

A Hands-on Introduction to IBM Cloud Private for Data

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About Me



David Solomon
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Team-
wolfpack

Focus / Passion

- AI, Cognitive, Emerging Technology
- Analytics
- Data (Architecture, Modeling, Integration)
- Cloud Service Architecture
- Applying the above to real-world business problems

Education & Certification

- M.S. Software Engineering
- B.S, Physics
- Data Mgmt, AI, Cloud, Docker, DevOps, ...



Proud Member of
the IBM WolfPack

Companies are pouring investment into AI

9.8X

Increase in demand for
ML Engineers over the last 5 years

\$39 Billion+

Investment by companies in
AI during 2017 – led by tech,
finance, and automotive

83%

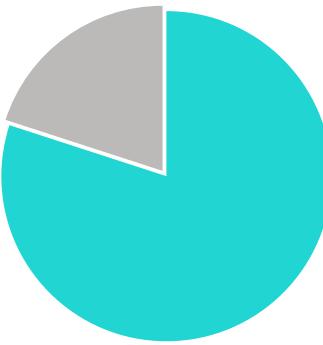
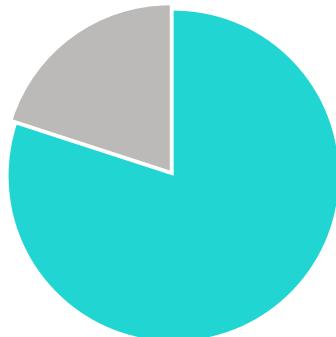
Of companies say AI is strategically
important to their business

Why are companies struggling to capture the value of AI?

