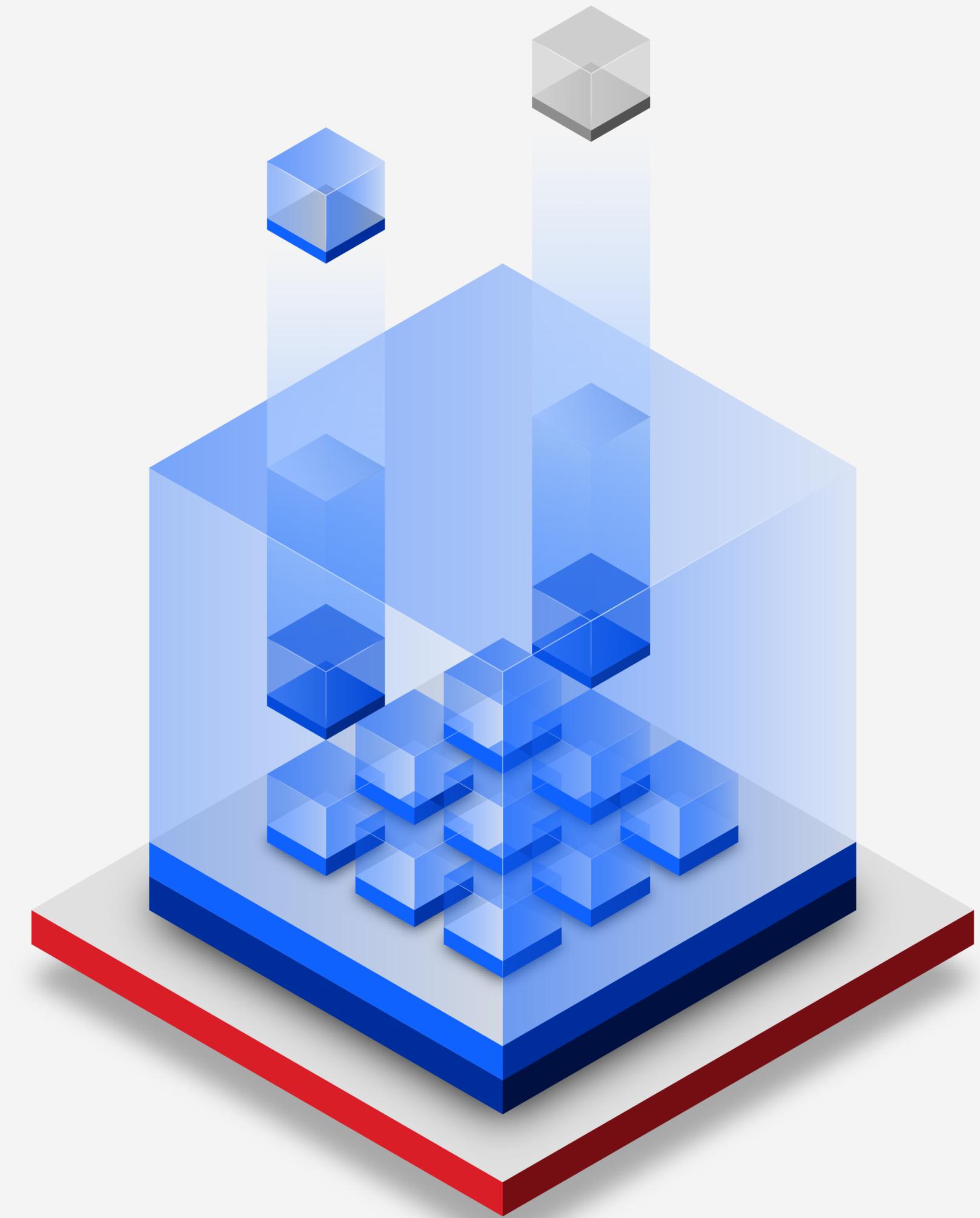


IBM Data Governance



Agenda

Why?

- Market Opportunity
- Enterprise Data Governance Challenges
- Stakeholder Pain Points

What?

