



Democratizing AI with Databricks

Ali Ghodsi, Co-Founder & CEO

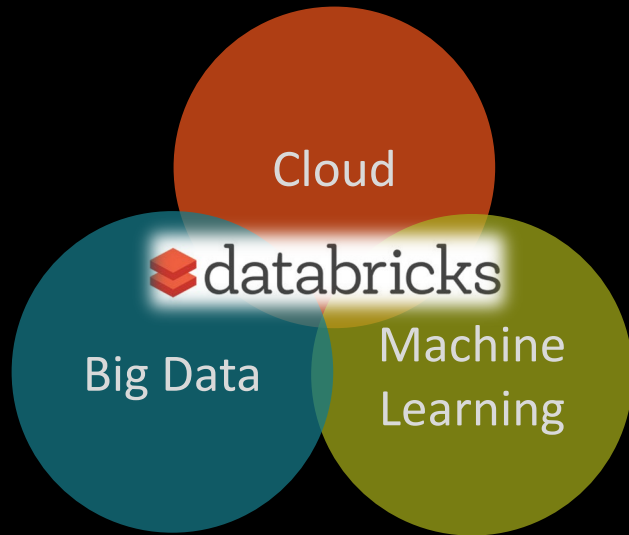
May 9, 2017



Democratizing AI with Databricks

Databricks original three bets

- Cloud computing
- Big data
- Machine learning and Artificial Intelligence



The combination of these has enabled entire new sets of use cases across many industries

500+ customers across industries

AD & MARKETING TECH

MEDIA & ENTERTAINMENT

HEALTHCARE & PHARMA

ENTERPRISE SOFTWARE



Predict where to drill for oil
based on sub-surface data

PUBLIC SECTOR

FINANCIAL SERVICES

INDUSTRIAL & IOT

RETAIL & CPG

REGENERON

Correlate EMR of 50,000 patients
compared with their DNA

Democratizing AI with Databricks

Cloud computing

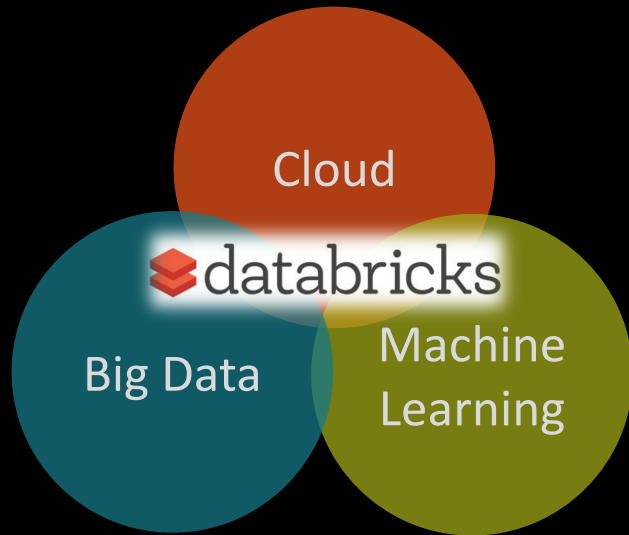
- Gartner believes this market to be \$200b in 2020

Big data

- 90% of the data created in last 2 years

Machine learning and Artificial Intelligence

- Just scratched the surface of the use-cases



Likely to be a juggernaut in the analytics space,
we believe it will be Databricks

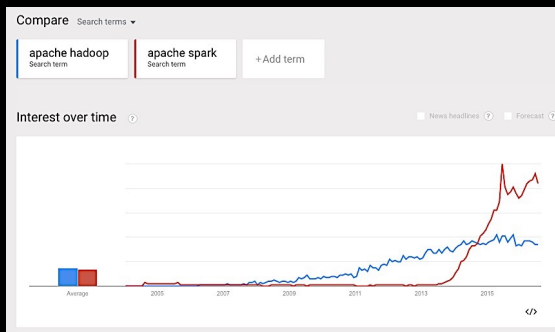
Background: Spark™

Virtually every company doing AI on massive data does it with Spark

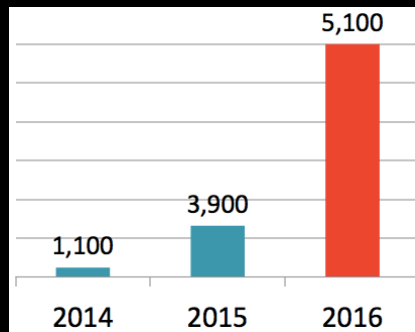
We built Spark enable the unification of

- Processing of large amounts of unstructured data (ELT)
- Make predictions on that data using machine learning (ML)
- Get insights in real-time continuously (streaming)