Bad data is simply paralyzing

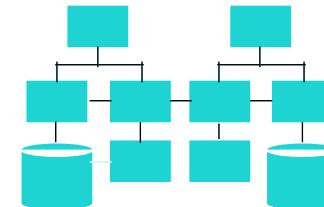
Only 20%

Of companies say they have successfully adopted AI



80%
Say they **do not** understand
the data needed for AI

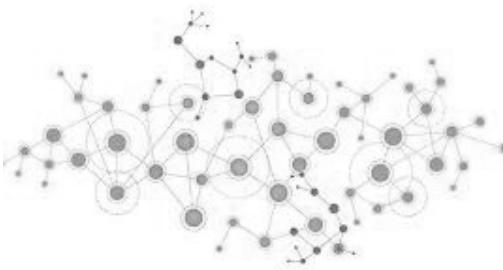
**There is no
AI without IA**



A new basis for competitive advantage



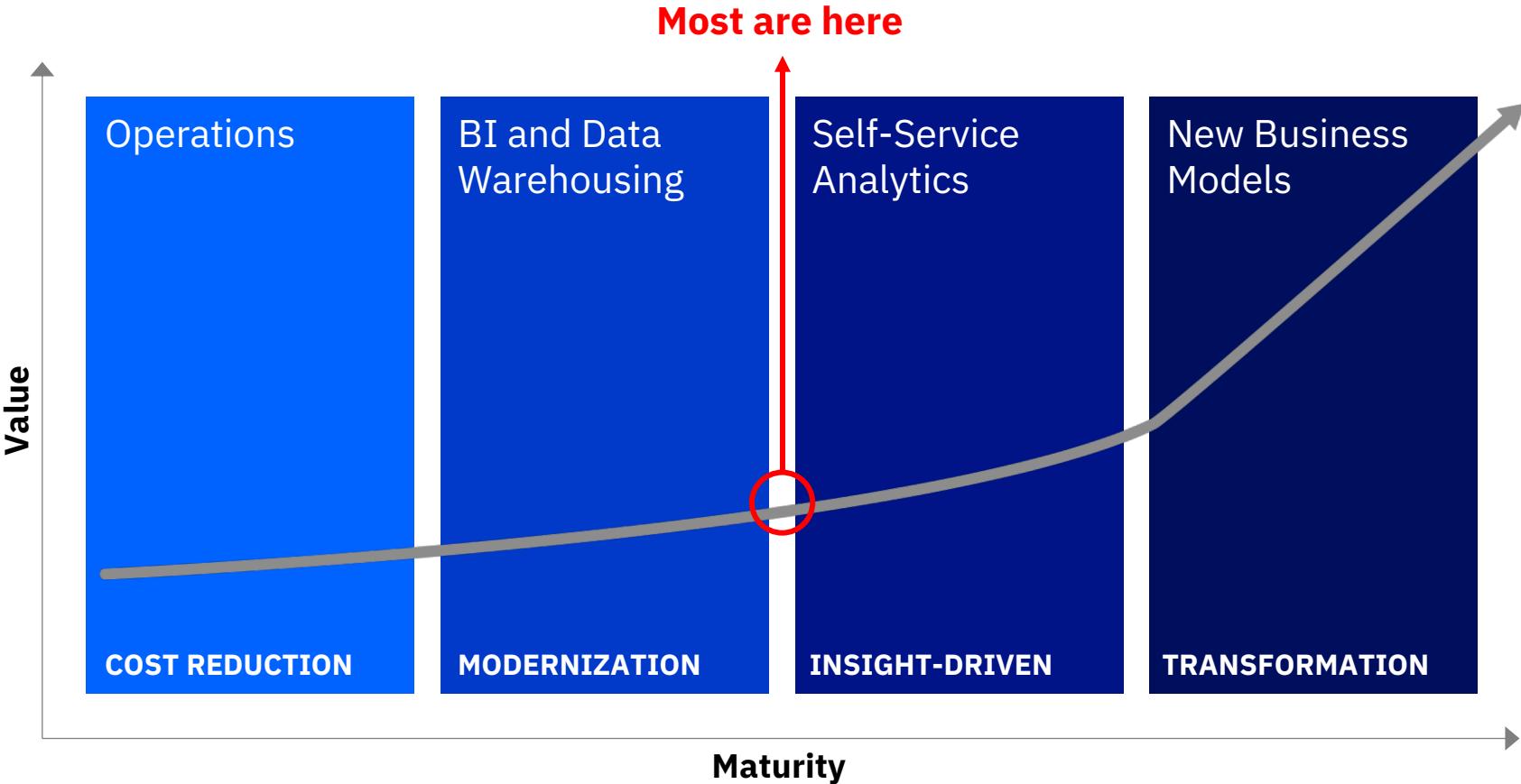
Economies Of Scale



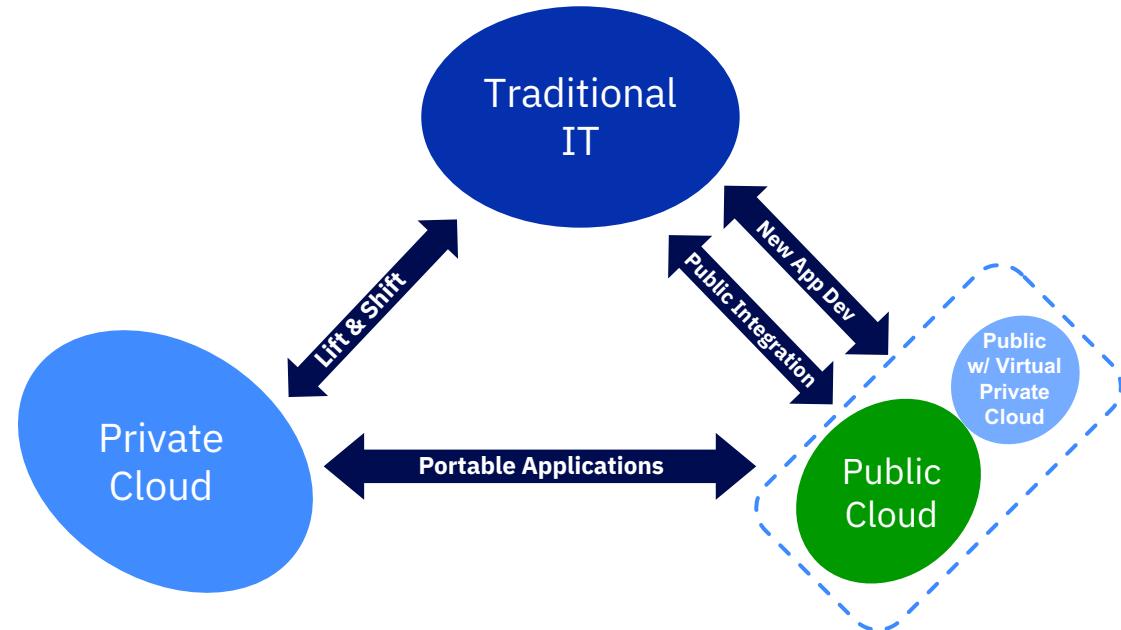
Network Effects



Data Maturity Curve



**Multi-Cloud is
the key to
organizational
agility,
IBM is uniquely
placed today**



Your data challenges

1. Collect

2. Organize

3. Analyze

**Hybrid
Data Management**

**Unified Governance
& Integration**

**Data Science &
Business Analytics**

IBM Data & Analytics Portfolio

Collect

Hybrid
Data Management



Organize

Unified Governance
& Integration



Analyze

Data Science &
Business Analytics



- Collect all types of data, structured and unstructured
- Includes all open sources of data
- Leverages a single platform with a common application layer
- Write once and deploy anywhere

- Satisfy all matters of finding, cataloging and masking data
- Integrates fluid data sets
- Delivers built-in compliance
- Leverages advanced machine learning capabilities

- Delivers descriptive, prescriptive and predictive insights across all types of data
- Empowers all your teams and their unique use cases
- Enables advanced analytics and data science methods

*Lead with
Capabilities:*

- Db2 & Db2 Warehouse
- Db2 Event Store
- Integrated Analytics System
