

Azure Databricks

Helping data teams solve the world's toughest problems

Presenter name

Title

Company

Agenda

- Qualification criteria and Azure Databricks Sales Pitch
- Industry Focus
- Hadoop Migrations
- Discount Plans (RI) and Big Data Migration Promotion
- Driving consumption with Databricks

Qualification criteria and ADB sales pitch



Unified data analytics platform for accelerating innovation across
data science, data engineering, and business analytics

Global company with 5,000 customers and 450+ partners

Original creators of popular data and machine learning open source projects





Azure Databricks

First party service

Enterprise-ready: secure & compliant

Native integration with Azure services

Partner ecosystem ready



Azure Databricks

Amazing growth in the first 2 years

Thousands

Azure Databricks
customers globally

2 Exabytes

Data processed per
month

Millions

Server-hours
spinning up every
day

30+

Regions available
worldwide



Azure Databricks



DELTA LAKE

Open-source storage layer that brings ACID transactions to Apache Spark™ and big data workloads.

75%

of the data processed in
Azure Databricks is Delta



Azure Databricks

mlflow™

More than 200 contributors and

2.5M+

monthly downloads

Thousands of customers: Data-driven innovation across industries

Healthcare and Life Sciences



Financial Services



Media and Entertainment



Retail, CPG, and eCommerce



Energy & Utilities



Enterprise Technology



Manufacturing & Automotive

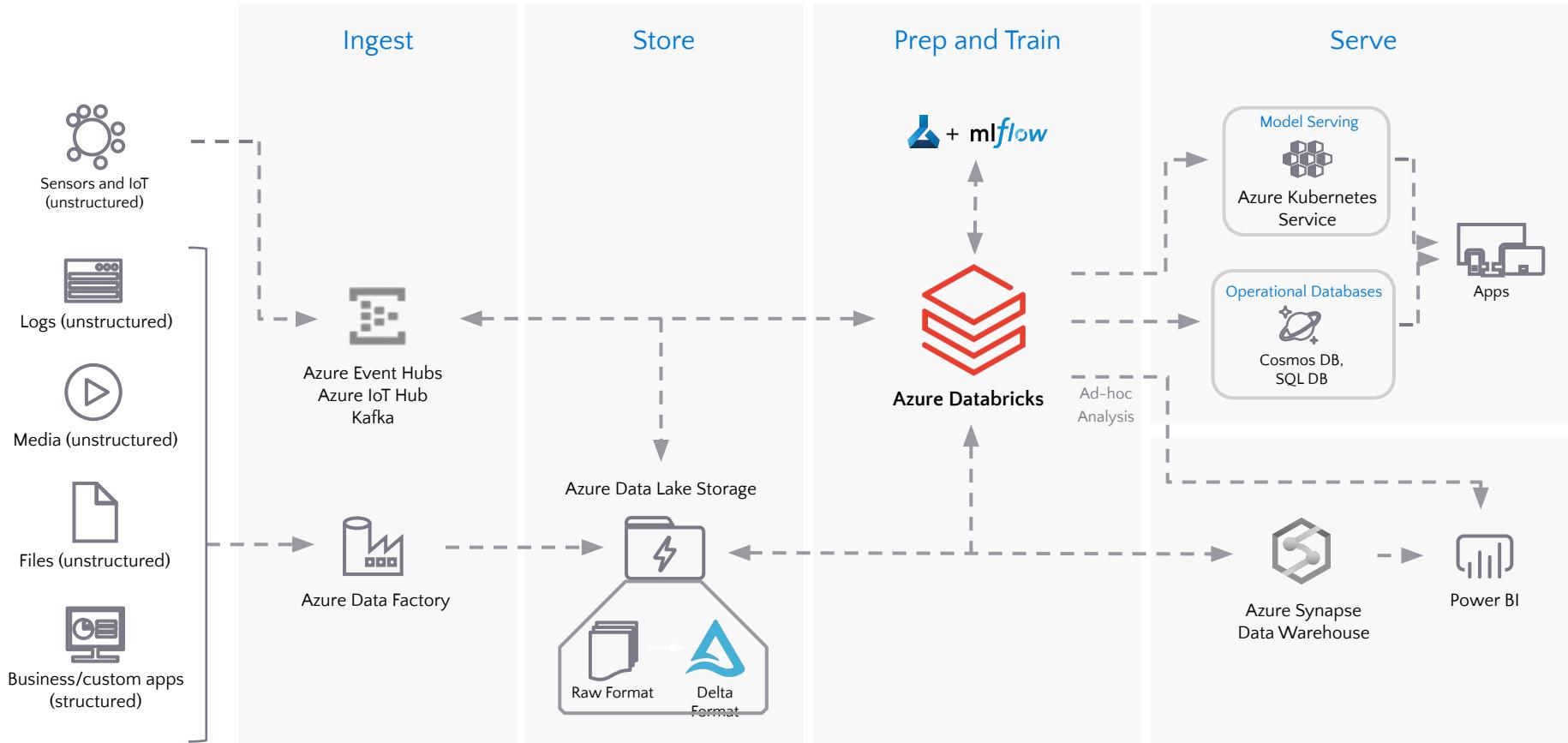


Telecom





Azure Databricks And Azure Data Services

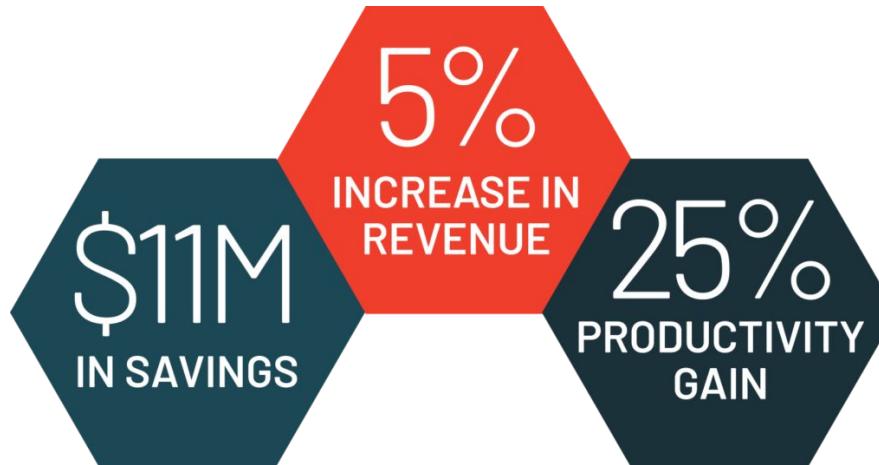


ADB Qualification criteria

Prospect	Azure Ready	Data	Big Data Expertise	User Personas	Timeline to Prod
Great	All Project Data in Azure	10TB +	In Production with Spark/Hadoop	Combination of "true" Data Engineers, Scientist and Advanced Analysts	ASAP
Good	Most Project Data in Azure	1-10TB	Production Hadoop / Moving to Spark	Single Team of "true" Data Engineers or Data Scientists	1-3 months
Okay	Some Project Data in Azure	100GB - 1TB	Learning/New to Hadoop or Spark. MPPs Only (SAP Hana, Teradata, etc)	Tradition GUI based ETL Users (Informatica, Talend, SSIS, etc.) , "Aspirational" Data Scientists, SQL only Analyst	3-12 months
Effort	No Project Data in Azure	<100GB	No Big Data Tools	Undetermined	12+ months

Databricks delivers nearly \$29 million in economic benefits and pays for itself in less than six months

Databricks customers experience revenue acceleration, improved data team productivity and infrastructure savings resulting in a 417% ROI on their data analytics and AI projects.



