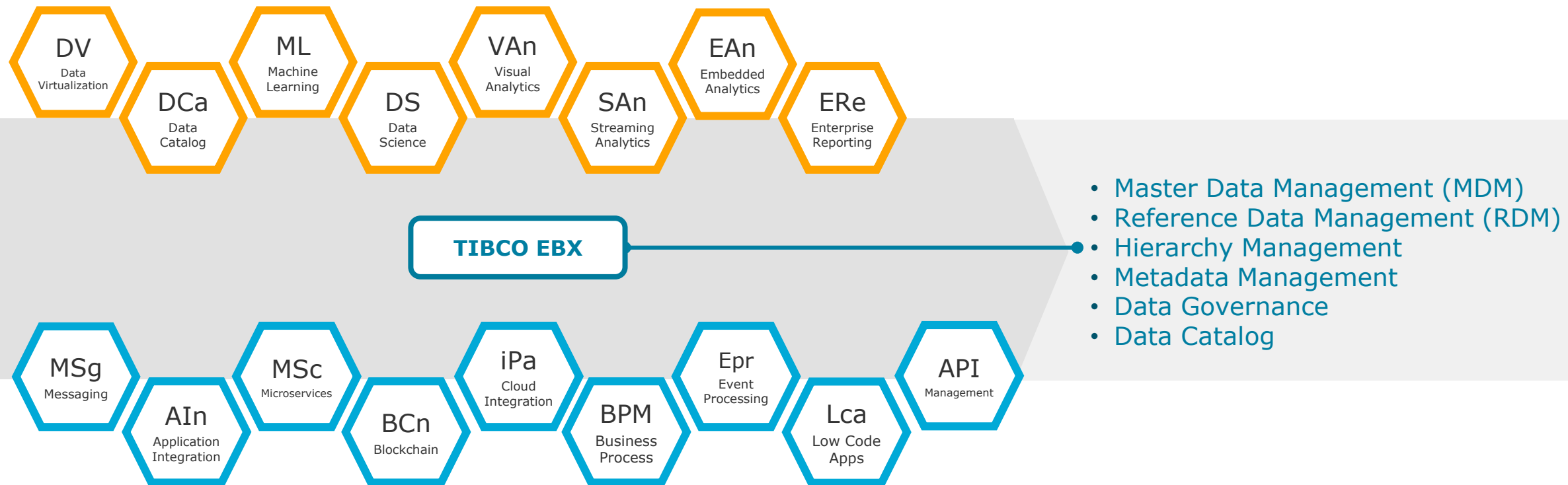
TIBCO®



CONNECTED  
INTELLIGENCE

# TIBCO EBX: Single solution to manage, govern, and consume shared data assets

## Augment Intelligence



## Interconnect Everything

# Recognized leader in master data management

## Validated by Customers



## Validated by Industry Analysts

**Gartner**

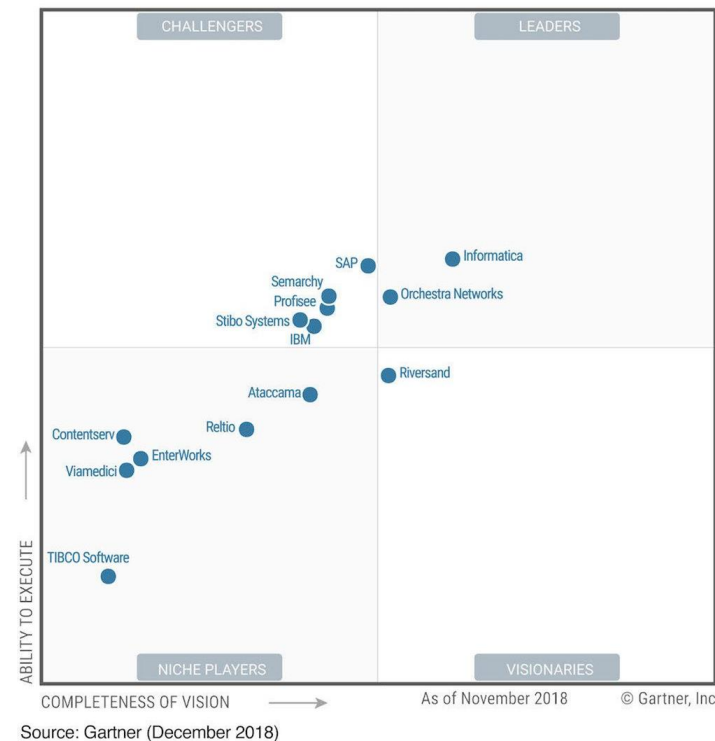
**Leader**  
Master Data  
Management

**FORRESTER**

**Strong Performer**  
Master Data  
Management

**The Information  
Difference**

**Technology Leader**  
Master Data  
Management



**Leader in the Gartner Magic Quadrant for Master Data Management for the third year in a row**

"EBX is a single, integrated MDM solution that scored slightly above average across a broad spectrum of reference customers in terms of industries and data domains mastered. Respondents reported the second-highest weighted average number of applications integrated with MDM, with the majority integrated in real time or near real time."

Gartner: Magic Quadrant for Master Data Management Solutions, Michael Moran, Bill O'Kane, Simon Walker, Sally Parker, Alan Dayley, 12 December, 2018

# Multiple shared data assets are intrinsically linked and should be managed that way



## Master Data

“How we manage important things”



Parties



Products



Suppliers



Locations

## Reference Data

“How we classify things”



Geographies



Legal entities



Chart of accounts



Industry codes

## Metadata

“How we define things”