- Big SQL & Hortonworks Hadoop

*Lead with
Capabilities:*

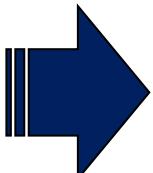
- Information Server
- Data Replication
- Master Data Management
- Optim & StoredIQ

*Lead with
Capabilities:*

- SPSS & DSX
- Cognos & Watson Analytics
- Watson Explorer
- Planning Analytics

Now simplified into a “single offering” on private cloud

Today, we offer
individual products
to **Collect, Organize**
& Analyze data



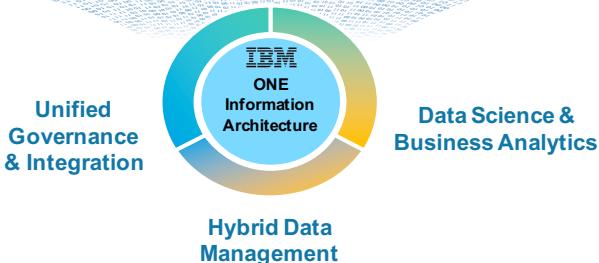
NEW

IBM Cloud Private for Data

Cloud Agility
Easily build data-driven apps, Pre-assembled personalized experiences, Extensible with open APIs

Lightning Fast
Provision users in minutes, Fast Data ingest speeds, Fast track projects with industry models

AI-ready
Machine Learning everywhere, Makes your data ready for AI



IBM Cloud Private for Data

Sample Services

One single offering for all your Data & Analytics requirements

COLLECT

ORGANIZE

ANALYZE

Database

Governance Catalog

Dashboards & Visualization

Data Warehouse

Data Quality

Reporting

Event Store

Data Preparation

Advanced Analytics

Federation / Virtualization

Data Integration

Machine Learning

IBM Cloud Private for Data

New



Instant Provisioning - Dynamic Dashboards



Cloud-native Data Micro Services

- Customized DBs
- Data warehousing
- Fast Data Ingest
- Federated query

- Data integration
- Data cataloging
- Governance
- Data lifecycle mgmt

- Predictive Modeling
- Machine Learning
- Mathematical models
- Dashboards, reporting