Unlocking business value

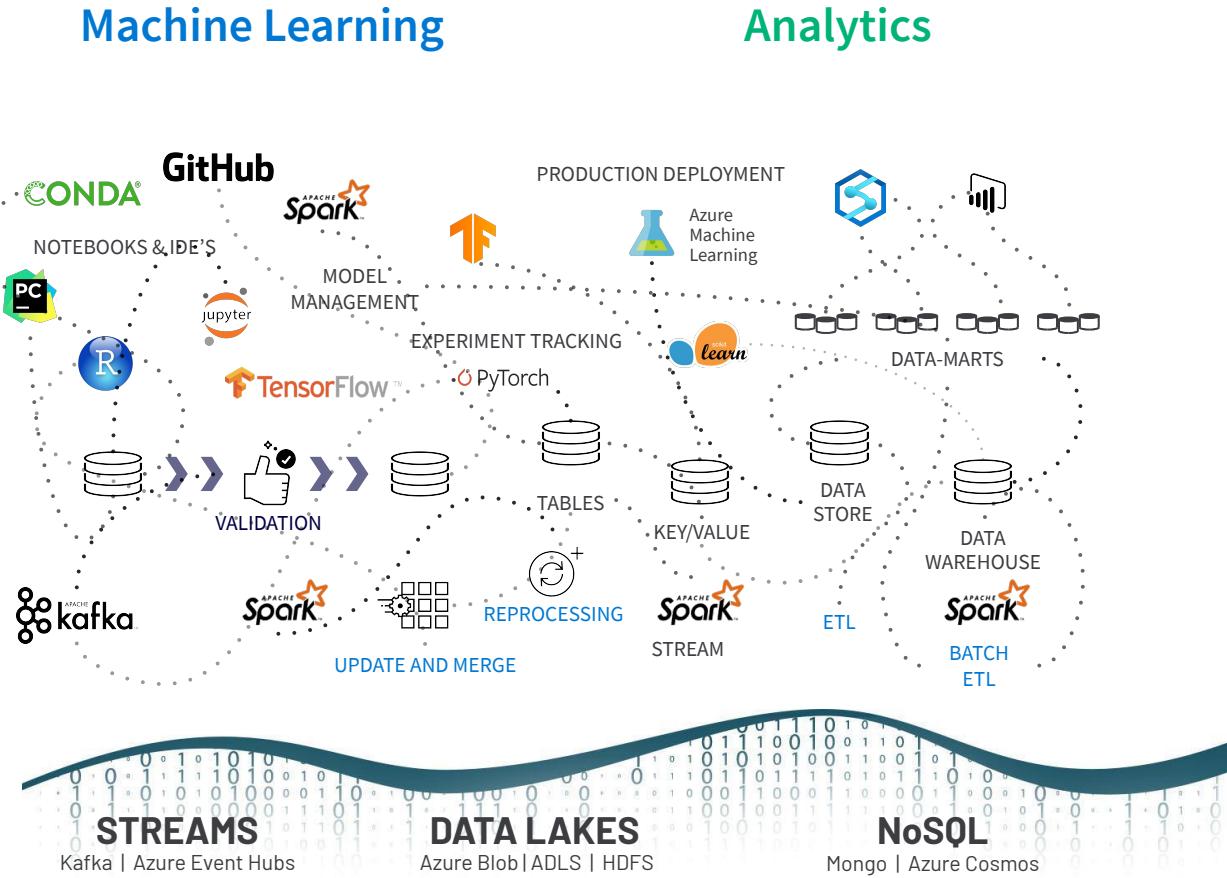
These companies combined their massive data with machine learning and analytics capabilities

Machine Learning

Analytics



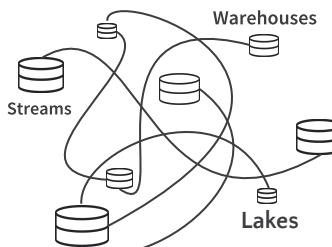
Most organizations fail to unlock business value due to data, technology and people silos



Unlocking business value: Four challenges

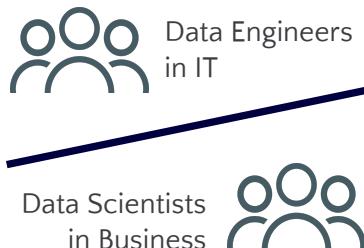
1

Data is messy,
siloed and slow



2

ML is hard,
Production is harder



3

BI is limited to a
fraction of data

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4

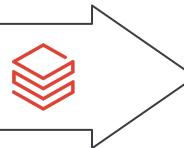
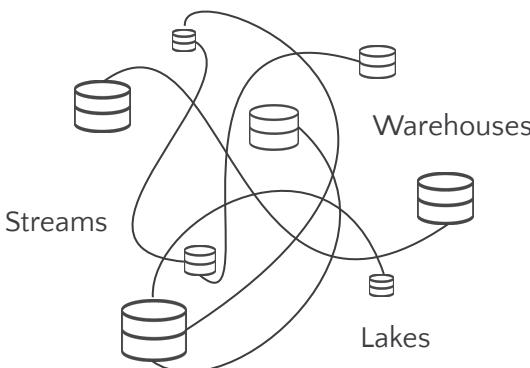
Lack of enterprise
readiness

- Fragmented security
- Poor reliability
- Disjointed governance

Make all your data ready for analytics and ML

1

Data is messy,
siloed and slow



Unified Data Service

Build open, reliable, fast data lakes with all your data

Big Data

Business Data

Applications

DELTA LAKE™

Open High Quality Fast

Your Existing Data Lake



Azure Data Lake
Storage



hadoop



Azure Blob
Storage

APACHE Spark

Unified
Engine

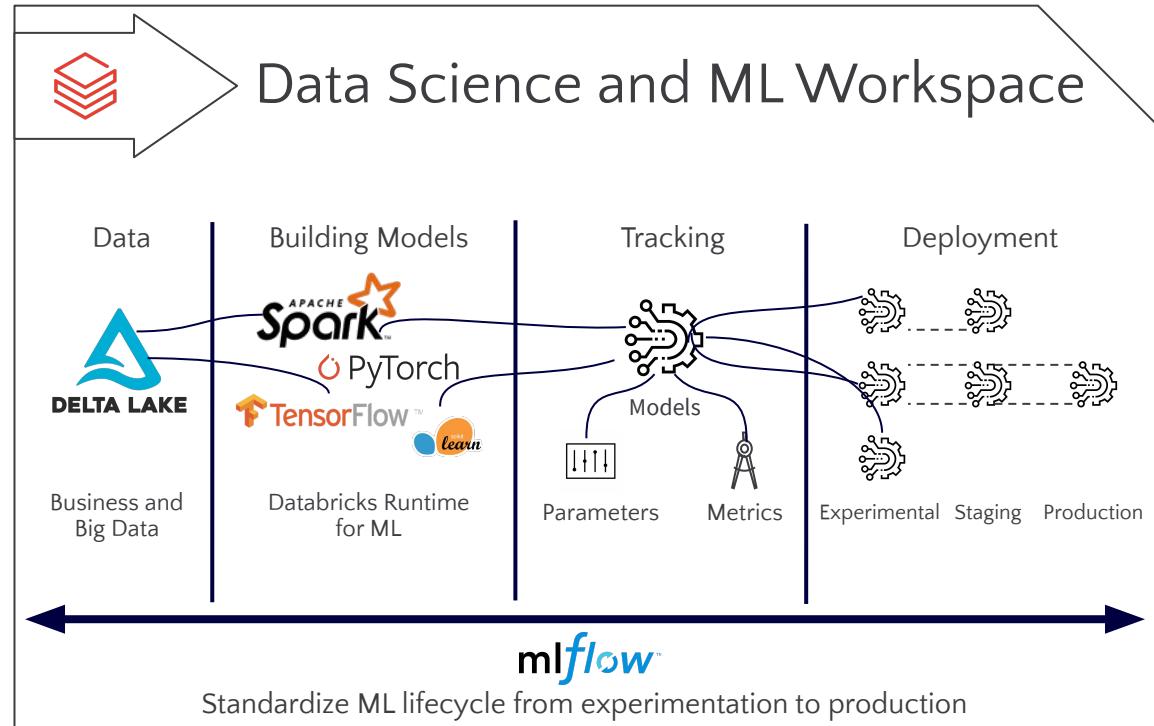
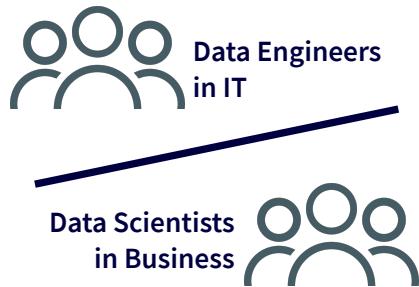
BI
Reporting