- Data Governance Overview
- Key Use Case Highlights
- Competitive Differentiation

How?

- Opportunity identification
- Progressing and closing opportunities
- Pricing and packaging

Call to Action

Market opportunity

According to the market research group Reportlinker:

“The global data governance market is expected to grow from \$2.62 billion in 2021 to \$3.28 billion in 2022 at a compound annual growth rate (CAGR) of 24.9%. The data governance market is expected to grow to \$7.42 billion in 2026 at a CAGR of 22.7%.”

They name and list **IBM** first amongst the most significant vendors in this growing but competitive marketplace:

“Major players in the data governance market are IBM Corporation, Oracle, Collibra, Informatica, Talend, TopQuadrant, Alation, TIBCO Software Inc. , Varonis, Data Advantage Group, Ataccama, Global Data Excellence, Global IDs, Microsoft Corporation, Adobe Inc, Datum LLC, Infosys Limited, Microfocus, Denodo Technologies, and Amazon Web Services Inc.”

Key growth factors:

- Rapidly increasing growth in data volumes
- Increasing regulatory compliance requirements
- Increasing importance of data as a strategic asset



Enterprise data governance challenges

Lack of automation

Lack of automated management and enforcement of business controls is the single biggest blocker for self-service

Complex data estates

Long wait times for business users to access and retrieve data as needed

Complex management of on-premises and multi-cloud environments with large data volume and disparate data sources

Dynamic regulatory landscape

Lack of investment in technology to control and keep up with regulatory mandates exposing organizations to increased risk

Rapid development of AI regulations are putting pressure on Chief Data Officers

Lack of trust in data

Poor data quality and consistency are significant barriers to becoming more data-driven

Inadequate data literacy

Lack of a consistent understanding of data across the organization

Inadequate data literacy is ranked as the second-biggest internal roadblock to the success of the CDO's office

Stakeholder Pain Points



Data Engineer

We are usually dealing with a distributed data landscape, which means the data needed for analytics and AI is almost always spread out across a complex hybrid data estate; on-premises and cloud environments. As data engineers, we have the tedious job of identifying correct data sources, discovering relevant data, matching across these sources, and providing access to data wherever it resides.



Data Steward

We deal with inefficiencies in discovering, curating, and providing timely access to governed, trusted data due to reliance on manual approaches to data stewardship tasks. The proliferation of data privacy and industry regulations can increase risks of non-compliance if data is not governed and protected, which requires additional time to define and enforce the proper policies and rules to protect sensitive information.



Data Consumer

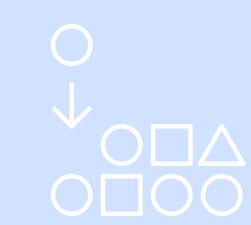
Our teams generally deal with long wait times to get access to data we need, along with poor data quality, and lack of trust in data, which can lead to data underutilization. Underutilization can result in inconsistent interpretation and reduce confidence in business intelligence and analytics applications.

IBM Data and AI

Product strategy

IBM Cloud Pak for Data

Providing collaboration, integration, and interoperability



Data Insights and Applications

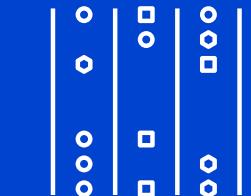
Delivering decisions from data and AI apps to consumers

Business analytics

- Business Analytics Enterprise
- Cognos Analytics
- Planning Analytics

Business apps

- Watson Assistant
- Watson Discovery
- Watson Orders



Data Fabric and AI Lifecycles

Automating integration, metadata management and AI governance

Data governance

- Watson Knowledge Catalog
- Match 360
- Manta

Data integration

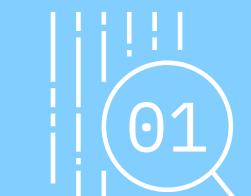
- DataStage
- Databand
- Watson Query
- Watson Pipelines
- Data Replication

Data science and MLOps

- Watson Studio
- Watson Machine Learning

AI governance

- OpenPages
- Watson Studio
- Watson OpenScale
- Watson Knowledge Catalog



Data Sources

Storing, managing, and unlocking the value of data

Transactional

- IBM Db2
- Informix

Warehouse

- IBM Db2
- Netezza

Lakehouse

- IBM Lakehouse
- Coming soon...