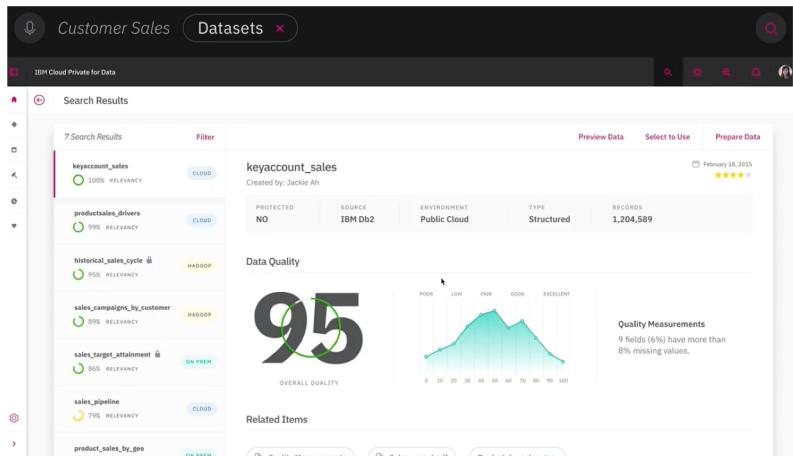
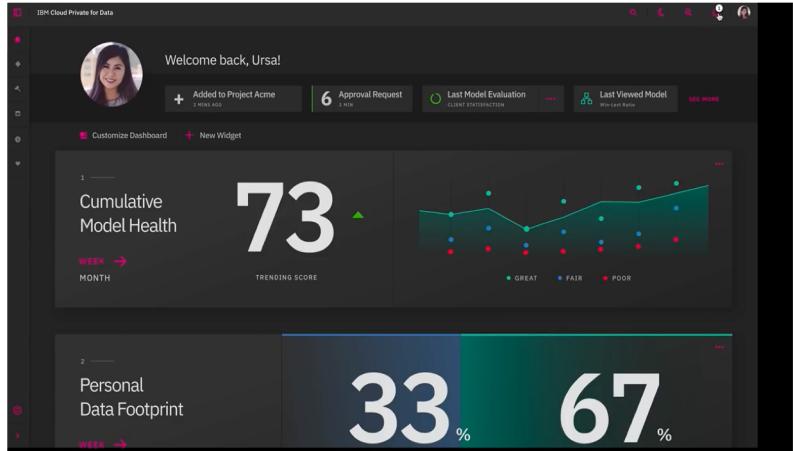
Enterprise Data Catalog



IBM Cloud Private



Kubernetes



IBM Cloud Private for Data

Make your data ready for AI with an integrated and governed data platform

IBM Cloud Private for Data

Extensible, Open API Platform

App Developers Data Engineers Business Partners



Personalized, Collaborative Team Platform

Data Scientists Business Analysts & CXOs Data Stewards



Cloud-native Scalable Data Micro Services

- ✓ Databases on-demand
- ✓ Data warehousing
- ✓ Fast Data Ingest
- ✓ Federated query

- ✓ Data integration
- ✓ Data curation
- ✓ Governance & policies
- ✓ Data Asset lifecycle management

- ✓ Data Science
- ✓ Predictive Modeling & ML
- ✓ Data Visualization & Exploration
- ✓ Dashboards & reporting

