Compliant Enterprise Data Freedom:
The art of the possible with IBM Cloud Private for Data
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Businesses are facing intense pressure

We are in the era of Digital Transformation
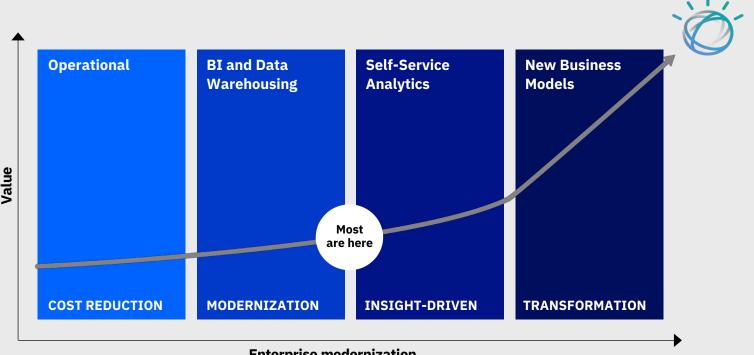
Data-driven

- Change culture
- Break silos
- Discover "what"
- Understand "why"

Insight-driven

- Prediction
- Optimization
- Automation
- Collaboration
- Self-services
- Deep analytics

Digital transformation

- New business models
- Disruptive technology
- Real-time decisions
- Embedded analytics

The business value of data is growing

Value (vertical axis)

Operational	BI and Data Warehousing	Self-Service Analytics	New Business Models
COST REDUCTION	**MODERNIZATION**	**INSIGHT-DRIVEN**	**TRANSFORMATION**

Most are here

Enterprise modernization

Enterprise Information Governance Practices are Maturing

Initial

UNSURE
Aware that there may be data issues lurking, but not proactively looking for or managing them

Managing

OVERWHELMED
Dealing with issues from troublesome data sources in ad-hoc/ reactive fashion with no real understanding of data value or cost

Defined

STRUCTURED
Gaining stronger understanding of data issues that exist and establishing repeatable, defensible processes to mitigate issues

Quantitatively Managed

MANAGING
Enterprise-wide stakeholder agreement on problematic data issues and well-established validated processes

Optimizing

CONFIDENT
Strong understanding of enterprise data composition, confident that issues are being discovered and addressed through fully automated processes
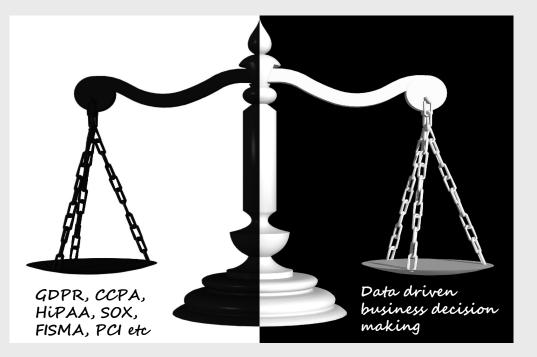
REACTIVE

PROACTIVE

Compliance & Data Freedom – At odds with each other within the Enterprise

Understand obligations

Policies & Rules

Security & Audits

Stay out of jail!

'Self-Service' culture

On-demand access to data

Fit for purpose tooling

'Bring my own data'

GDPR, CCPA, HiPAA, SOX, FISMA, PCI etc

Data driven business decision making

Stay compliant with regulatory obligations or else....

Become a data driven business or else...

Restrict access to enterprise data

Freedom to access enterprise data

Enterprise Data

Governance can enable a 'compliant' data-driven enterprise

Your Data Anywhere

On-Premises

Private Cloud

Public Cloud

Structured & Unstructured Data

Governance of Consumers and Producers
With lineage, business context & metrics

Virtualized access with autodiscovery

Self-service access to data

WORKSTREAM
COMMENT
INVOKES
PERSON
USES
APP
DATASET
RESPONSE
DATASET
COMMENT
VISUALIZATION
DATASET
COMMUNITY
PERSON
WORKSTREAM
MODEL