Strategic partners

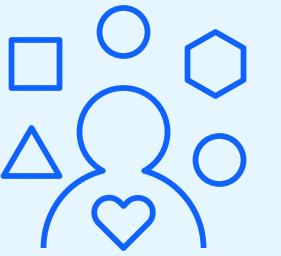
- Cloudera
- DataStax
- EDB
- MongoDB
- SingleStore

Data Governance



Key pillars

*Make data ready
for business*



Data Products

- Business friendly data consumer user experience
- Enable business users to quickly find and use the right data with quality and conformity
- Support for auditable data access requests and workflows
- Develop data products with SLAs and documented rights management, whilst always enforcing governance rules
- Build knowledge around data ecosystems to create data products that conform with regulations

Solution:

- Watson Knowledge Catalog
- Match 360



Privacy and Sovereignty

- Define sovereignty aware policies to enable seamless federated execution, that adhere to sovereignty rules
- Enforce policies at runtime anywhere as “policies follow the data”
- Retain the usefulness by providing advanced data masking methods
- Provide access to the most relevant data, preserving data format and integrity and maintaining compliance

Solution:

- Watson Knowledge Catalog



Regulatory Compliance

- Ability to observe, remediate, and dynamically monitor data issues
- Visibility into where data came from, how it has changed, and who is using it
- Ensure data conformity with quality, business rules and industry regulations
- Provide industry specific and agnostic accelerators for business metadata
- Manage risks associated with constant changes in data privacy regulations

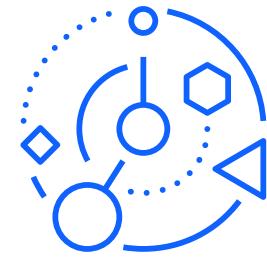
Solution:

- Databand
- Manta
- Match 360
- Watson Knowledge Catalog

Data Governance

Key use cases

Data governance provides organizations with consistent data availability, usability, integrity, improved data quality, and higher trust in business decisions and programmatic enforcement of data protection rules



Establish data governance foundation

- Define and publish a meaningful, well-documented business glossary of governance artifacts
- Discover, curate, and provide governed access to data using advanced automated methods



Enable self-service access to governed data

- Intelligent catalog to store and maintain a rich metadata index of curated and governed data assets
- Business-friendly user experience with enhanced search capabilities to easily find and use the right data



Deliver trusted data for business consumption

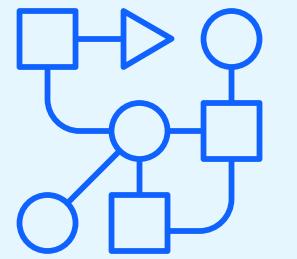
- Automated data content analysis using deep data profiling, quality assessment and classification
- Build trusted 360-degree views of organizational data to easily find, match and identify relationships



Centralize management of regulatory compliance

- Autonomous enforcement of data and AI governance policies to protect data at the point of access
- Visibility into where data came from, how it has changed, and who is using it with automated data lineage

What differentiates IBM Data Governance?



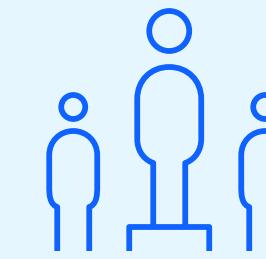
Integration

- Centralized management of Data and AI governance
- Integrated Data and AI platform that can run anywhere and connect to data everywhere
- Integrated data fabric approach that can easily adapt to change in data estates, governance artifacts, regulations etc.
- Seamless integration with other data fabric solutions:
 - Data Integration
 - Data Science and ML/Ops
 - AI Governance
 - Data Security