Enterprise Data Catalog

Admin & Ops Dashboards, storage management, identity access management

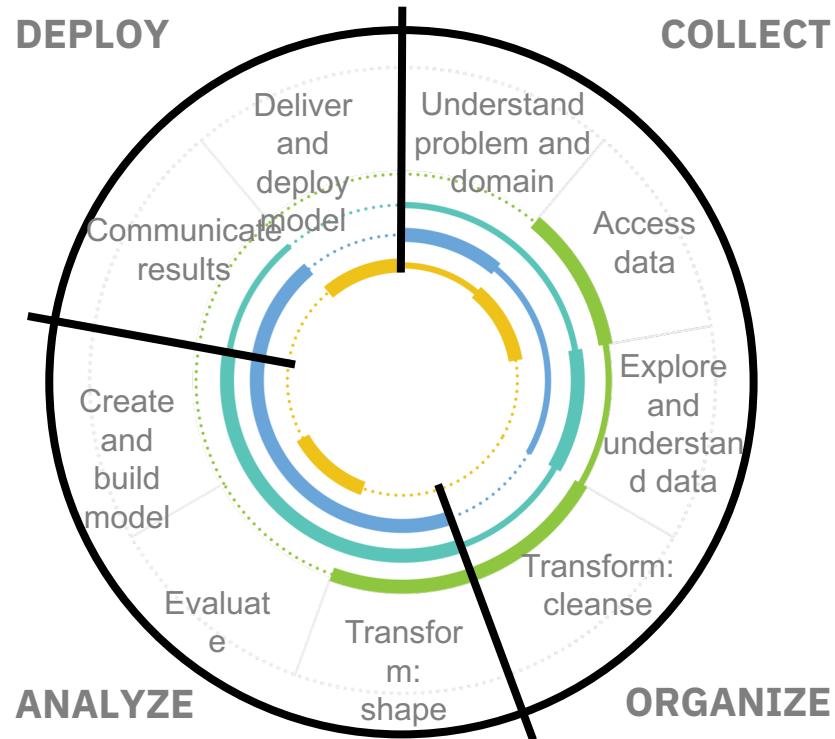
 Kubernetes

IBM Cloud Private for Data

- An “**end-to-end**” data & analytics platform to **collect, organize and analyze** enterprise data @ scale
- Includes **tightly integrated** data & analytics services with a simple, collaborative task driven experience
- Addresses needs **of both business and IT** (Personas addressed : Data Stewards, Data Scientists, Business Analysts, Data Engineers, Developers, CXOs etc.)
- **Purpose built for cloud** on IBM Cloud Private with automation & governance infused throughout

IBM Cloud Private for Data

Increases workforce productivity across the analytics lifecycle – governed seamlessly