End Users

Data Engineer

Data Scientists

Business Analysts

App Developers

The end-to-end enterprise data workflow for analytics

Gather & Manage Data

Connect, discover & **provision** data sources

Understand & Govern Data

Auto Classify, **Catalog** and **Govern** data for both compliance and insights

Prepare Data for Analysis

Integrate, cleanse and **shape** your data

Build Analytica Models

Create ML, Deep Learning, Optimization, and other advanced mathematical **models**.
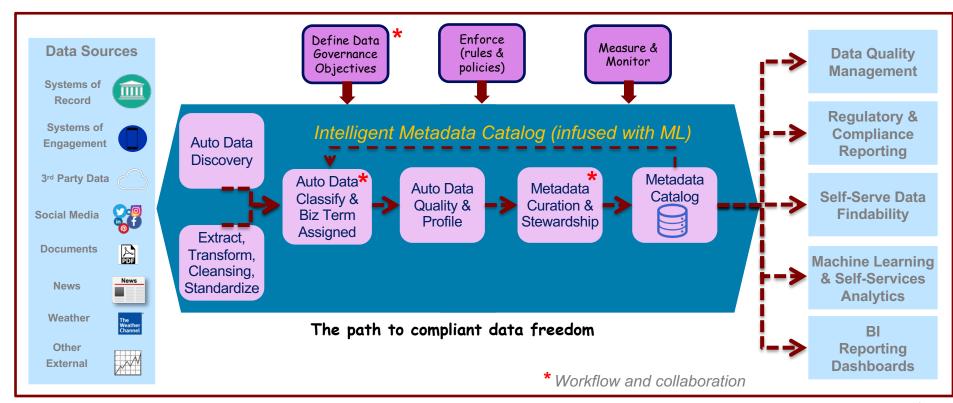
Deploy Analytical models

DevOps for analytical models.

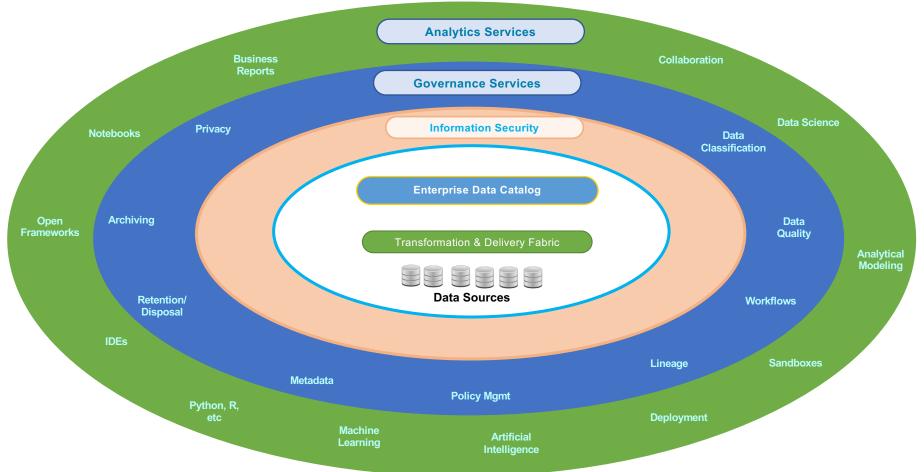## "Insightful" Applications

Incorporate **trusted and governed models** into applications, dashboards, and operational systems

Make data compliant, trusted and easy to consume

Support compliance objectives throughout the analytics lifecycle

Data Sources

- Systems of Record
- Systems of Engagement
- 3rd Party Data
- Social Media
- Documents
- News
- Weather
- Other External

Define Data Governance Objectives *

Enforce (rules & policies)

Measure & Monitor

Intelligent Metadata Catalog (infused with ML)

- Auto Data Discovery
- Extract, Transform, Cleansing, Standardize
- Auto Data Classify & Biz Term Assigned *
- Auto Data Quality & Profile
- Metadata Curation & Stewardship *
- Metadata Catalog

The path to compliant data freedom

- Data Quality Management
- Regulatory & Compliance Reporting
- Self-Serve Data Findability
- Machine Learning & Self-Services Analytics
- BI Reporting Dashboards

* *Workflow and collaboration*

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Building blocks for a seamlessly integrated enterprise data & analytics strategy

Blueprint for successful data & analytics strategy

Data Engineers   **Data Scientists**   **Business Analysts**   **Data Stewards**   **Developers**   **Partners**

Integrated User Experience   APIs

Hybrid Data Management Services	**Data Governance & Integration Services**	**Data Science & Analytics Services**

Open source based end user services

Collect	**Organize**	**Analyze**
Data Management	Governance services	Data Science services
Data Connectivity & Virtualization	Data Integration services	Business reporting services
Data Query & Access	Data Catalog services	Analytical models

Open source based foundational services

Private Cloud Foundational Platform Services

Storage	**CHOICE OF HYBRID INFRASTRUCTURE**
	Bare Metal Virtual Machines Public Cloud

Thank you

Try it out (hosted trial): https://www.ibm.com/cloud/garage/cloud-private-experiences/icpd

Come see us at the main conference

Demo peds 365-4, 365-5, 365-6, Tue- Friday

2109: Prepare your data for AI: Introducing IBM Cloud Private for Data, Tue 9:30am – 10:30am

5065: How to Design a Trusted Data Platform for Self-Serving Analytics on IBM Cloud Private for Data, Tue 1:30pm

5478: BM Cloud Private for Data: Deep Dive Into the Data Platform, Wed 2:30pm

7181: Transform Your Analytics with IBM Data Virtualization, Wed 3:30pm

2578: AI Meets IA: IBM Cloud Private for Data, Thu 9:30am

6709: User Perspectives into a Private Cloud Data and Analytics Platform, Thu 10:30am