Innovation

- Award winning user experience designed to address stakeholder pain points
- Optimized data consumption using semantic search making quality data easier to find, while sensitive data remains hidden
- AI-augmented data catalog with extensible business glossary to apply semantic meaning to data assets
- AI/ML-driven automation to reduce and eliminate manual, error prone data stewardship:
 - Data curation
 - Metadata enrichment
 - Data quality assessment



Leadership

- IBM named a leader in 2022 Gartner Magic Quadrant for Data Quality Solutions
- IBM named a leader in the 2022 Q2 Forrester Wave for Enterprise Data Fabric
- IBM is a global leader in AI governance
- Leaders in data privacy:
 - Automatic and uniform policy enforcement across the integrated fabric services
 - Support for data privacy and data sovereignty policies unmatched in the data governance market

Common data governance buyer profiles



Chief Data Officer

Responsible for the utilization and governance of data across the organization

Decision maker

Key influencers



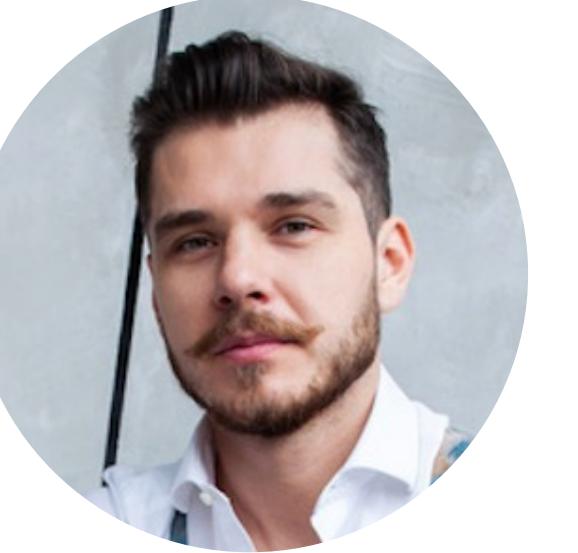
Data scientist

Extracts knowledge and insights from data and uses AI to build machine learning models



Business analyst

Analyzes data and uses business intelligence to build analytical dashboards for business leaders



Data steward

Defines the business glossary and establishes business standards, policies and rules



Data engineer

Responsible for data discovery, data virtualization, data integration and quality

Opportunity qualification

Questions

What to listen for

How are you documenting and publishing business content, standards and policies across your organization?

It is all done through document sharing and we use email for our workflow approval process.

How are you assessing data quality to ensure good clean data is provided for analytical use cases?

We analyze data quality when data is loaded or extracted from a data source. Our data engineers do it manually using some scripts and code.

How are you protecting sensitive information from being exposed to data consumers who should not have access?

We control sensitive data access through IT. End users must submit a request to get access. We just redact all sensitive information, so end users don't get to see it.

How do you find and access the data you need for analytics and AI projects?

We spend hours pulling data together from multiple sources for analytics and the amount of data is overwhelming.

Do you rely on IT for data access? If so, how long do you have to wait for data before you can access and use it?

Most of the time we must rely on IT to get access to data we need. Especially if it is deemed sensitive information. A data request to IT can take days before we get access to the data.

How much time do you spend cleansing and preparing data before you can put it to use for analytics and AI?

We spend most of our time cleansing and preparing data before we can use it for analytics and AI. We also rely on IT for the complex transformation and integration tasks because we have those skills or tools.

Preparing for a customer meeting

1. Understand which buying and influencer personas will be in attendance and ensure your presentation materials align to their priorities.
2. Use the qualification questions to tailor your presentation to line up with the client's responses and challenges.
3. Use the [Data Governance Client presentation](#) as a starting point. Weave in applicable use case content based on attending personas and move other content as backup.
4. After proper opportunity qualification, schedule a meeting to present a [live demo](#) that showcases the capabilities that match the client's interests and priorities.
5. Strengthen IBM's position by sharing Data Governance client success stories:

[ING](#) [Danske Bank](#)



Handling objections

Objections

Response

I don't need all the features of the Cloud Pak for Data base product for my data governance project. Can I start small?