Machine
Learning

Unify data and ML across the full lifecycle

2

ML is hard,
Production is harder

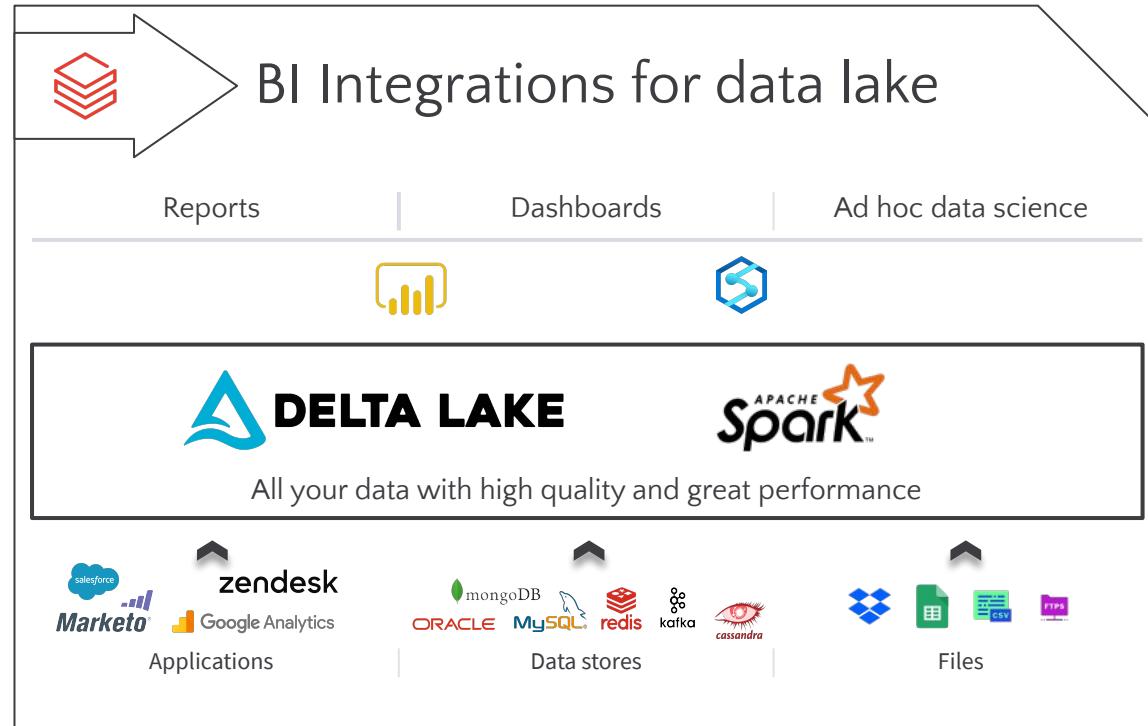


Enable analytics directly on all your source data

3

BI is limited to a fraction of data

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Leverage cloud native platform for enterprise grade solution

4

Lack of enterprise readiness



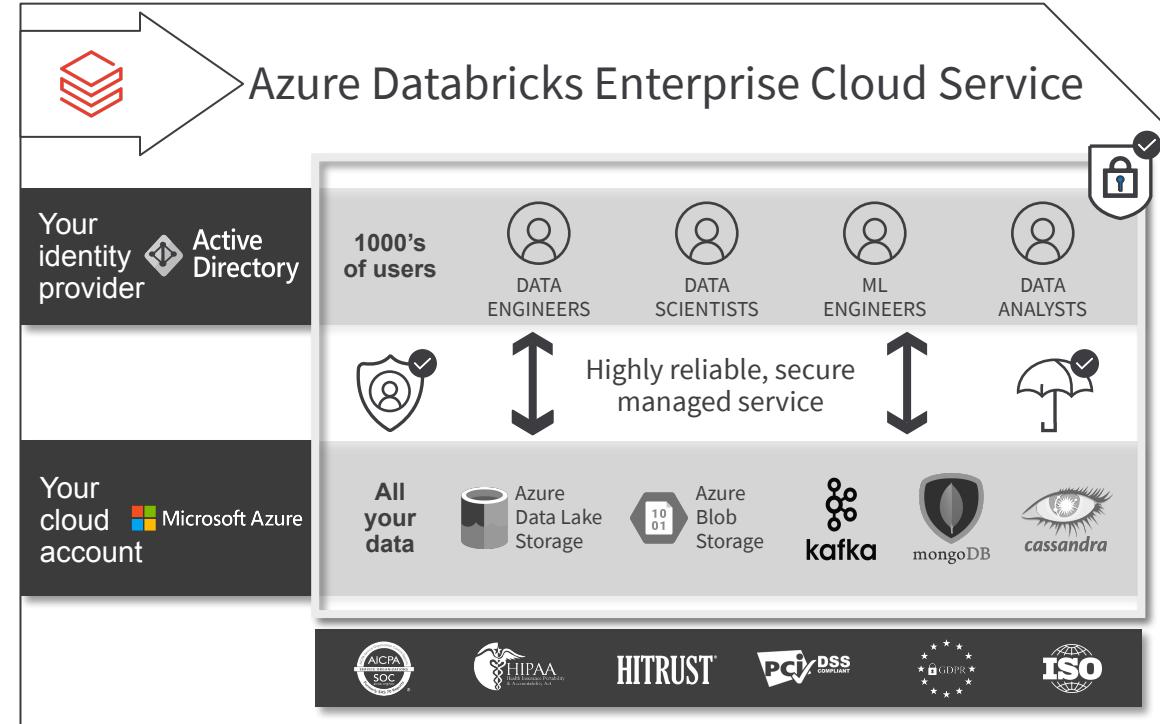
Fragmented security



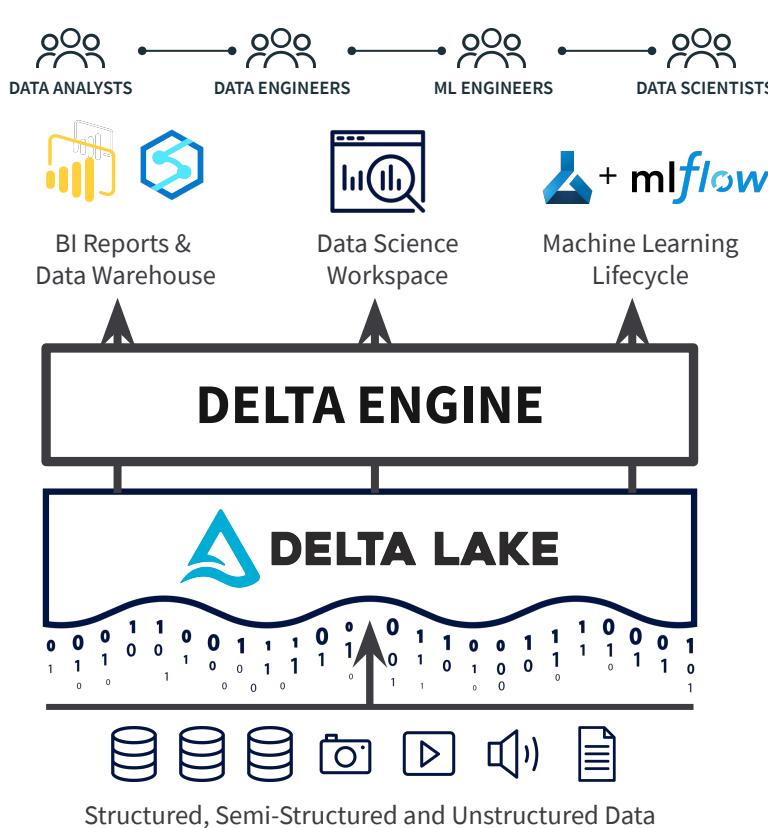
Poor reliability



Disjointed governance



Unifying Data Analytics



Unifying data teams

One architecture for every use case

High performance query engine

Structured transactional layer

Data Lake for all your data

Azure Databricks

First-Party Service, Natively Integrated into Azure

Integrated Data Services

Azure Data Factory



Azure Data Lake Storage



Azure Blob Storage



Azure Event Hubs



Azure Cosmos DB



End-to-End Analytics & ML



Azure Security
Azure Active Directory
Single Sign-On, Identity
Passthrough, Network