Data Engineer

Architects data pipelines and ensures operability



Data Steward

Governs data and ensures regulatory compliance



CXO



Data Scientist

Gets deep into the data to draw insights for the business



Sys Admin



Business Analyst

Works with data to apply insights to business strategy



App Developer

Plugs into analysis and code to build apps

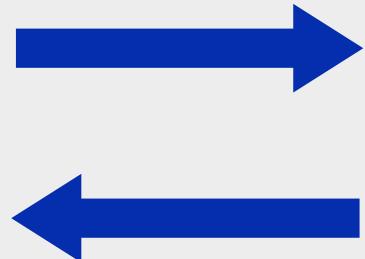
IBM

Enabling the end to end AI life cycle

Enterprise Data & Apps

**IBM Cloud
Private
for Data**

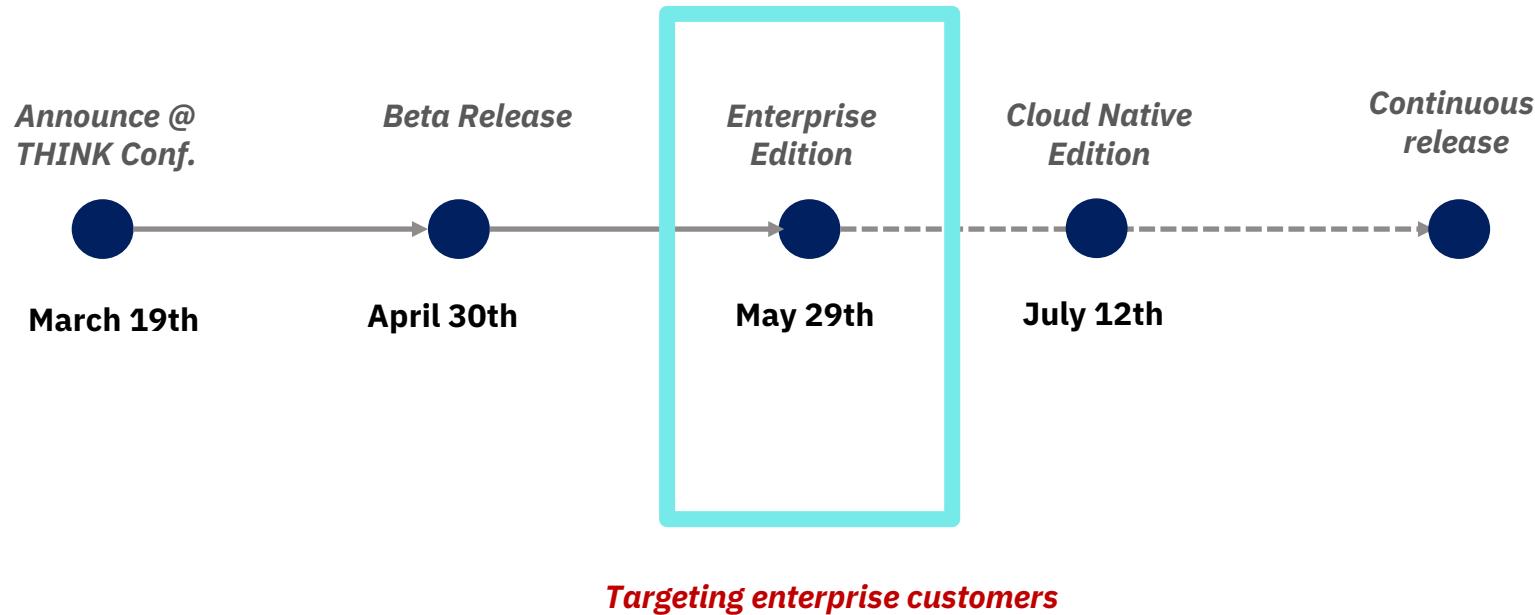
ML Models, Metadata, Data



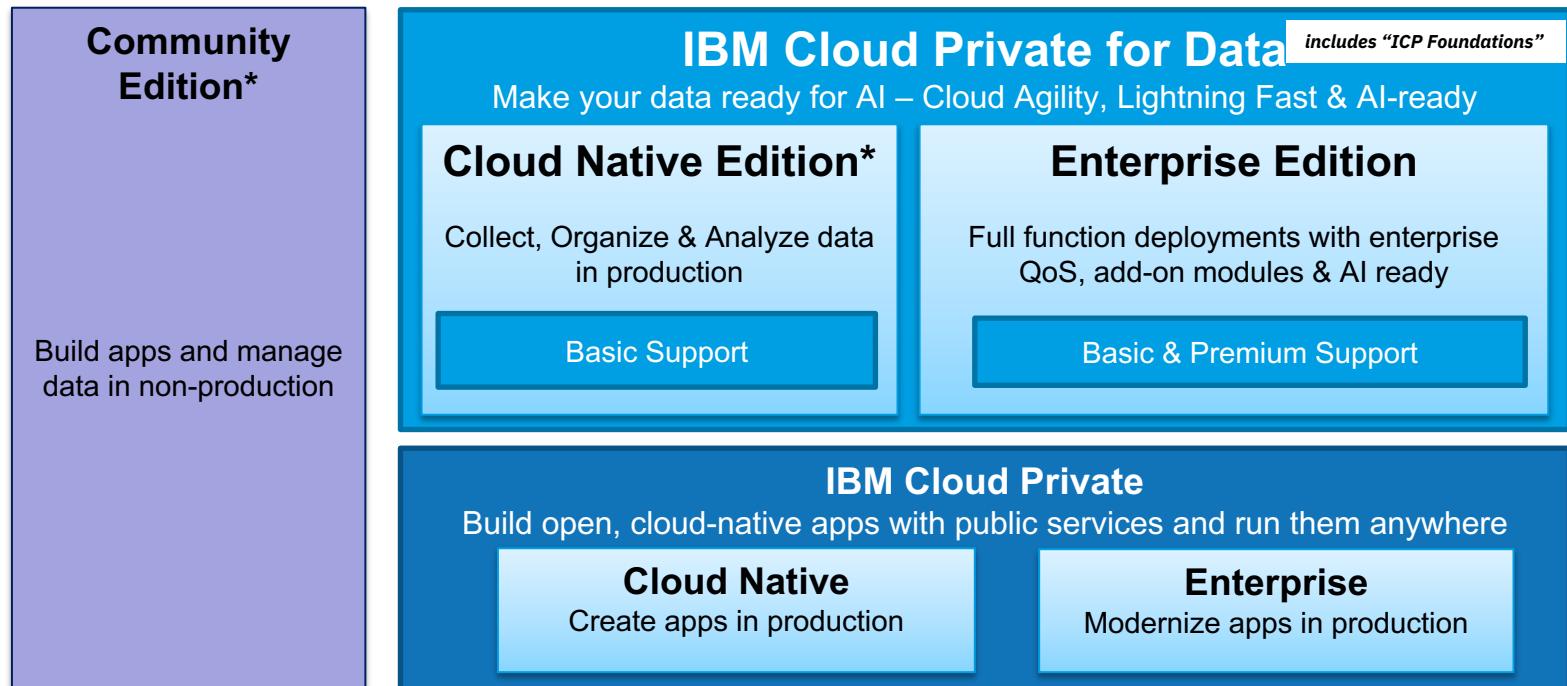
AI Business Processes

**IBM
Watson
Studio**

ICP for Data Launch Timeline



IBM Cloud Private for Data packaging options



* On roadmap for 2H 2018

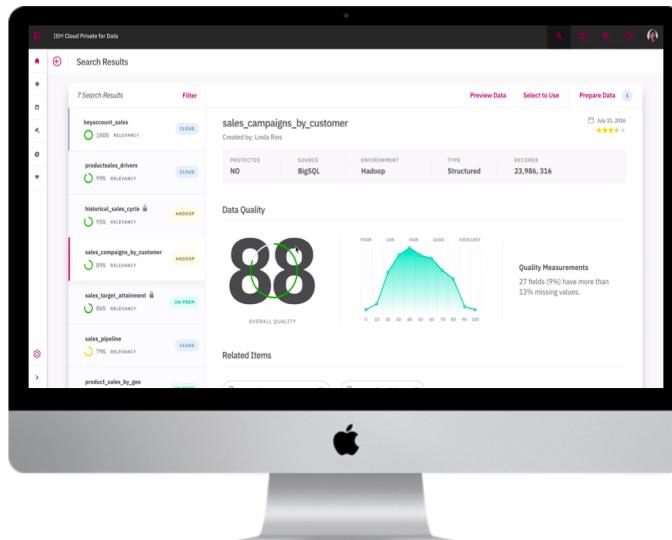
IBM Cloud Private for Data

Product Roadmap

	GA Launch	2H 2018 & Beyond
Platform	<ul style="list-style-type: none">End-to-end, governed, data and analytics solution	<ul style="list-style-type: none">IBM Cloud Private for Data applianceIndustry accelerators for banking, healthcare, and insuranceBCBS 239, HIPAA, PCI, GDPR ready
Collect	<ul style="list-style-type: none">Federated data access	<ul style="list-style-type: none">DB2, DB2 Warehouse, and DB2 Event StoreData virtualization
Organize	<ul style="list-style-type: none">Enterprise asset catalogData integrationData shaping and transformationCuration for analytics assets	<ul style="list-style-type: none">Data curation experience and task workflow engineCognitive elements built into data integration and shapingMachine enforceable governance
Analyze	<ul style="list-style-type: none">Build machine learning modelsModel management and deploymentVisualize insights through reports and dashboards	<ul style="list-style-type: none">Full-feature business reporting and dashboardingStatisticsDecision Optimization