You don't need the full data platform. You can start with a small use case and expand using an agile iterative method. To ease deployment, we can host this on cloud: use as-a-service solution running on cloud, that are both functional and delivers value in minutes. A second option could be our managed service offering by IBM Expert Labs that delivers a fully managed platform on top of AWS, so you can focus on your data projects while IBM manages the solution. And a third option, could be a managed platform by your team, running either on cloud, or on-premise.

We are just starting our data governance journey. A data governance tool is not something we are considering at this point.

A data governance program is a journey. One that encompasses people, process and technology. With a well-planned data governance program, organizations can work on all 3 facets at the same time. We have experience in helping companies like yours with all 3 facets of the journey. But tools can help accelerating this journey, as it offers a runtime to deploy and automate all your governance processes. This yields a reduction in time to market and savings in the deployment of your project. Some examples include: 1) automating organizational policies and rules, 2) include privacy and masking rules to protect your data, 3) document your business glossary and other use cases.

Handling objections

Objections

Response

Do I have to use IBM Cloud, or are other clouds supported?

Our Cloud Pak for Data software can run on any cloud or on-premises. OpenShift provides portability across environments and the flexibility to deploy wherever your workloads reside. Cloud Pak for Data Software deployed on managed OpenShift is a great option if you don't want to manage OpenShift in-house.

I've been trying to achieve a "360-degree view" of data for years now, how is this different?

We've combined best in class governance, quality, privacy, self-service functionality, and automated matching to make getting a complete view/digital twin of your customers more accessible, fast, and customizable to meet your business needs. Most of the challenges with customer/enterprise/patient/citizen 360 arise around the growing amount of data, governance, and privacy.

We spend hours pulling data together from multiple sources for analytics and the amount of data is overwhelming.