Azure Portal
1-Click Setup
Unified Billing

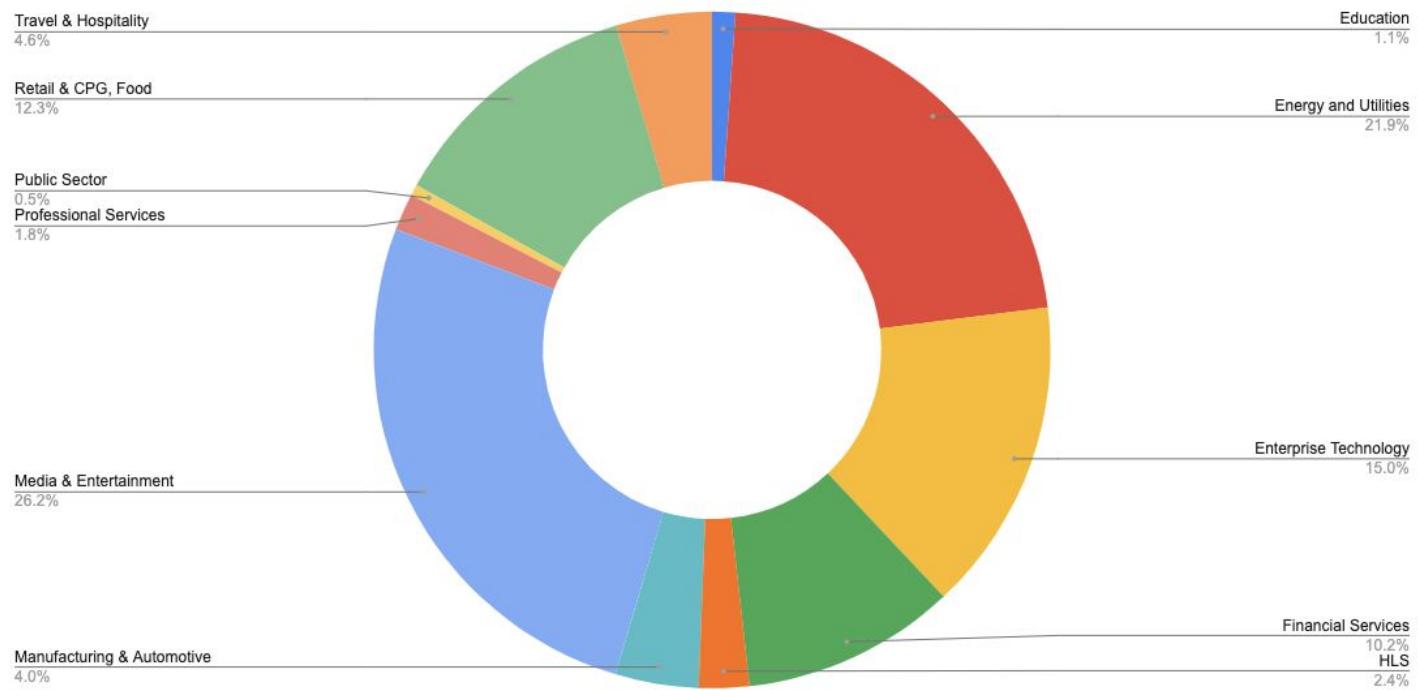


Azure DevOps
Notebook integration

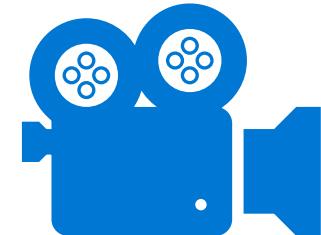
Industry Focus

ADB Revenue by vertical Asia Time zone

August Revenue by Vertical



Innovative industry use cases



Healthcare

Genomics & DNA sequencing

Accelerated drug discovery

Smarter trial design

Efficient Inventory optimization

Financial services

Fraud detection and prevention

Customer 360 & personalization

Underwriting

Asset management

Retail/CPG

Personalize customer experience

Optimize merchandising & pricing

Inventory optimization

Last-mile delivery

Media/entertainment

Ad targeting

Content personalization

Ad inventory optimization

Sentiment analysis

Leading to transformational changes

Product recommendation

-  The average size of a single cart has decreased
- 
-  Provide personalized digital content to shoppers
- 
-  Increase cart size



ASOS delivers 15.4 million personalized experiences with 33 orders per second



Predictive maintenance

-  Unplanned downtime results in cost overruns
- 
-  Predict when maintenance should be performed
- 
-  Minimize downtime



Hybrid solution predicts onboard water usage, saving \$200k/ship/year



Demand forecasting

-  Solar energy production is inconsistent
- 
-  Align energy supply with the optimal markets
- 
-  Maximize revenue



Distributed power generation increases revenue by over €100M



Databricks Industry Solution Accelerators

Retail & CPG	Banking & Fin Serv	Health & Life Sciences	Media & Comms
Demand Forecasting (Causal)	Risk / VAR Calculation	Genomics: DNASEq	Quality Of Service
Demand Forecasting (Timeseries)	Computer Vision - Claims Damage Estimation	Genomics: Live-updating QC Pipelines	Foot Traffic Ad Campaign Analysis
Safety Stock	Alternative Data	Genomics: Joint Genotyping	Content Recommendations
Customer Lifetime Value	Environment Social Governance (ESG)	Genomics: Common-variant GWAS	Addressable Advertising
Consumer Segmentation	Credit Risk and Regulations	Genomics: Rare-variant GWAS	Audience Personalization
Customer Churn Analysis	Credit Expected Loss	Genomics: Normalization/Cohort Merging	Churn Propensity Score
Next Best Offer		Medical IoT: EEG event detection	Next Best Offer

Hadoop migration

Customer Qualification:



Target Market and On-Prem Spark Migration

Opportunity Strength	Decision Timeline (Driven by upcoming renewal or other factors)	On-prem Big Data Cluster: Size and Config	Leadership Mandate
High Priority	Need to make cloud technology choice in 6 months OR Account is S500	20+ production nodes Hive, Spark, data engineering & analytics	Clear mandate for cloud migration w/ named sponsor
Priority	Need to make cloud technology choice in 12 months	20+ production nodes Hive, Spark, data engineering & analytics	Emerging mandate for cloud migration.
Case-by-Case	No clear decision timeline (but can be influenced to be within 12 months)	20+ production nodes Hive, Spark, data engineering & analytics	Leadership is considering cloud options Evaluations/POCs in process
Not a Good Candidate	No cloud migration within 12 months	Predominantly HBase and/or Storm usage (without any data engineering)	No exec support No cloud migration sponsor

Powering Innovation with Modern Data Analytics

Customers that migrated from On-premises Big Data Lake





Reckitt
Benckiser

Use Case

- As a global CPG company, Reckitt Benckiser struggled with the complexity of forecasting demand across 500,000 stores.
- They process over 2TB of data every day across 250 pipelines.
- Hadoop Data lake infrastructure proved to be complex, cumbersome, and costly to scale. This legacy system also struggled with performance.