Business terms



Policies

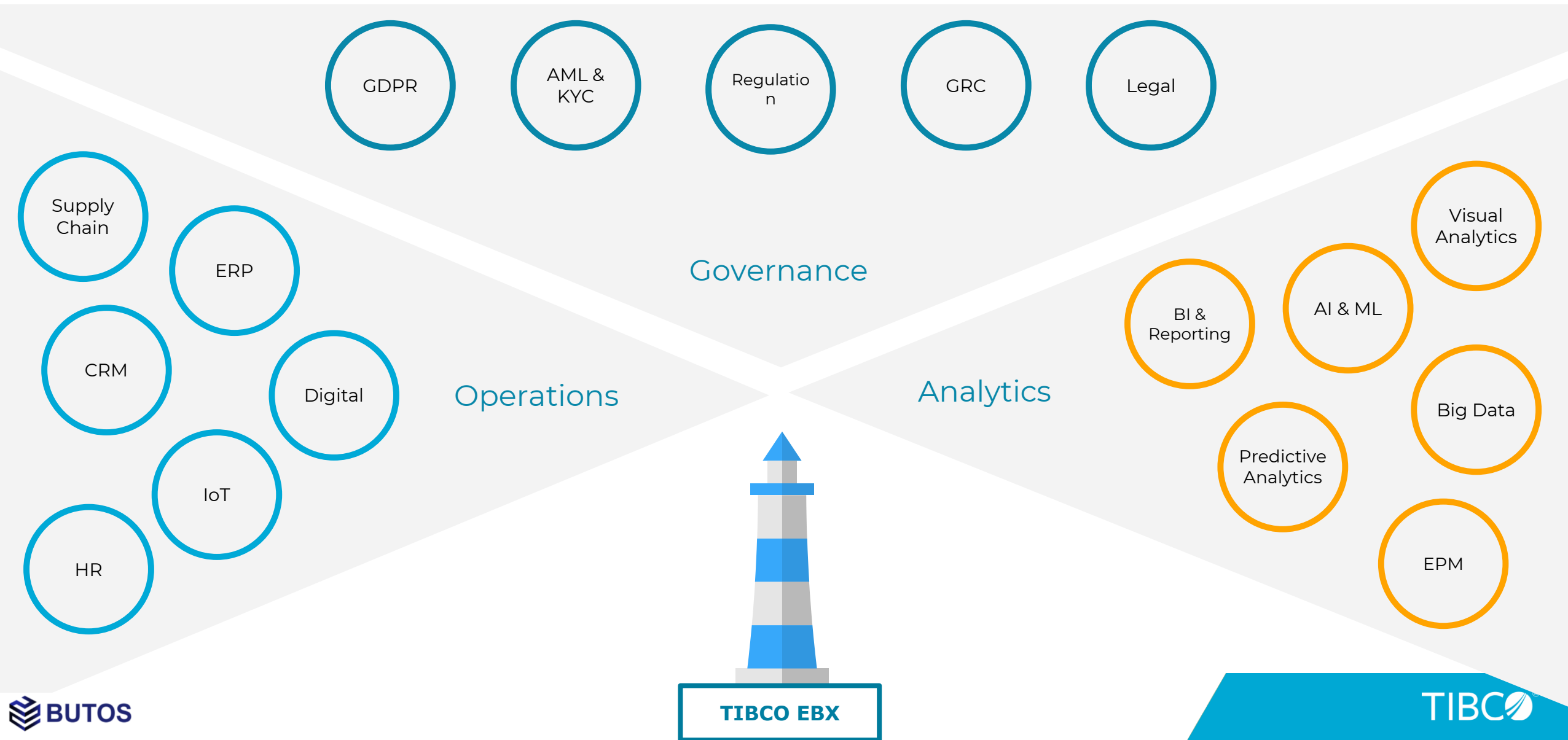


IT systems



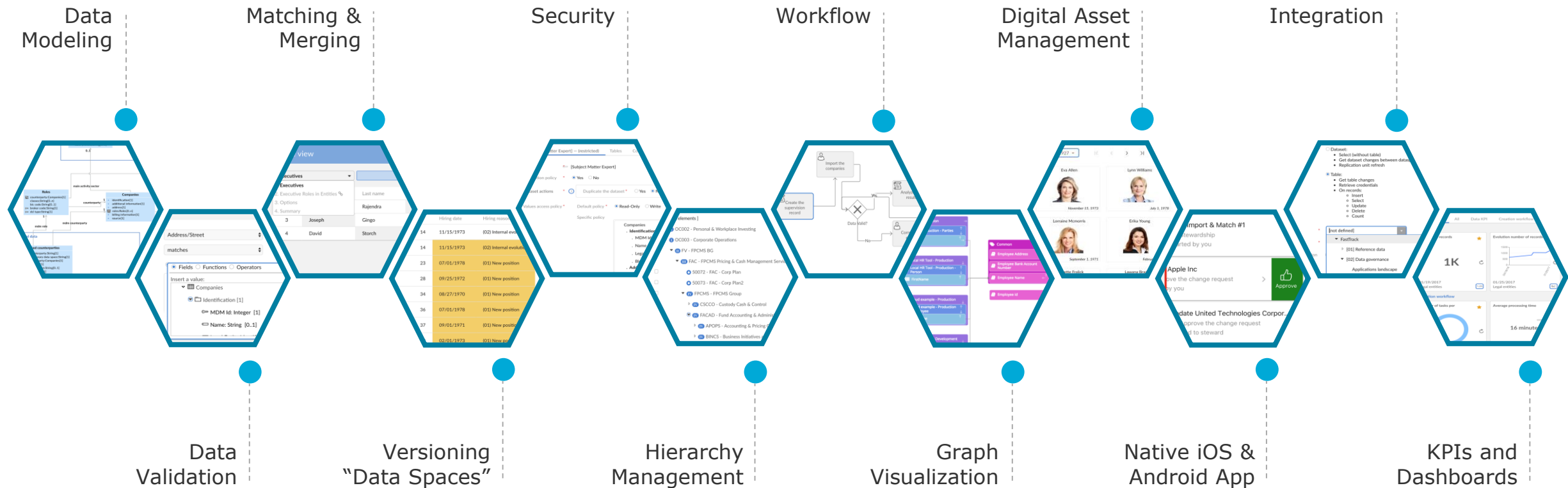
Models & rules

# Support all data-driven initiatives



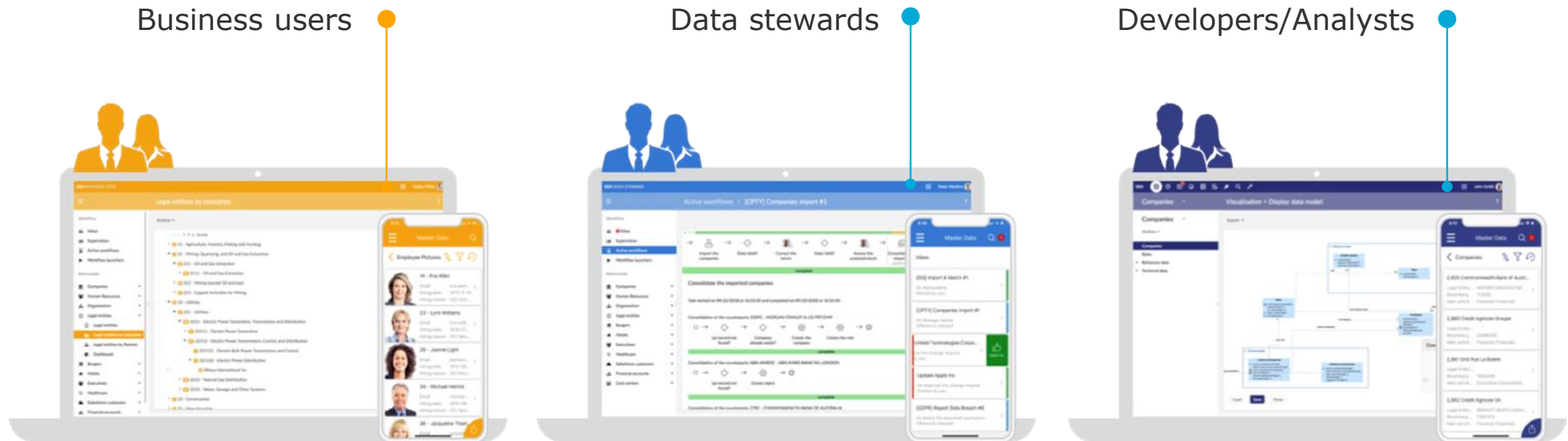
# Introducing TIBCO EBX

Agile, model-driven, and multidomain solution to manage, govern, and consume shared data assets

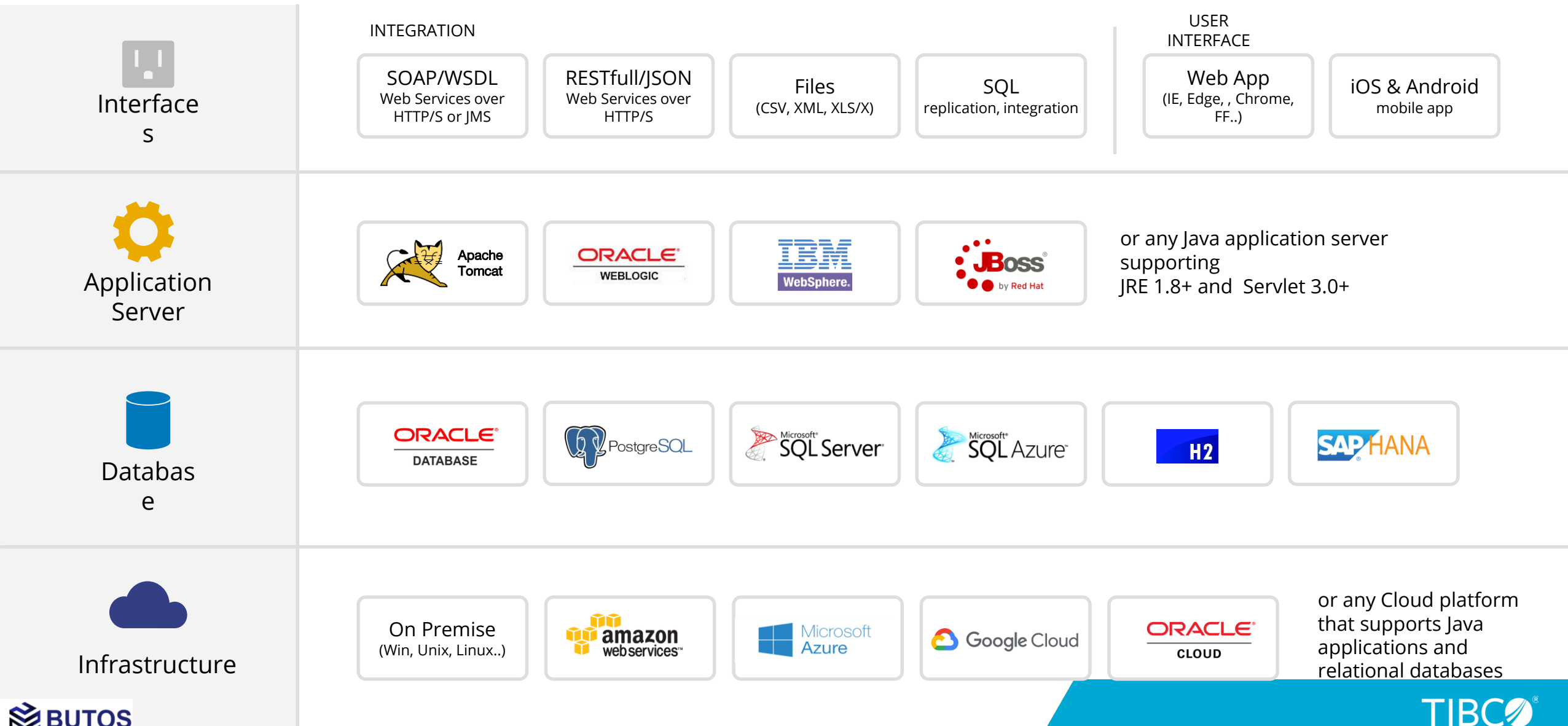


# Designed for collaboration

EBX delivers self-service capabilities to all users, so they can manage, govern, and consume all their key data assets on one unified solution