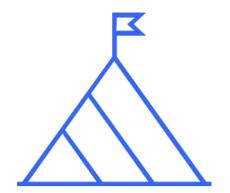
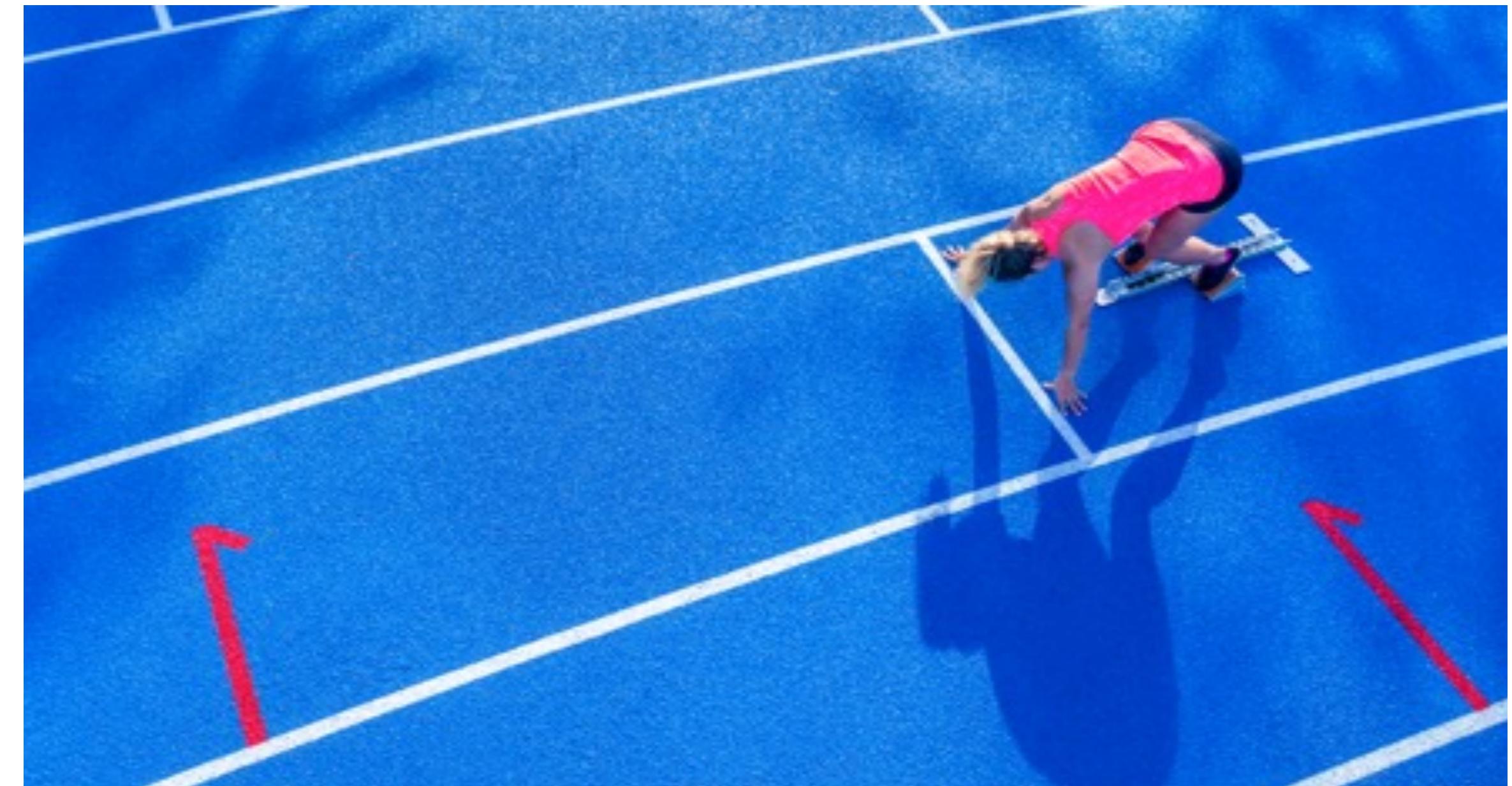
We have many customers who use multiple point tools-whether they have an existing master data management tool, a customer data platform, or something homegrown. IBM's solutions can work with these solutions as a source, providing governance, self-service access, and ML-fueled matching.

[Data Governance Objection Handling](#)

Experts are available to help progress your deals

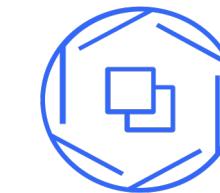
Prove the value of IBM products through a hands-on engagement

Tap into [IBM Client Engineering](#) expertise to deliver a hands-on proof of value project to modernize your data governance approach and rapidly see business value



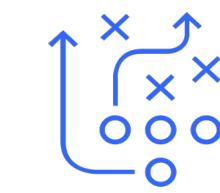
Proof of value

Work with our experts during 2–6-week engagements



Proven pattern

Operationalize and scale your solutions with our proven patterns and agile value engineering methodology.



Diverse, robust expertise

Highly specialized, deep-technical experts on core technology across various industries.

Expert Labs Data Governance services offerings

Expertise Connect for Express Parts

4 months

- ✓ Discovery + Assessment to review business requirements and project objectives, select use case
- ✓ Installation of OpenShift, Cloud Pak for Data and Express Part Services
- ✓ Use Case planning, execution and implementation assistance
- ✓ Guidance on how to operate and manage IBM Software
- ❖ Outcome: Deployed platform and use case initiation

[Link to offering details](#)

Data Governance and Privacy

4 weeks

- ✓ Establish a knowledge-based trusted data catalog for Self-Service
- ✓ Automate data privacy and data protection
- ✓ Co-create with customer Data Steward
- ❖ Outcome: Foundational governed data catalog for self service data access and compliance and audit readiness

[Link to offering details](#)

Customer 360

4 weeks

- ✓ IBM Expert Lab assets, best practices and expertise
- ✓ Leverage Self-service capability to enable agile teams to build fit-for-purpose 360-degree views
- ❖ Outcome: Services to deliver business-ready data through enablement and co-creation