Why Databricks?

- A unified platform for data science, engineering and business analysts to quickly innovate and deliver ML-powered insights
- Delta Lake improved cost optimization and storage space with extreme data compression

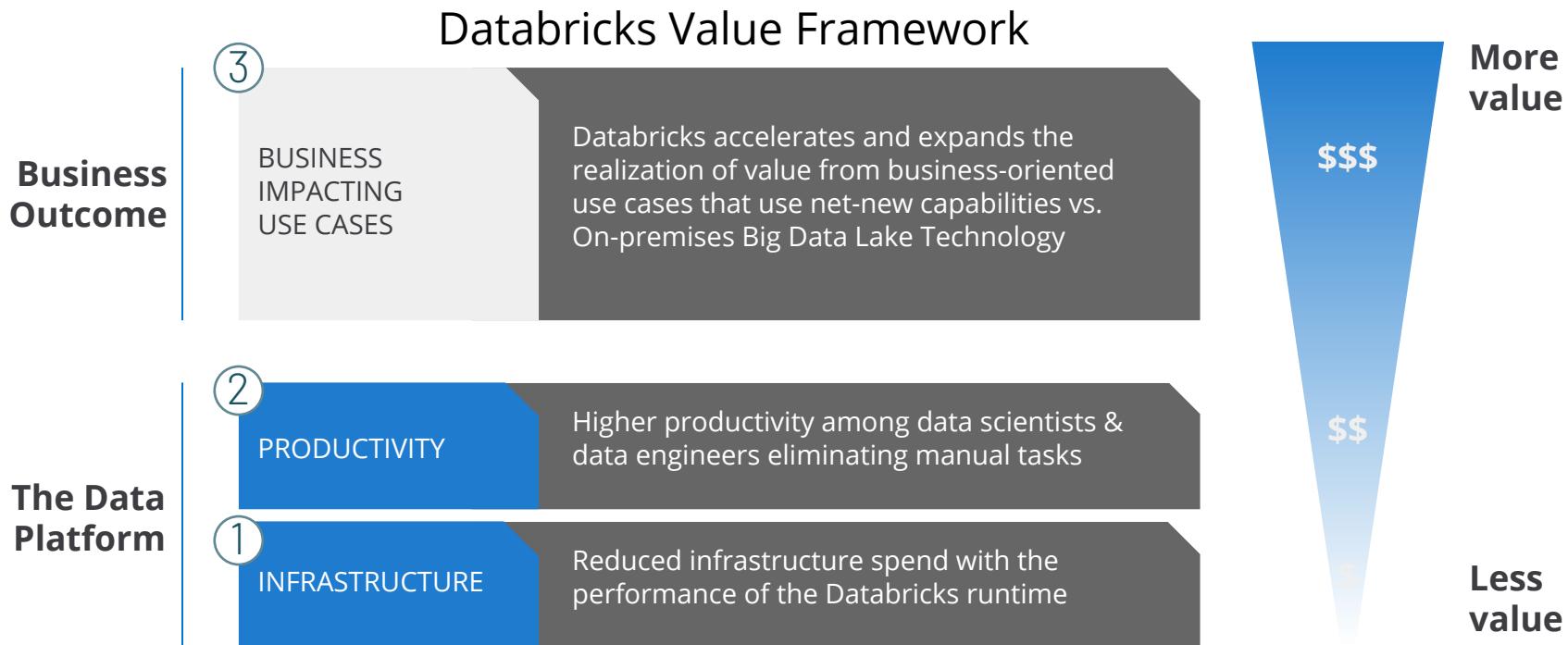
Impact

- **10x more capacity** to support business volume
- **98% data compression** from 80TB to 2TB, reducing operational costs
- **2x faster data pipeline** performance for 24x7 jobs



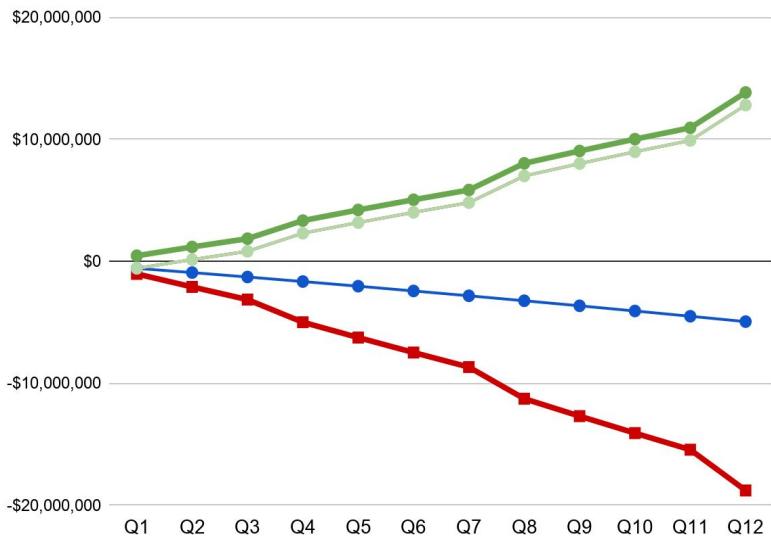
Azure Databricks

Databricks Drives New Business Value at 3 Levels



\$17.7M in value delivered with Databricks

On-premises **costs** vs. Databricks **value & investment**
Units: \$ Cumulative PV over 3 years



Source: Databricks value model

\$13.8 M
Potential value
with Databricks

\$12.8 M
Net impact
Includes cost of
both solutions
during migration

-\$4.9 M
Investment -
Databricks,
migration & cloud

-\$18.8 M
Current technology -
Cost of inaction

Databricks customer example:
Large U.S. Telco,
156 node cluster

Value of Databricks

- Avoided Data lake licensing
- No need to add expensive new hardware for additional capacity
- Avoided data center costs
- Avoided Data-lake admin costs

Databricks investment

- Databricks usage & support
- Migration
- Cloud compute

On-premises Data-lake costs

- Data center, Cluster administration, new hardware, licensing

Work with us for a Tailored Value Case for Your Migration

Tailored Financial Analysis

Customer example



Tailored business case to be produced by answering 4 core questions:

1. How many **nodes** in your on-premises Big Data lake cluster ?
2. How many **people** support your On-premises environment?
3. When is your **renewal** with the On-premises Data lake vendor ?
4. How do you expect your **data needs to grow** over time?