Get Started Today

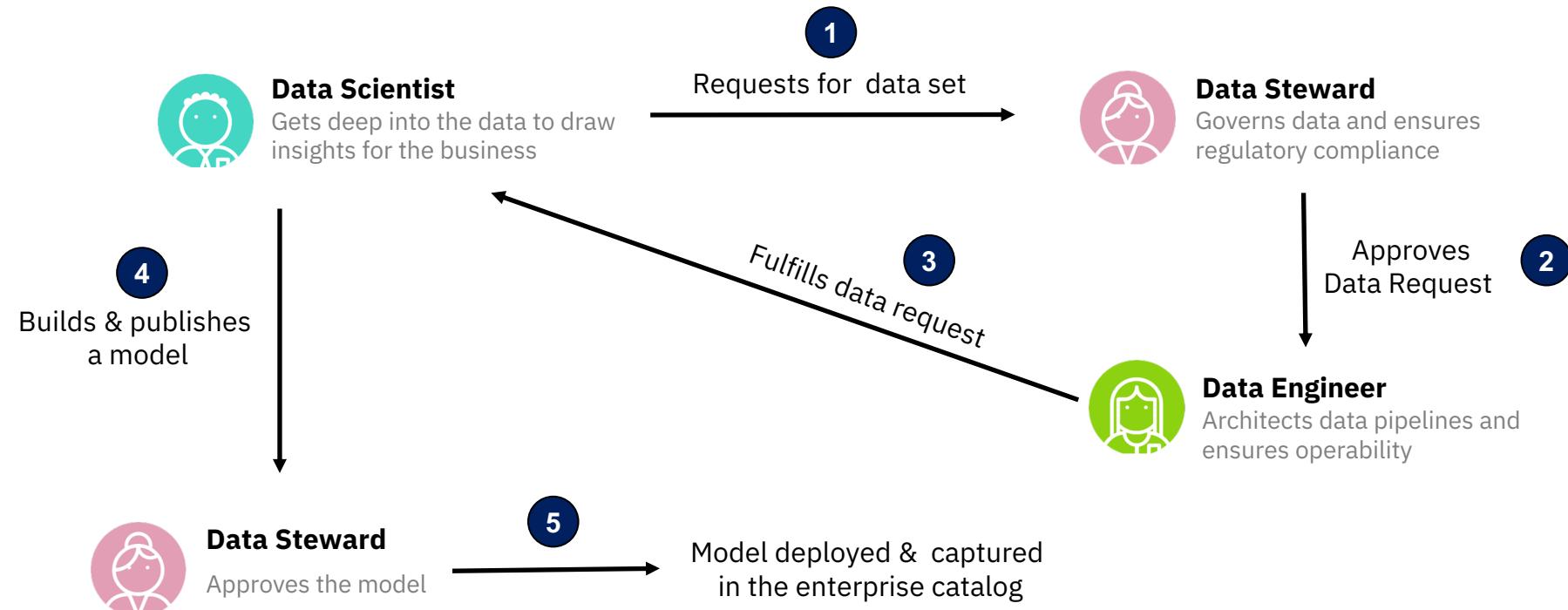
IBM Cloud Private for Data



Guided Demo

Sample Collaboration

IBM Cloud Private for Data



The Value of Container-based Architecture Compared to Traditional Monolithic Applications

Reduce operations cost by 50%

DevOps is 20% more efficient

Hybrid Cloud Adoption

Container-based applications scale by clustering the containers within a container manager reducing infrastructure cost

DevOps using containers and container cluster managers is about 20% more effective - ability to reuse containers / better architecture practices

Kubernetes can be run on a public/private cloud as a native service, so there is no need to purchase hardware or software to host Kubernetes.



Survey

http://ibm.biz/survey_atl_icpd