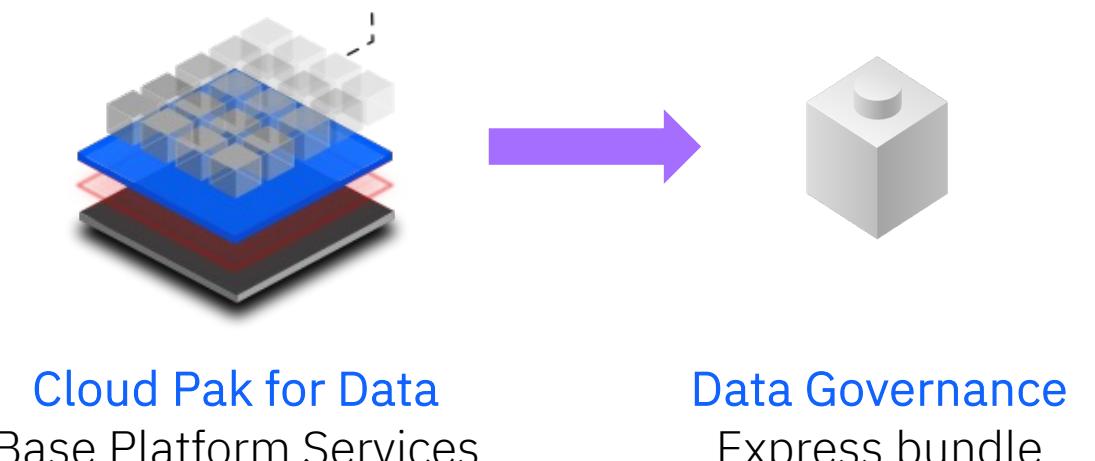
[Link to offering details](#)

Data Governance express bundle

Data Fabric Express Parts are software bundles of strategically picked Services designed as on-ramps and positioned as entry point solutions with low pricing to attract volumes of new logos in Select / Tier 2 markets

What is the Data Governance Express bundle?

A quick start bundle for Data Governance use cases leveraging Watson Knowledge Catalog on Cloud Pak for Data



- Simplified offer
- Complete delivery
- Entry level pricing

What services are included?

- 64 VPCs of Cloud Pak for Data Enterprise Edition
- Use is restricted to any combination of the following services:
 - Watson Knowledge Catalog Excluding:
 - Data Lineage
 - Data Quality rules
 - Masking Flows
 - Advanced Metadata Import
 - Symantec search
 - All CPD common core, common database, control pane and foundational services

* Limited to quantity of one per environment

What is not included in the bundle?

- All other Cloud Pak for Data Enterprise Edition base services that are not listed under Usage Restrictions in the [License](#)
- Specifically: this bundle excludes the use of Data Lineage, Data Quality rules, Masking flows, Advanced Metadata Import and Semantic search

Express parts recommended services

IBM Data Science and MLOps Express

Watson Studio (including select sub-services)
Watson Machine Learning
Watson OpenScale

IBM Data Governance Express

Watson Knowledge Catalog
(no data quality, no masking flows, no data lineage)

IBM Data Integration Express

DataStage for ELT (SQL Pushdown)
Limited use license for SQL Pushdown Execution only

Recommended companion services offering:

Expertise Connect

- Prescriptive hands-on assistance to help clients with their Data Fabric use case implementation that includes:
 - Discovery + Assessment to review business requirements and project objectives
 - Installation of OpenShift, Cloud Pak for Data and Express Part Services
 - Use Case planning, execution and implementation assistance
 - Guidance on how to operate and manage IBM Software
 - 30-60-90-day plan to achieve desired outcomes
 - Clients emerge with an early version of their solution, with hands-on experience

Expert Labs services offering	Part number	Quantity	Duration	List price
Expertise Connect Core	D0676ZX	4	4 months	\$60K USD