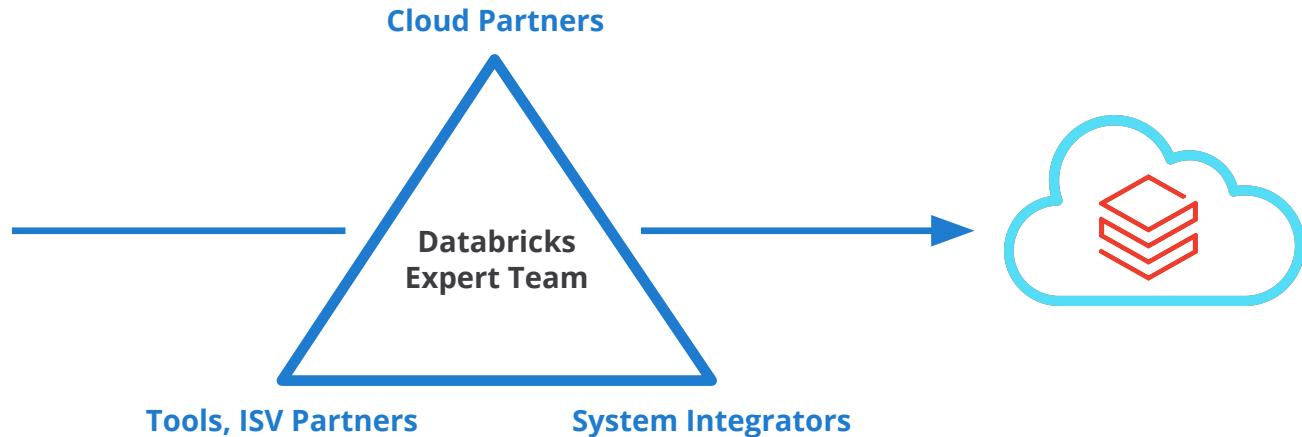
Source: Databricks value model

Proven Migration Strategy: Reduce Risk, Costs

COMPONENTS TO MIGRATE

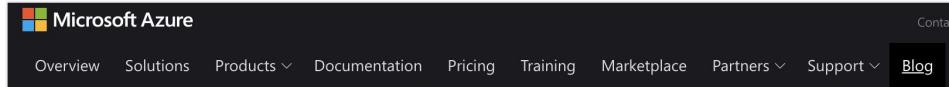
- Data + Metadata
- Workloads/ Jobs
- Security & governance
- Other tools, integrations

AUTOMATION, TOOLS AND PROVEN METHODOLOGIES



Strategy Options: **Lift & shift** (faster, automatable) **Transformation** (higher impact)

Save up to 52% when migrating to Azure Databricks



Now save up to 52 percent when migrating to Azure Databricks

Posted on July 15, 2020 by Bharat Sandhu, Director, Azure Data & AI

More than ever before, companies are relying on their big data and artificial intelligence (AI) systems to find new ways to reduce costs and accelerate decision-making. However, customers using on-premises systems struggle to realize these benefits due to administrative complexity, inability to scale their fixed infrastructure cost-effectively, and lack of a shared collaborative environment for data engineers, data scientists and developers.

To make it easier for customers to modernize their on-premises Spark and big data workloads to the cloud, we're announcing a new migration offer with [Azure Databricks](#). The offer includes:

- **Up to a 52 percent discount** over the pay-as-you-go pricing when using the Azure Databricks Unit pre-purchase plans. This means that customers can free themselves from the complexities and constraints of their on-premises solutions and realize the benefits of the fully managed Azure Databricks service at a significant discount.
- **Free migration assessment** for qualified customers.

Azure Databricks is a fast, easy, and collaborative Apache Spark-based service that simplifies building big data and AI solutions. Since its debut two years ago, Azure Databricks has experienced significant adoption from customers, such as [Shell](#), [Cerner](#), [Advocate Aurora Health](#), and [Bosch](#), which are using it to run mission-critical big data and AI workloads.

We've also seen several customers accelerating their migration of on-premises systems to Azure Databricks for the following reasons:

Offer summary:

- **Up to a 52 percent discount** over the pay-as-you-go pricing when using the Azure Databricks Unit pre-purchase plans.
- **Free migration assessment** for qualified customers.

Learn more at:

[dbricks.co/SaveUpTo52](#)

On-premises Big Data Migration Technical Assessment

2 Day Workshop

Identify

Existing Workloads
Infrastructure and Security Requirements

Prioritize

Identify Priority Workloads
Dependent Schedules

Roadmap & Value

Assess New Workloads
Business Value

Target State

Cloud Native Reference Architecture
Migration Schedule
Prescriptive recommendations

Customized On-premises Big Data Lake Migration Success Plan with a Free Expert Assessment

1 Pre-questionnaire + 2 day workshop led by experts

- Learn about how Databricks works and how your current workloads, tools and processes map and transform in the future state in cloud

2 Technical, Use-case and Business Value analysis

- High level current and future state architecture, discuss use-cases and prioritize them, understand how \$\$ value is driven with the migration

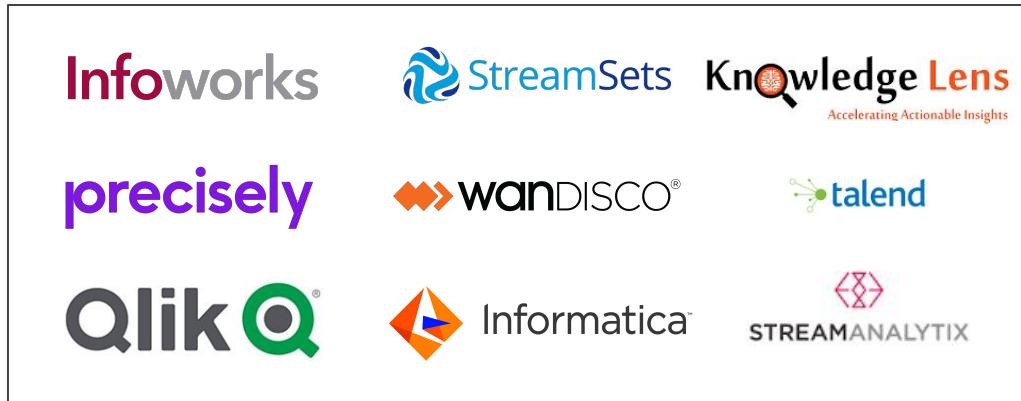
3 Proposal and Recommendations for path forward

- The expert team will summarize all the findings and walk through the proposed costs, business value summary and recommended migration plan

Our Partner Ecosystem will Accelerate Migrations



ISV Partners and Migration Tools



Security Governance



Cloud



Consulting & SI Partners

Driving consumption

BUSINESS IMPACT

Company Goal:

Text

COST SAVINGS & PRODUCTIVITY

Use Case

With enhanced customer insights, enterprises can deliver relevant offers, helping both to lower the cost of customer acquisition and drive revenue growth.

Metric (Positive)

Provide text of expected outcomes

IMPROVE REVENUE GROWTH

Use Case

With enhanced customer insights, enterprises can deliver relevant offers, helping both to lower the cost of customer acquisition and drive revenue growth.

Metric (Positive)