# Run TIBCO EBX on the platform of your choice

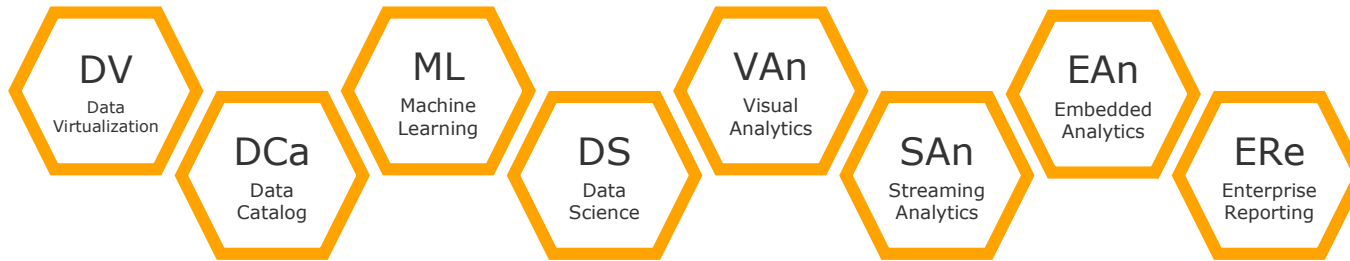




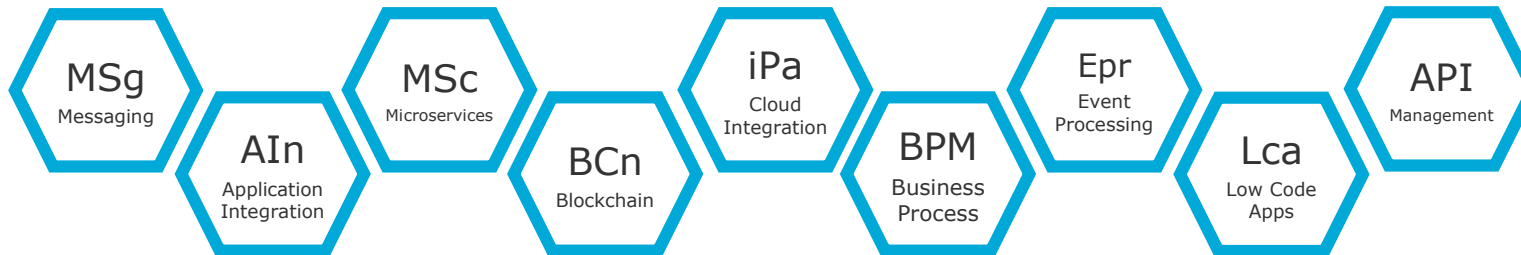
# TIBCO powers digital business

A unique set of integration and analytics capabilities to enable the basic to the most advanced digital initiatives

## Augment Intelligence



**TIBCO EBX**



## Interconnect Everything

Data-at-rest



Data-in-motion



Analytics



Applications



Regulatory Compliance



Data Monetization



Data Democracy



Operational Excellence (IoT)

# Three key takeaways about EBX

It's business-user  
focused

"All-in-one"

It's not just  
about MDM

User adoption is  
a critical success  
factor in MDM  
because change  
mgmt is inherent

Single solution  
vs. suites of  
solutions  
approach

Address MDM,  
RDM, and  
Metadata/DG use  
cases in the  
same platform

# Product capabilities overview

# Data Modeling

Semantic modeling

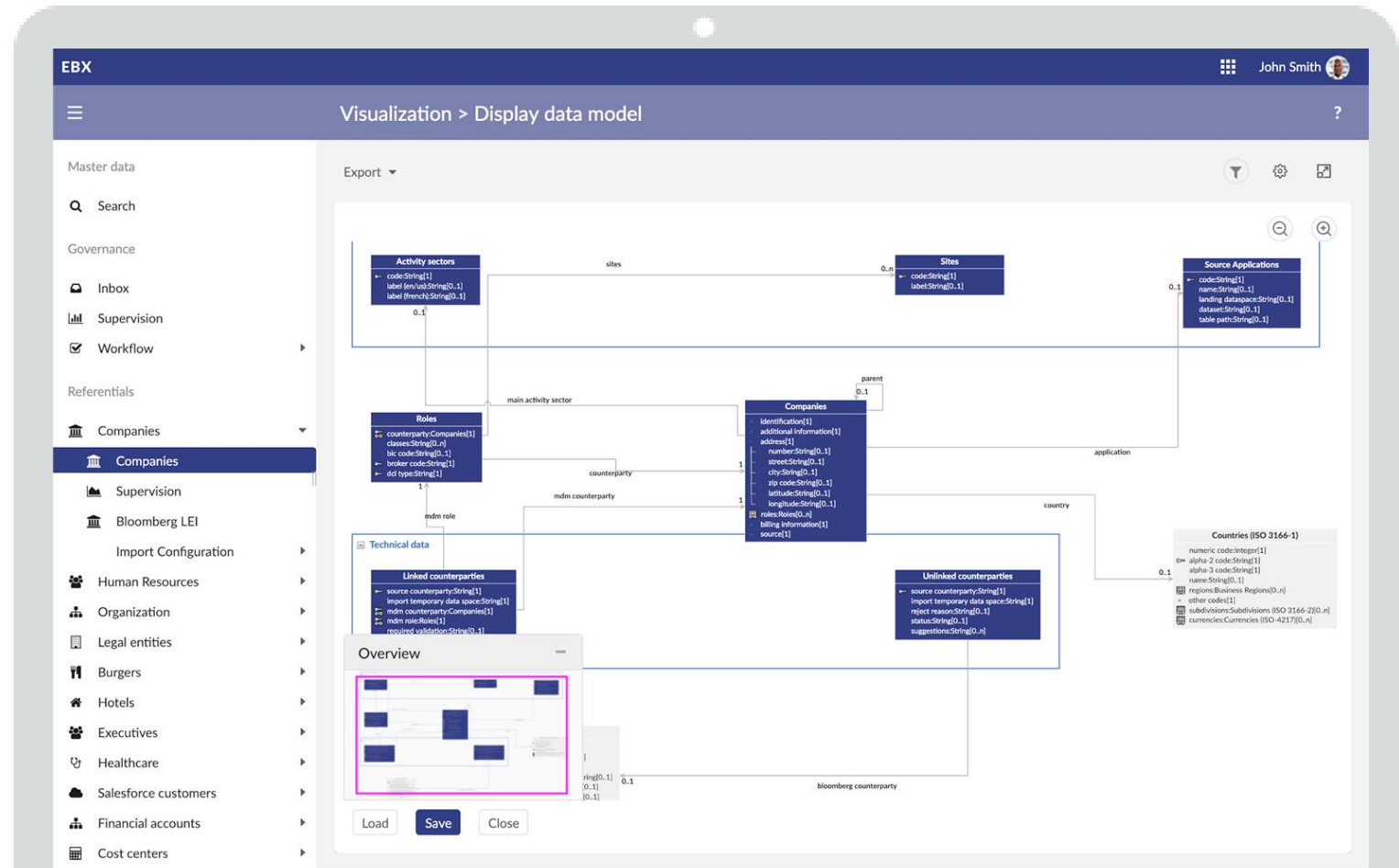
Support for complex types, cardinalities