Pricing and packaging

Data Governance Express Bundle

	Subscription license part number	Subscription license list price / month (CTL)	Perpetual license part number	Perpetual license w/ S&S list price
Production	D0D3DZX	\$25K USD	D0D3BZX	\$750K USD
Non-Production	D0D3QZX	\$12.5K USD	D0D3NZX	\$325K USD

Cloud Pak for Data Enterprise Edition

	Subscription license part number	Subscription license list price / month (CTL)	Perpetual license part number	Perpetual license w/ S&S list price
Production	D264MLL	\$612 USD per VPC	D1YGZLL	\$18.3K USD per VPC
Non-Production	D27TQLL	\$306 USD per VPC	D27RMLL	\$9.18K USD per VPC

Cloud Pak for Data as a Service

Service	Lite	Standard	Enterprise Bundle	Part numbers (no standalone parts)
Watson Knowledge Catalog	Free • 2 Catalogs • 50 Assets per Catalog • 300 Business Glossary Terms • 20 Reference Datasets • 10 Categories • 25 CUH per Month	\$0.209 USD / Catalog Asset Per Month \$1.25 USD / Capacity Unit Hours	\$0.209 USD / Catalog Asset Per Month \$1.25 USD / Capacity Unit Hours \$19,100.00 USD / Instance Per Month	Sell under Cloud Pak for Data as a Service, IBM Cloud, or Watson Subscription parts • D01CFZX: IBM Cloud Pak for Data as a Service for IBM Cloud 1 US Dollar per month • D01CGZX: IBM Cloud Pak for Data as a Service for IBM Cloud 1 US Dollar Overage • D1U1GLL: IBM Cloud Platform 1 US Dollar per Month • D1U1HLL: IBM Cloud Platform 1 US Dollar Overage • D019JZX: IBM Watson Subscription for IBM Cloud 1 US Dollar per Month • D019NZX: IBM Watson Subscription for IBM Cloud 1 US Dollar Overage

Always use [Passport Advantage](#) for the latest parts and pricing

Watson Knowledge Catalog

Feature comparison

Feature	CPD 4.6	Express Bundle	CPD SaaS
Multiple catalogs	✓	✓	✓
Data preparation (Data Refinery)	✓	✓	✓
Customer asset types, attributes, relationships	✓	✓	✓
Data lineage	✓	✗	✗
Semantic search	✓	✗	✗
Model factsheets	✓	✓	✓
Reporting data mart service	✓	✓	✓
Integration with Db2 Data Gate	✓	✗	✗
Metadata import	✓	✓	✓
Advanced Metadata import	✓	✗	✓
Metadata enrichment (auto profiling, data class and term assignments, data quality score and OOTB dimensions)	✓	✓	✓
Data quality rules (from analytics project)	✓	✗	✓
Automatic enforcement of data protection rules	✓	✓	✓
Advanced masking options	✓	✗	✓
Masking flow to generate new datasets	✓	✓	✓
Business glossary (terms, policies, governance rules, data protection rules, reference data, data classes, classifications)	✓	✓	✓
Custom data classes and classifications	✓	✓	✓
Category hierarchies to organize governance artifacts	✓	✓	✓
OOTB workflows to manage governance artifacts	✓	✓	✓
Knowledge Accelerators (as a part of WKC)	✓	✓	✓

Call to action

What can you do today?

- Familiarize yourself with the IBM Data Governance solution bundle and how you can get help with assets available on [Seismic](#)
- Build your list of target accounts by leveraging the [Prospecting kit](#)
- Reach out to your clients and send them the [one-pager](#) to learn more about IBM Data Governance and how we can help
- Register 3 new opportunities in ISC / Partner Portal for Data Governance use case

Resources

- [Pricing and Packaging](#)
- [External Client Presentation](#)
- [Frequently asked questions](#)

Contacts

- [Brian Mayer – WW Sales](#)
- [Yan Zhuo – WW Ecosystem](#)
- [Jennifer Wales – Expert Labs](#)
- [Carlo Appugliese – Client Engineering](#)
- [Marcus Boone – Product Management](#)
- [Mukta Singh – Product Management](#)