Provide text of expected outcomes

RISK MITIGATION

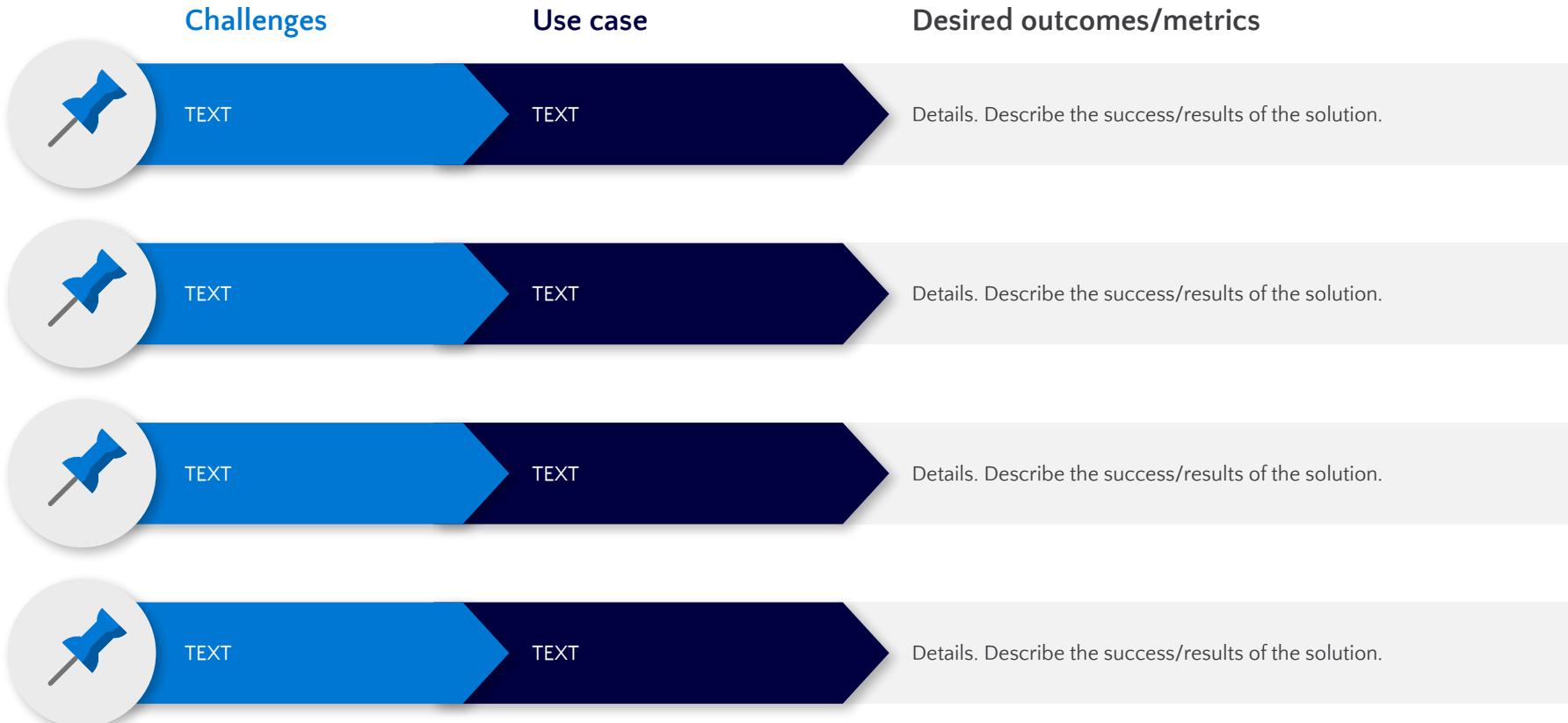
Use Case

With enhanced customer insights, enterprises can deliver relevant offers, helping both to lower the cost of customer acquisition and drive revenue growth.

Metric (Positive)

Provide text of expected outcomes

Business challenges



Initial use cases



Use case

How do we support the use case



Use case

How do we support the use case



Use case

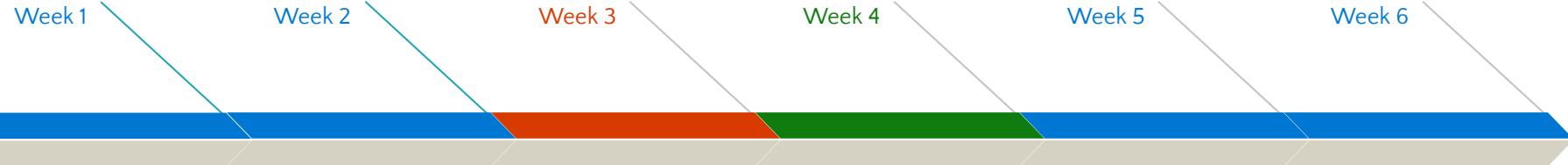
How do we support the use case



Use case

How do we support the use case

Success Plan/Deployment Plan



Planning	Prerequisites	Pre-testing	Testing	Review	Onboarding
Identify Key Use Cases	Security Review	Data Loading	Day 1—Working Session (3-4 Hours)	POC Readout	Introduction with CS/PS teams
Designate Project Lead	Executive Sync Partner Sync	Confirm User Setup	Day 4—Working Session (1 Hour)	Proposal Review Executive Summary and Proposal	Partner Delivery Assurance
Select Partner(s)	Installation	Test to Confirm Data Source Connectivity	Day 7—Working Session (1 Hour)	Negotiation/ Procurement	New use case development and delivery
Create Test Plan (1-2 hours)	Slack Channel Setup		With Partner(s)		

Technical validation on Azure Databricks

1

Pick a use case(s)

Identify a current initiative the will drive business value and the success metrics to be measured by the business

2

Enable Databricks platform with secure data

Ensure datasets are in a secure within cloud environment or can be accessed securely from the cloud

3

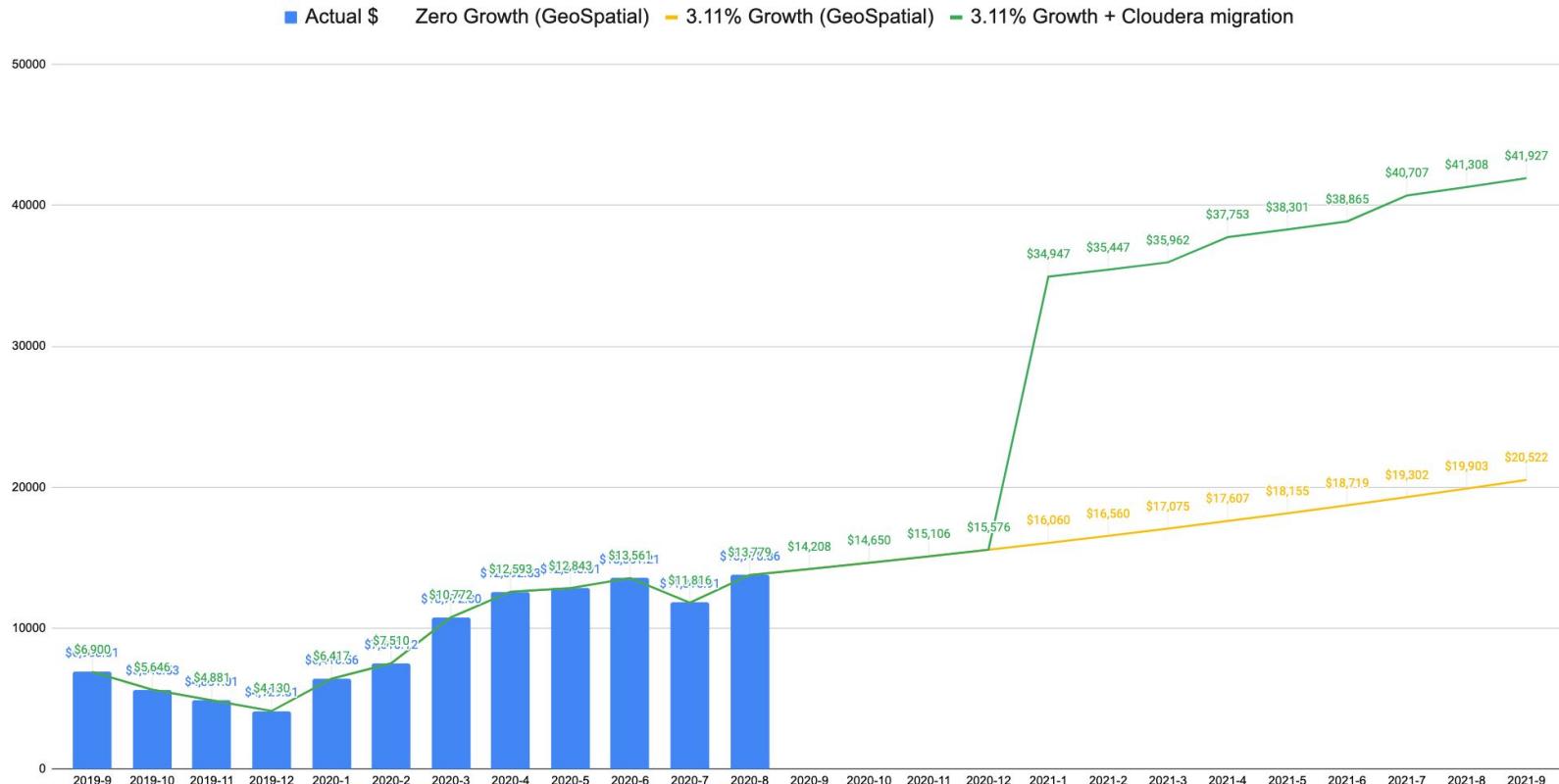
Co-develop what success looks like

Have your teams work with Databricks and partners to show value in weeks and months; expand out to other use cases