Full model-driven approach, What you model is what you get

Version control

Dynamic generation of UI and Data Services

Visualization



# Data Validation

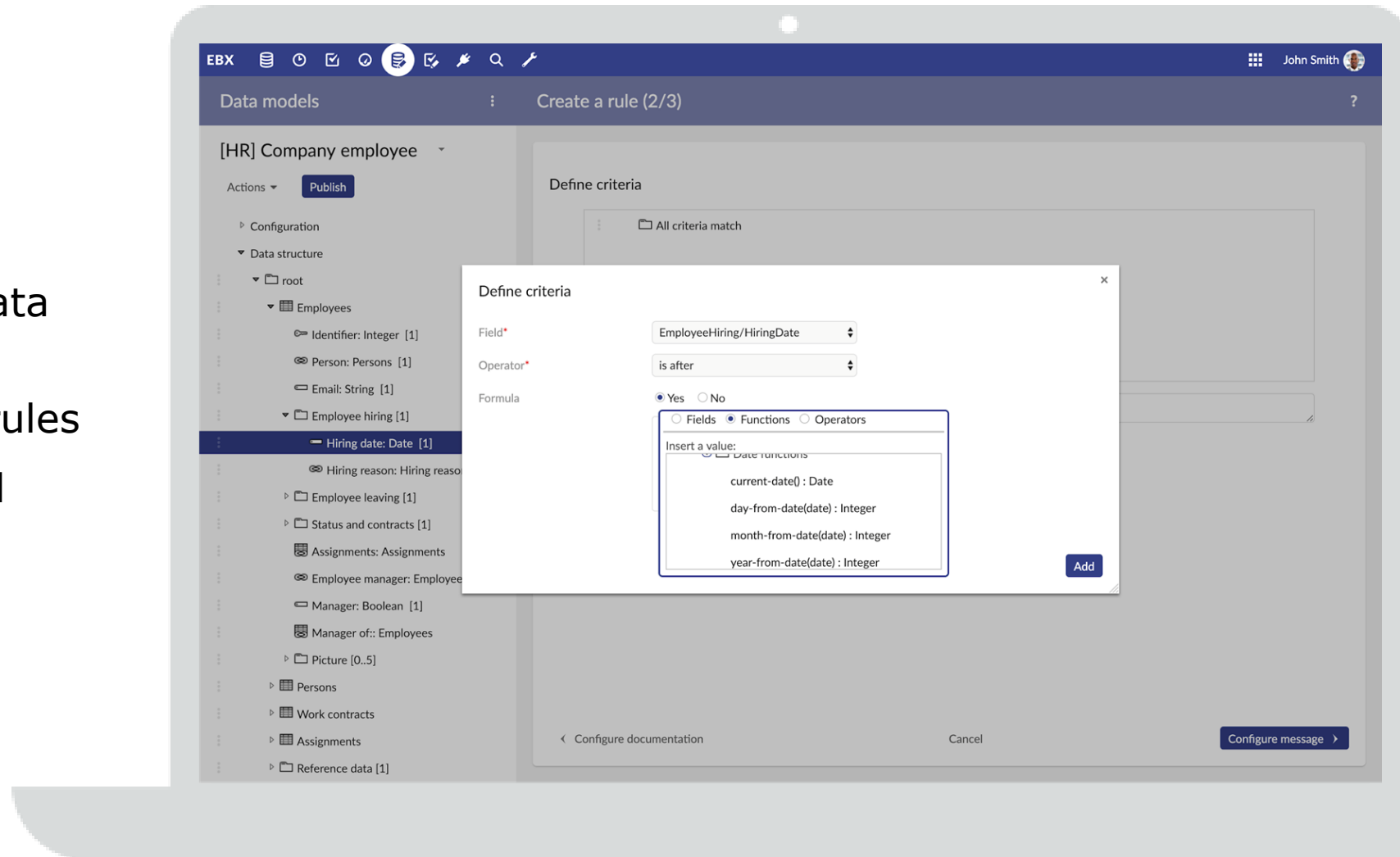
Validation engine

Real-time or  
incremental data  
validation

Rules defined in data  
model

API for advanced rules

Available in UI and  
Data Services



# Matching and merging

Support for matching  
in realtime or batch

Fine grained  
configuration of  
algorithms, matching  
rules

Matching + merging  
or linking

Survivorship:  
Automatic resolution  
of duplicates

Stewardship: Manual  
resolution of  
duplicated

The screenshot displays the 'Merge view' interface of the EBX DATA STEWARD application. The interface is divided into a left sidebar and a main content area. The sidebar contains a search bar and a list of navigation items: Master data, Governance (Inbox, Supervision, Workflow), Referentials (Companies, Search on Companies, Companies, Supervision, Bloomberg LEI, Dashboard), Human Resources, Organization, Legal entities, Burgers, Hotels, Executives, and a sub-menu for Executives (Executives by countries, Dashboard). The main content area shows a 'Merge view' for '1. Executives'. It includes a table with columns: Id, First name, Last name, Gender, Number, Street, City, Zip code, and State. The table contains four rows of data. Below the table is a 'Preview' section showing a single row of data. At the bottom of the main content area are 'Cancel' and 'Next' buttons.

Id	First name	Last name	Gender	Number	Street	City	Zip code	State
3...	Joel	Abramson	Male		89 Canterbury Drive	Douglas	66050	Kansas (U)
1...	Lee	Abrams	Unknown		347 Rose Street	Marshall	37174	Tennessee
1...	George	Abrams	Male		373 Schoolhouse Lane	Perry	62237	Illinois (US
1...	Julie	Abramson	Female		379 Sherwood Drive	Kershaw	29078	South Car

Id	First name	Last name	Gender	Number	Street	City	Zip code	State
14,849	Lee	Abrams	Male		373 Schoolhouse Lane	Marshall	62237	Tennessee

# Version control

Past, present and future versions (data spaces)

Version control on both data models and data values

3-way compare and merge

Full record-level history

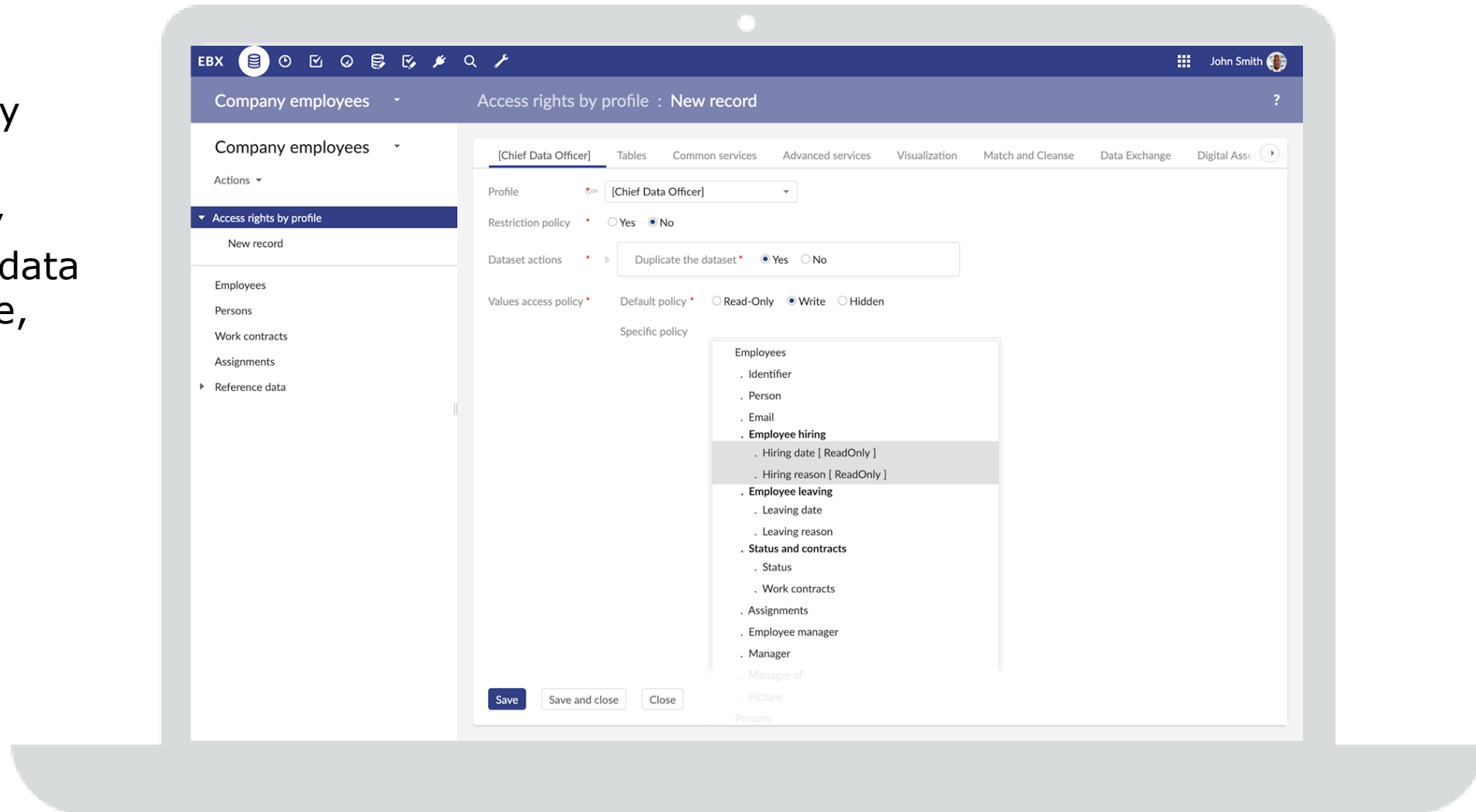
The screenshot displays the EBX DATA STEWARD application interface. The top navigation bar includes the title 'EBX DATA STEWARD', a user profile for 'Peter Martins', and a search icon. The main header shows the breadcrumb 'Companies > Companies'. A left sidebar contains a navigation menu with categories like 'Master data', 'Governance', 'Referentials', and 'Companies'. The 'Companies' category is selected, showing a list of sub-items including 'Supervision', 'Bloomberg LEI', 'Dashboard', 'Human Resources', 'Organization', 'Legal entities', 'Burgers', 'Hotels', 'Executives', 'Healthcare', 'Salesforce customers', and 'Financial accounts'. The main content area displays a table of company data with columns for 'Transaction id', 'MDM Id', 'Operation type', 'User', 'Merge', and 'Name'. The table shows a list of companies with their respective transaction IDs, MDM IDs, operation types (Update or Creation), users (Peter Martins (steward) or John Smith (admin)), and names. The table is paginated, showing '1 - 10 of 449' records. The current view is 'View' with a dropdown arrow. The table data is as follows:

Transaction id	MDM Id	Operation type	User	Merge	Name
2,499	2,861	Update	Peter Martins (steward)		SAS Rue La Boetie.
2,498	2,861	Update	Peter Martins (steward)		SAS Rue La Boetie.
2,497	2,861	Update	Peter Martins (steward)		SAS Rue La Boetie.
2,424	2,825	Update	John Smith (admin)		Commonwealth Bank of Australia
2,009	3,286	Creation	John Smith (admin)		Toronto Dominion South East Asia Ltd
2,009	3,285	Creation	John Smith (admin)		Credit Suisse Singapore Ltd
2,009	3,268	Creation	John Smith (admin)		Oddo et Cie SCA
2,009	3,262	Creation	John Smith (admin)		Morgan Stanley International Finance SA
2,009	3,254	Creation	John Smith (admin)		Lombard Odier & Cie France
2,009	3,242	Creation	John Smith (admin)		Caisse Regionale de Credit Agricole Mutuel Val de Fra

# Security

Integration with  
enterprise directory  
(LDAP, AD...)

Permissions at any  
level (data space, data  
set, table, attribute,  
row, features..)





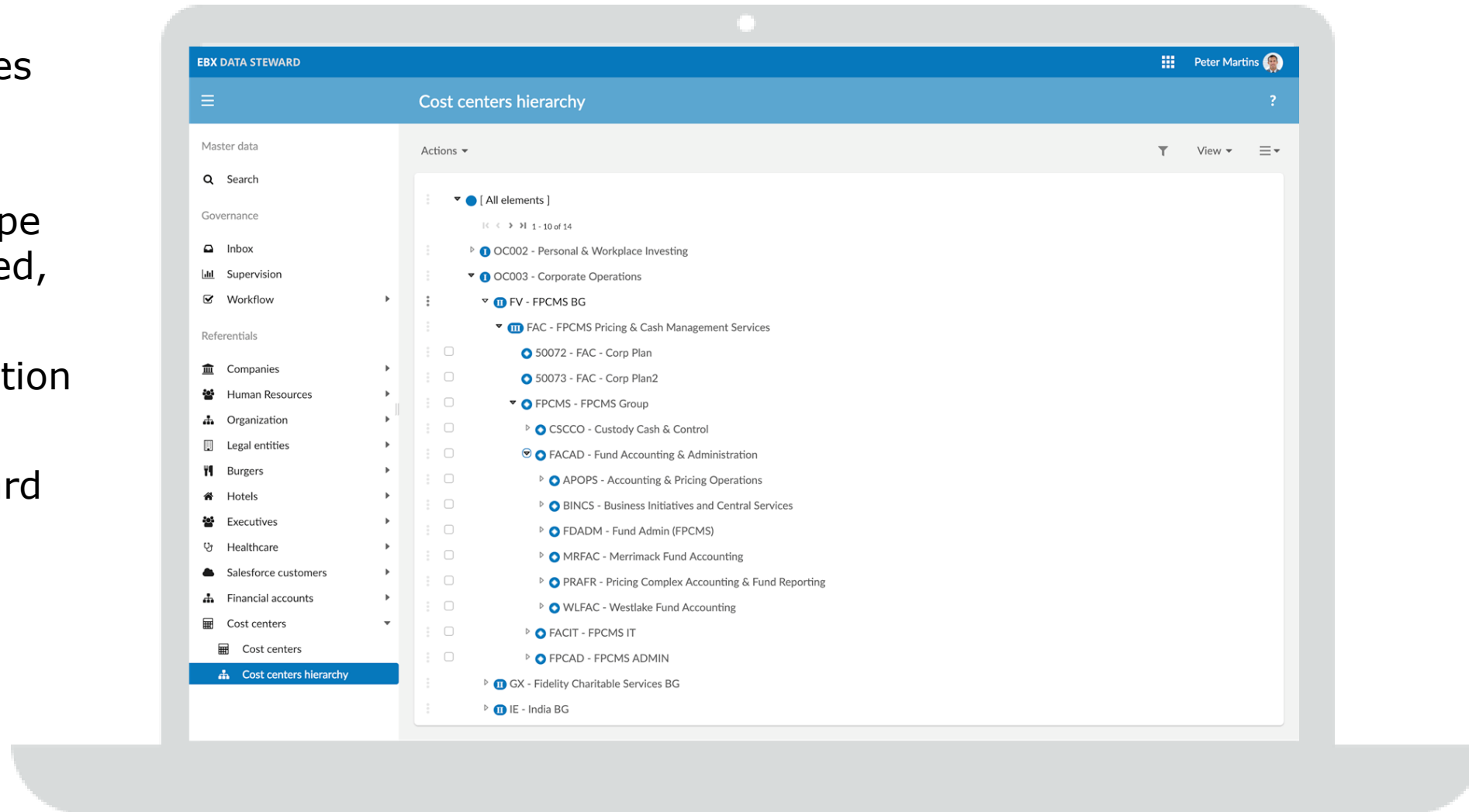
# Hierarchy Management

Dynamic hierarchies  
based on any  
relationship

Support for any type  
of hierarchy (ragged,  
balanced...)