ADB Pre Purchase plans and Big Data migration promotion

Geospatial Use Cases monthly consumption

Monthly Consumption Forecast



Expected growth over next 12 months

Cumulative Consumption Forecast

— Cumulative \$ConsumptionForecast (flat growth 5%) — Cumulative \$ConsumptionForecast (conservative 10%) — Cumulative \$ConsumptionForecast (historical 19.74%)

\$3,000,000

\$2,634,315

\$2,154,170

\$1,750,687

\$1,411,626

\$1,126,700

\$887,267

\$686,062

\$516,983

\$374,899

\$303,958

\$255,502

\$216,785

\$155,167

\$70,853

\$2,000,000

\$1,400,542

\$1,213,680

\$1,043,806

\$889,374

\$748,982

\$621,353

\$505,326

\$399,847

\$345,446

\$425,235

\$509,014

\$596,982

\$689,348

\$786,332

\$888,166

\$995,091

\$1,000,000

\$0

2020-9

2020-10

2020-11

2020-12

2021-1

2021-2

2021-3

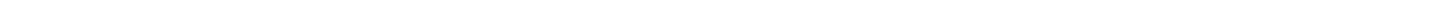
2021-4

2021-5

2021-6

2021-7

2021-8



ADB Pre-Purchase plan

[Big Data migration to ADB link](#)

The screenshot shows the Microsoft Azure Databricks pricing page. At the top, there's a navigation bar with links for Overview, Solutions, Products, Documentation, Pricing (which is currently selected), Training, Marketplace, Partners, Support, Blog, and More. Below the navigation, the title "Azure Databricks pricing" is displayed, followed by a subtitle: "A fast, easy, and collaborative Apache Spark™ based analytics platform optimized for Azure". Underneath, there's a list of four benefits with checkmarks: "No upfront cost", "No termination fees", "Pay only for what you use", and "Per-second billing". A green "Try for free" button is located at the bottom left of the main content area.

1-year pre-purchase plan

DATABRICKS COMMIT UNIT (DBCU)	PRICE (WITH DISCOUNT)	DISCOUNT
25,000	\$23,500	6%
50,000	\$46,000	8%
100,000	\$89,000	11%
200,000	\$172,000	14%
350,000	\$287,000	18%
500,000	\$400,000	20%
750,000	\$578,000	22%
1,000,000	\$730,000	27%
1,500,000	\$1,050,000	30%
2,000,000	\$1,340,000	33%

3-year pre-purchase plan

DATABRICKS COMMIT UNIT (DBCU)	PRICE (WITH DISCOUNT)	DISCOUNT
75,000	\$69,000	8%
150,000	\$135,000	10%
300,000	\$261,000	13%
600,000	\$504,000	16%
1,050,000	\$819,000	22%
1,500,000	\$1,140,000	24%
2,250,000	\$1,640,000	27%
3,000,000	\$2,070,000	31%
4,500,000	\$2,970,000	34%
6,000,000	\$3,780,000	37%

Strategic Customer Program at-a-Glance

When meeting the criteria, value can be accelerated even further



- Executive Sponsorship** Strategic customers have a **close relationship with our business**, product, delivery, Spark, ML and AI **leadership**.
- Spark Expertise at Scale** Building advanced skill sets for Data Engineers, Data Scientists, and Analysts.
Support for conferences and hackathons
- Customer Success Engineers** **Technical and project guidance** for Customer Use Cases to drive business value
- Resident Solutions Architect** Dedicated access to named highly technical advisory and **hands-on resources**
- Technical Support** Tech Support available via a **multiple channels**
- Prioritize Product Management** Early visibility to product roadmaps, private previews, product advisory boards to **influence product roadmap direction**

PRICING OPTIONS

OPTION 1

DBU

Interactive DBU: 800,000
(20%)
Automated DBU: 200,000
(80%)

\$ PRICE

Optional
Text

Text

OPTION 2

DBU

Interactive DBU: 800,000
(20%)
Automated DBU: 200,000
(80%)

\$ PRICE

Optional
Text

Text

OPTION 3

DBU

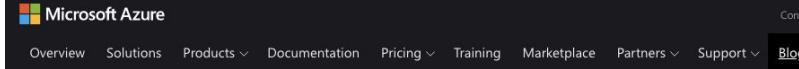
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(20%)
Automated DBU: 200,000
(80%)

\$ PRICE

Optional
Text

Text

Big Data Migration to ADB



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[Big Data migration to ADB link](#)

Not Available to CSP customers

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Posted on 15 July, 2020

Bharat Sandhu, Director, Azure Data & AI



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We've also seen several customers accelerating their migration of on-premises systems to Azure Databricks for the following reasons:

- **Reduced costs and enhanced security:** Moving to the fully managed Azure Databricks environment enables customers to reduce administrative costs while also helping increase overall security and compliance of their solutions. Autoscaling and auto-termination of jobs help reduce operational costs. In addition, native integration with Azure Data Lake Storage Gen 2, which supports the Hadoop Distributed File System (HDFS) format, helps reduce migration costs.
- **Increased agility:** On-premises systems are limited to a fixed amount of compute and storage. With Azure Databricks, customers can quickly scale up or down compute resources as needed to accelerate jobs and increase productivity.
- **Enhanced collaboration:** Azure Databricks empowers data engineers, data scientists and developers to collaborate in an interactive workspace using the languages and frameworks of their choice. Integration with Azure Machine Learning, Synapse Analytics, and Cosmos DB provides users easy access to new technologies, thereby accelerating overall time to value.

Offer Example

Example 1: 1-Year reservation



Example 2: 3-Year reservation



DBU pre-purchase pricing

1-Year		Migration Offer			
DBU list price	Discount	Customer price after discount	Additional Promo Discount	Final Customer Price	Overall discount
\$25 K	6%	\$24 K	N/A	N/A	N/A
\$50 K	8%	\$46 K		N/A	N/A
\$100 K	11%	\$89 K		\$75.7 K	24%
\$200 K	14%	\$172 K		\$146.2 K	27%
\$350 K	18%	\$287 K		\$244 K	30%
\$500 K	20%	\$400 K		\$340 K	32%
\$750 K	22%	\$578 K		\$497 K	34%
\$1 M	27%	\$730 K		\$620.5 K	38%
\$1.5 M	30%	\$1.05 M		\$900 K	41%
\$2 M	33%	\$1.34 M		\$1.1 M	43%

15% Off

3-Year		Migration Offer			
DBU list price	Discount	Customer price after discount	Additional Promo Discount	Final Customer Price	Overall discount
\$75 K	8%	\$69 K	N/A	N/A	N/A
\$150 K	10%	\$135 K		\$101 K	33%
\$300 K	13%	\$261 K		\$196 K	35%
\$600 K	16%	\$504 K		\$378 K	37%
\$1.05 M	22%	\$819 K		\$614 K	42%
\$1.5 M	24%	\$1.14 M		\$855 K	43%
\$2.25 M	27%	\$1.64 M		\$1.2 M	45%
\$3 M	31%	\$2.07 M		\$1.6 M	48%
\$4.5 M	34%	\$2.97 M		\$2.2 M	51%
\$6 M	37%	\$3.78 M		\$2.8 M	52%

25% Off

Azure Databricks

Fast, easy, and collaborative Apache Spark-based analytics platform optimized for Azure.

Microsoft 1st party service.

Native integration with Azure.

Enterprise Ready.

**Fastest growing Data & AI service on Azure.
Drives consumption & EA burndown.
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1. Engage your Databricks seller in account planning to identify and drive opportunities.
2. Learn more about the new [DBU pre-purchase plan](#) (faster & easier to use!)
3. Invite customers to [Azure Databricks Virtual Workshops and Webinars](#)
4. Sell through use cases and business value.