Onscreen visualization  
and editions

Support for standard  
and alternate  
hierarchies using  
inheritance



# Workflow

Integrated workflow engine to control any data management process

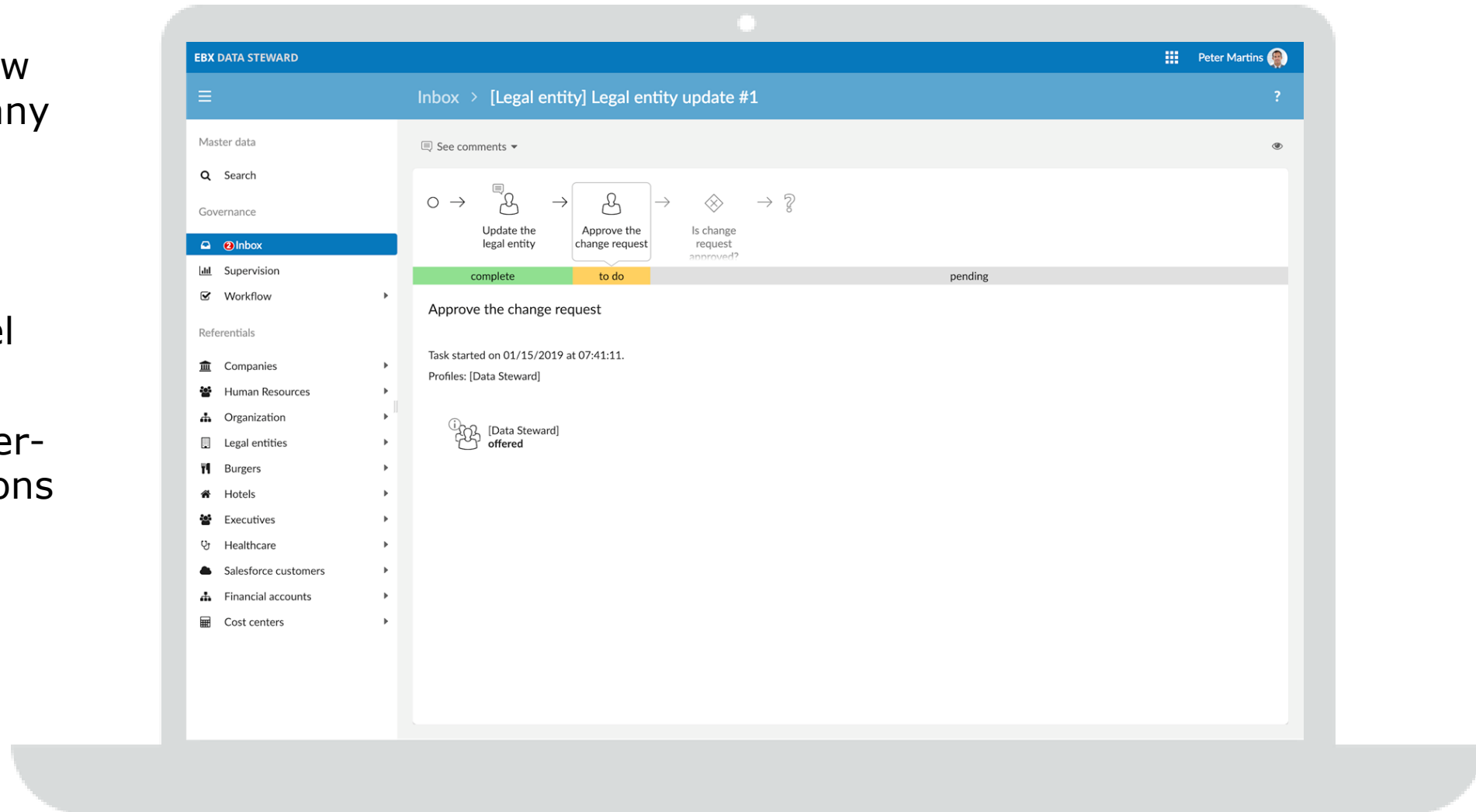
Workflow modeler

Support for parallel workflows

End user and server-side tasks, conditions

Inbox

Notifications, deadlines

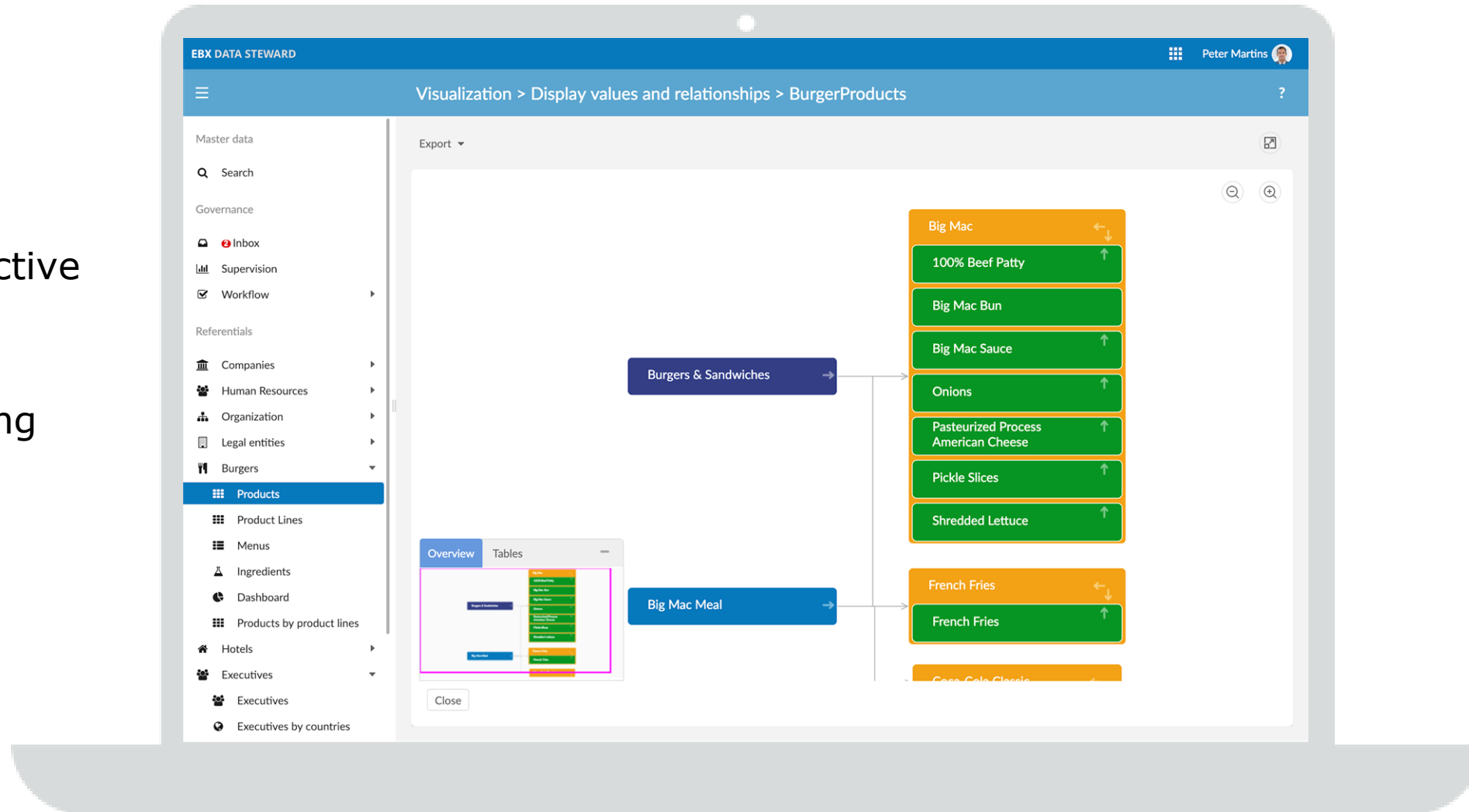


# Visualization

Data Model and  
Workflow Model  
visualization

Data values and  
relationship interactive  
graphs

Support for any  
dimension, including  
cross-domain  
relationships



# Digital Assets

Unstructured data  
(documents, videos)

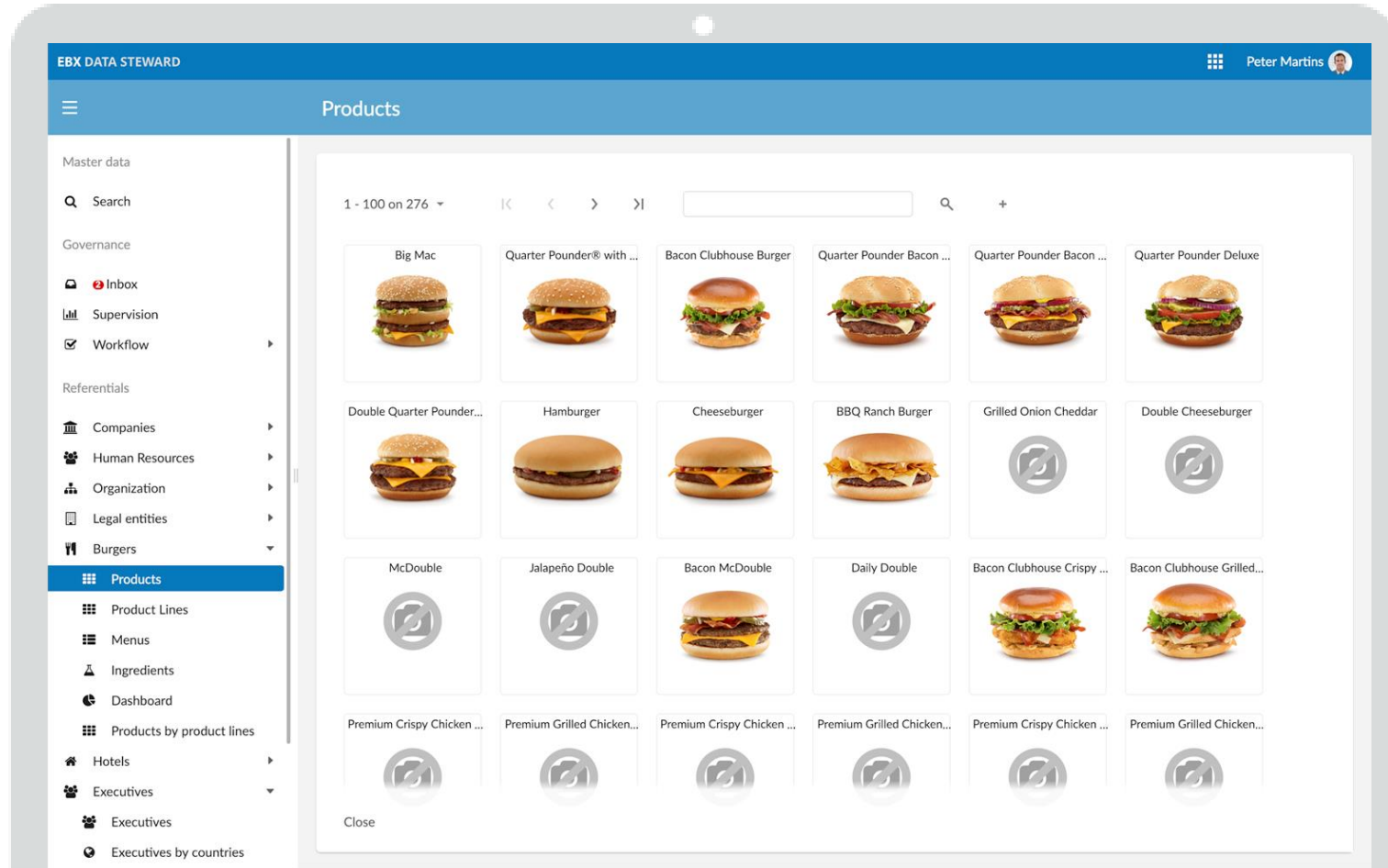
Digital asset libraries

Version control

Metadata and tags

Support for multiple  
storage systems

API for advanced  
integrations



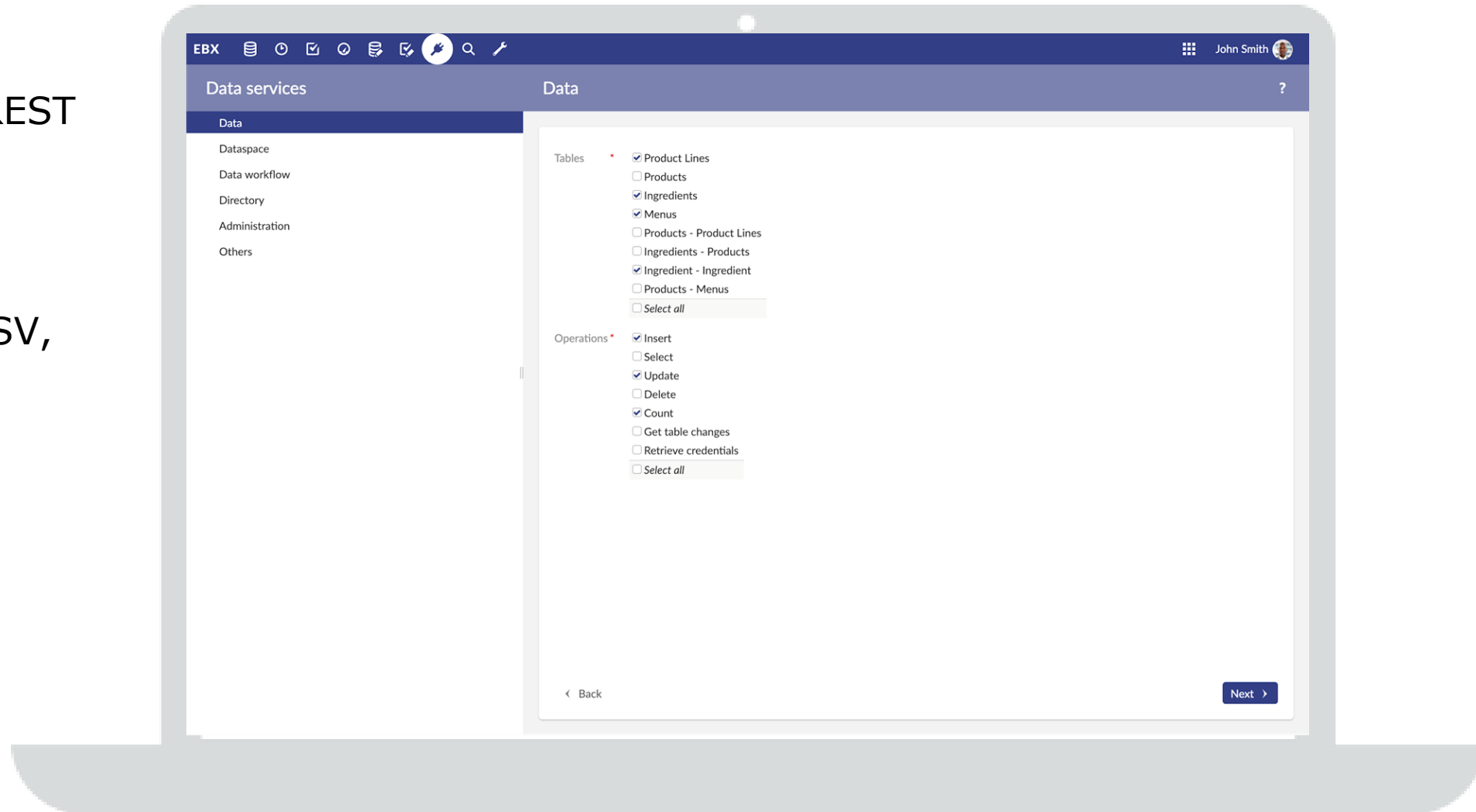
# Integration

Web Services:  
SOAP/WSDL and REST

REST Toolkit for  
customer REST  
services

File integration (CSV,  
XLS/X, XML)

SQL import/export

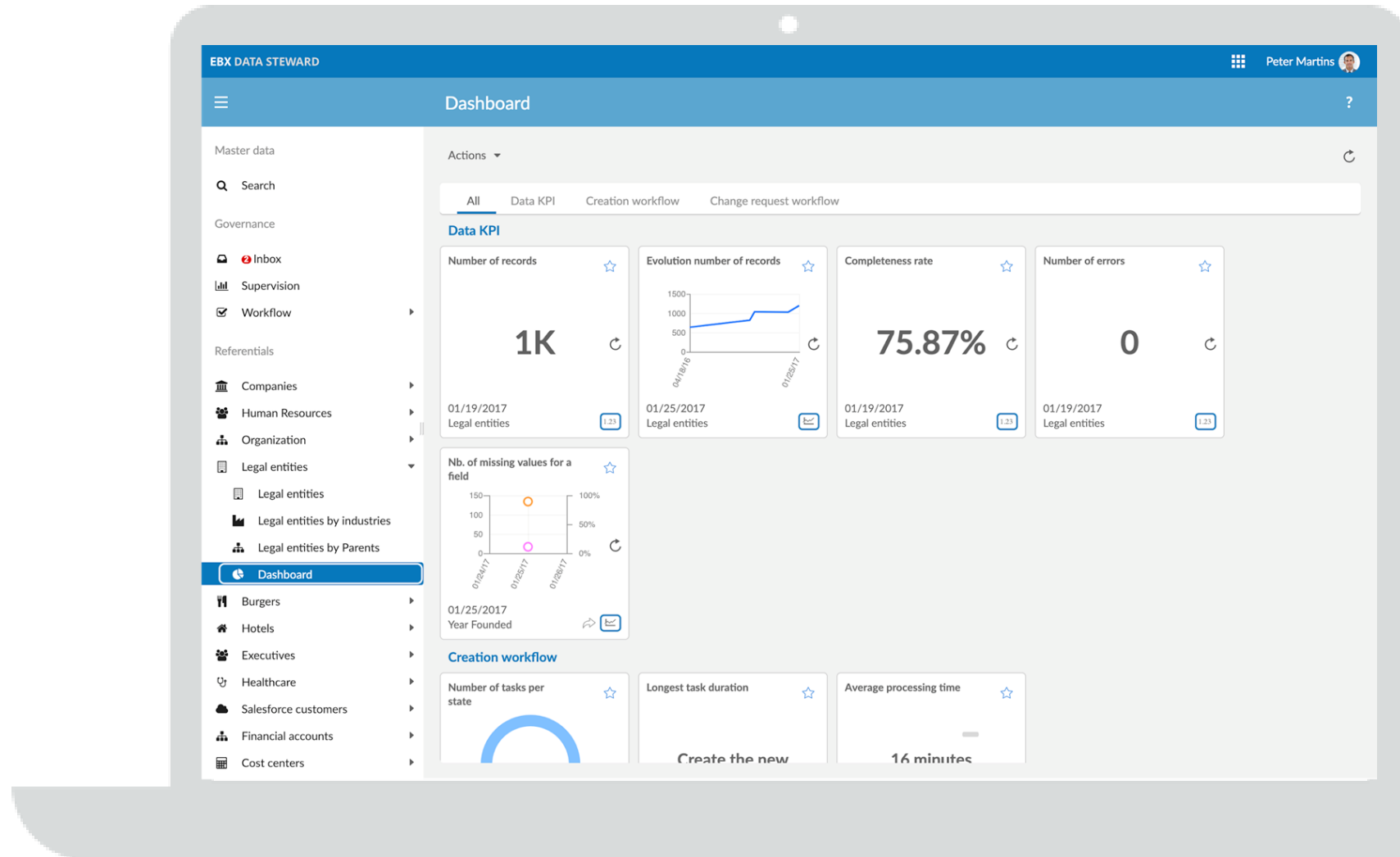


# KPIs and Dashboard

Data quality and performance indicators

Library of 60+ indicators

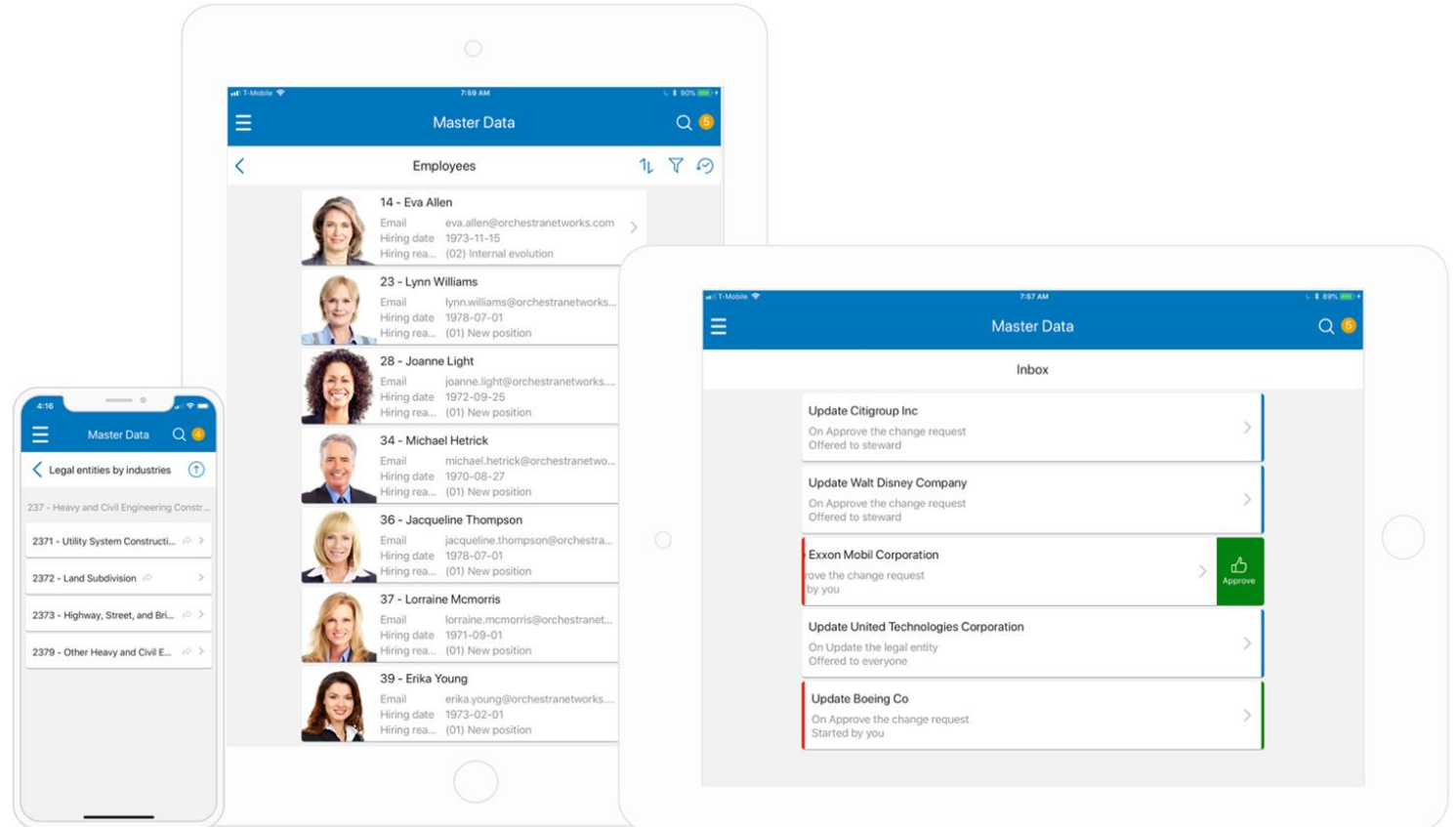
Dashboards per domain



# EBX GO

Native iOS and Android app for smartphones and tablets

- Browse, view and search data
- Workflow
- Support for digital assets
- Data quality dashboards
- Data visualization



# High win rate use cases

The data management market is broad, we need to pick our battles



# Use Cases Where Win Rate is High

## Data Management Use Cases
























Reference Data Management (RDM)	Classifications, hierarchies, workflows (includes self-service)	Few/weak competition
Multi-domain Master Data Management	Enterprise MDM spanning multiple domains/patterns	MDM Suites (vs EBX All-in-one)
Inbound Product MDM	Supply chain focus, materials, suppliers - workflow is key	ERP-centric MDM (ADM), MDM-Suites
Data Governance	Business and technical metadata for governance	DG software (can't do RDM/MDM!)
Customer/Party MDM	Strong focus on data quality/matching	Many competitors (B2C), few competitors (B2B)
Outbound Product MDM	In retail, focus on PIM	PIM vendors are very strong

## Targeted/tactical Use Cases

















Finance MDM	Financial hierarchies, dimensions, attributes -- Workflow is the killer app	EPM vendors
HR MDM	Organizational hierarchies, employee master, onboarding workflows	Few competitors - GDPR helps win in EU
Regulatory compliance	Data governance & MDM for GDPR, BCBS239	DG software (can't do RDM/MDM!)
Industry-specific	Implementation of standards for reference/master data	MDM vendors / Industry specialists
Hierarchy Management	Focus on dimensions/hierarchies	Weak competition

# Use Cases Where Win Rate is High

## Data Management Use Cases

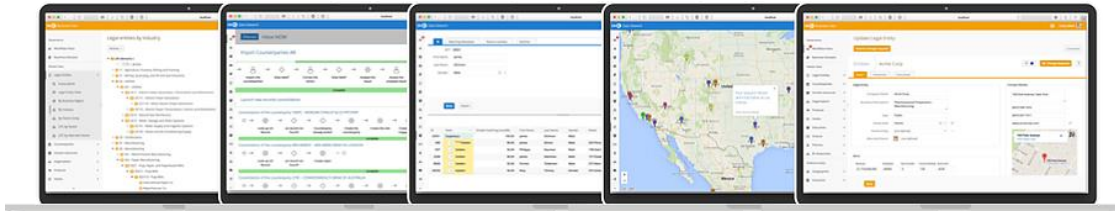
Reference Data Management (RDM)	  Swiss Re  Desjardins 
Multi-domain Master Data Management	  TechnipFMC  amadeus  BNP PARIBAS
Inbound Product MDM	  UBISOFT  faurecia 
Data Governance	  THE CARLYLE GROUP 
Customer/Party MDM	 BNY MELLON  NORTHERN TERRITORY GOVERNMENT  LDC. 
Outbound Product MDM	 Panera BREAD  DUNKIN' DONUTS  Vaasan 

## Targeted/tactical Use Cases

Finance MDM	 United Technologies  Capital One  AXA 
HR MDM	 BNP PARIBAS  Pernod Ricard 
Regulatory compliance	 FDJ  BIOMÉRIEUX 
Industry-specific	 noble energy  eSanté LUXEMBOURG 
Hierarchy Management	 WALT DISNEY Parks and Resorts  Symantec 

# Multidomain MDM

Every transaction in your organization is built on master data: products, customers, employees, suppliers, financial hierarchies or reference data. Accurate and consistent master data streamlines your operational processes and increases the quality of your reporting and analysis. EBX simplifies multidomain master data management by providing one way to manage, govern, and share all your master data.



## KEY FEATURES

- **Flexible data models** for any financial master data and hierarchy
- **Integrated data quality** to profile, cleanse, validate and match data
- **Collaborative workflow** to on-board, update and approve master data
- **Business user interfaces** to view and author master data
- **Real-time and batch interfaces** for systems integration
- **Data quality dashboards** to analyze and measure performance

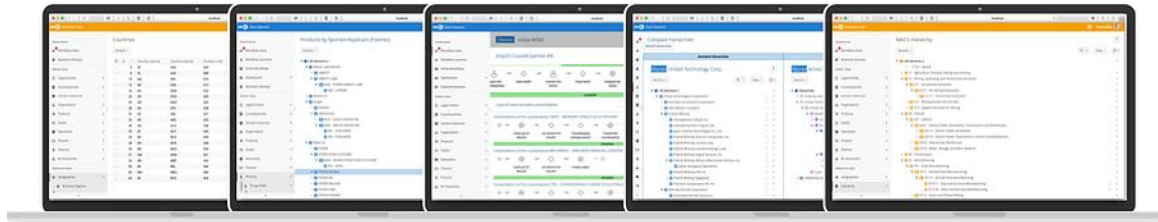
**It's actually multidomain.** EBX lets you model any master data—including relationships between domains—without buying separate solutions.

**Designed for the business,** not just your data stewards and developers, because mass adoption is critical for success.

**Everything you need for MDM in one solution** including workflow, data quality, role-specific applications and more.

# Reference Data Management

Reference data is a special subset of master data that's used for classification throughout your entire organization: postal codes, cost centers, financial hierarchies or countries. Whether the data is externally mandated or internally authored it's unambiguous and non-negotiable. EBX is a single solution for managing and distributing your reference data. By centralizing control you ensure that consistency and compliance are maintained.



## KEY FEATURES

- **Flexible data models** for any financial master data and hierarchy
- **Integrated data quality** to profile, cleanse, validate and match data
- **Collaborative workflow** to on-board, update and approve master data
- **Business user interfaces** to view and author master data
- **Real-time and batch interfaces** for systems integration
- **Data quality dashboards** to analyze and measure performance

**More than code lists.** Reference data includes complex hierarchies, mappings and more. EBX supports all of these forms.

**Version control.** EBX can manage every version of reference data, past, present and future—and connect them.

**Diversity of distribution.** Your business teams and systems can access reference data in the way they want.

# Data Governance / Metadata Management

Supporting your data governance program requires more than spreadsheets and simple documentation tools. EBX supports every facet of your data governance program with a process-driven, governance repository to capture all your critical data elements, business terms, policies, rules and responsibilities. Data stewards, managers, users and data owners can collaborate through workflow-driven, intuitive user interfaces.

Why EBX is different? Data governance is not just a “documentation” exercise. EBX can link metadata to “real” data assets (reference data, master data...)

## KEY FEATURES

- **Support for any metadata** including critical data elements, rules, policies
- **Business glossary** with definitions, classifications, RACI
- Collaborative workflow for policy management, issue management
- **Change request and approval workflows** for data stewards
- **Manage links to other data assets** including master data, reference data
- **KPIs and dashboards** to track data quality and performance

**Improve business ownership.**  
EBX is designed for end users, data stewards and business analysts.

**Support for any business metadata.** EBX can absorb all your artifacts, including Critical Data Elements, policies, business rules, RACI matrixes, and business terms.

**More than documentation.**  
Because EBX goes beyond just metadata, you can link it to your master and reference data.

# Finance MDM

Charts of accounts, cost centers and legal entities are the core of a well-run finance and accounting organization. A single point of management for corporate financial data is critical if companies are to remain competitive and compliant in today's economy.



Oracle  
EPM



OnStream



SAP BPC



SAP BPC

Tactical solution: EBX for Oracle Hyperion EPM. Displacement of Oracle DRM for managing financial dimensions and hierarchies in EPM apps (HFM, Essbase...)

## KEY FEATURES

- **Flexible data models** for any financial master data and hierarchy
- **State of the art hierarchy management** features for end users
- **Integrated workflow** for change requests and approvals
- **Version control** to work on past, present and future dimensions and hierarchies
- **Integration with MS Excel** for importing/exporting data
- **Interfaces** to import/export hierarchies to ERP and reporting applications

**Hierarchy Management** EBX supports unlimited standard and alternate hierarchies meaning teams across finance can use the tool (FP&A, Tax, Legal Entities...)

**Governance/Workflows**  
Workflows for controlling the review and approval of creation and changes to members and hierarchies

**References across multiple finance applications.** We've supported Finance MDM for Oracle, SAP, TM1, and OneStream environments.

# HR MDM

Managing human capital effectively is a big corporate challenge. To address it successfully, and optimize the productivity of your workforce, you need a comprehensive, accurate and global view of employee data.

Tactical solution: EBX Accelerator for GDPR. Compliance to GDPR regulation: Prebuilt metadata model and workflows (consents, right to be forgotten...)

## KEY FEATURES

- **Support for any HR data model** with complex attributes and relationships
- **Hierarchy management** for complex organizational and management structures
- **Integrated data quality** to profile, cleanse, validate and match data
- **Collaborative workflow** for change requests and approvals
- **Real-time and batch interfaces** for HR master data integration
- **Data quality dashboards** for analytics and performance measurement

That's why managing employee data such as organizational structures, locations, career growth, training programs, performance appraisals and compensation is critical for a well-run Human Resources (HR) organization. At its best, employee master data enables a single view of employees, allows companies to adapt to continuing organizational changes, provides a better understanding of human resources, and improves overall human capital efficiency.