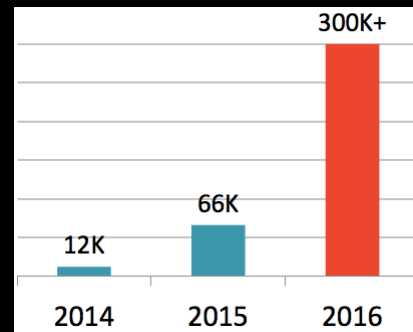
SPARK VS HADOOP



SUMMIT ATTENDEES

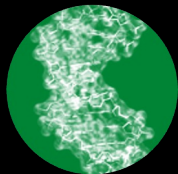


MEETUP MEMBERS

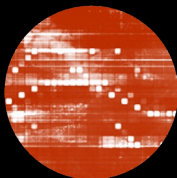


Artificial Intelligence

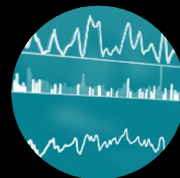
Artificial Intelligence Applications



PREDICTIONS



CLUSTERING



ANOMALIES

AI GAP

DATA WAREHOUSES



HADOOP DATA LAKES



CLOUD STORAGE



Big Data

Hardest part of AI isn't AI

“Hidden Technical Debt in Machine Learning Systems”, Google NIPS 2015

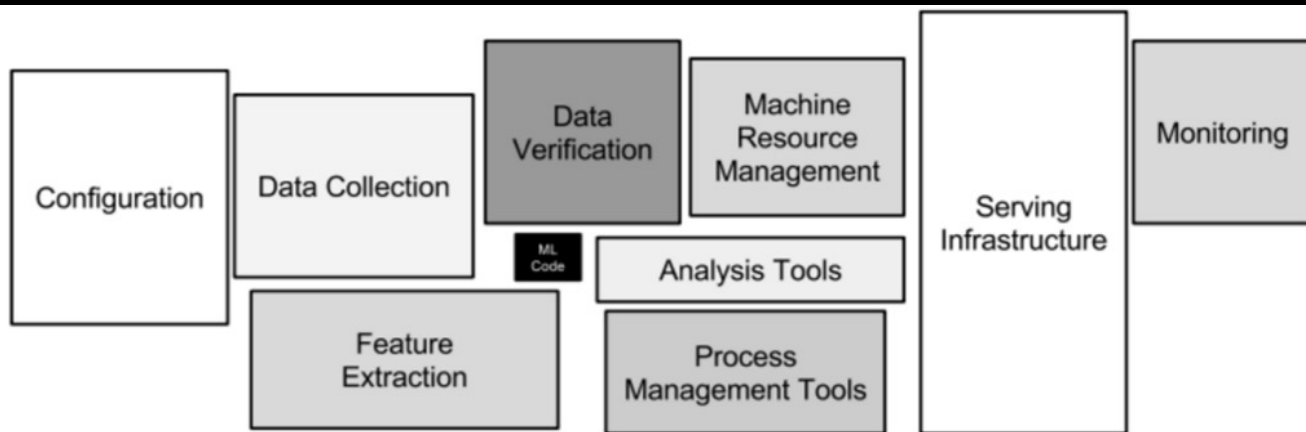
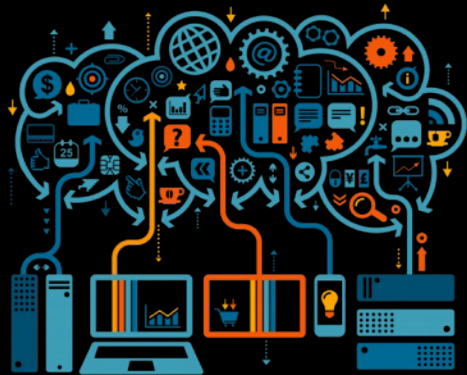


Figure 1: Only a small fraction of real-world ML systems is composed of the ML code, as shown by the small black box in the middle. The required surrounding infrastructure is vast and complex.

The hardest part of AI is Big Data

Big Data was the Missing Link for AI

BIG DATA



Customer Data
Emails/Web pages
Click Streams
Sensor data (IoT)
Video/Speech

...

GREAT RESULTS



But few companies are successful with AI

Why is there a gap?

- ① Difficult to manage & secure data infrastructure
- ② Hard for teams to share and ask questions from the data
- ③ Hard to put analytics into production



Databricks Platform

Databricks Platform

1

Difficult to create,
manage, and secure
Spark infrastructure

2

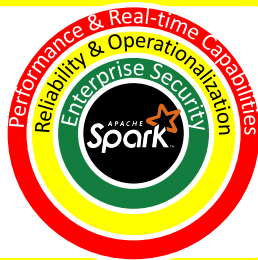
Not easy for teams to query
the data, collaborate, and
share the results

3

Hard to put analytics
into production

Databricks Serverless Spark Platform

- Auto-tuning Spark with reliability and availability
- 10-40x speedup vs Apache Spark, custom data connectors
- full governance, SOC2 & HIPAA compliance



Databricks Platform

1

Difficult to create,
manage, and secure
Spark infrastructure

2

Not easy for teams to query
the data, collaborate, and
share the results

3

Hard to put analytics
into production

Databricks Collaborative Workspace

- Notebooks – Interactive exploration for ETL, AI, Real-time applications
- Dashboards – interactive real-time dashboards to democratize access to Spark
- Reports – Ability to produce periodic reports with predictive insights

Databricks Serverless Spark Platform

- Auto-tuning Spark with reliability and availability
- 10-40x speedup vs Apache Spark, custom data connectors
- full governance, SOC2 & HIPAA compliance



The background of the slide is dark with abstract, colorful splashes of orange, red, and teal in the upper left corner. A faint, light-colored hexagonal pattern is visible in the upper left area, partially obscured by the colorful splashes.

Databricks Strategy

Making Big Data Simple with the Cloud

Databricks Data Science Workspace

- Software as a Service (SaaS)



Databricks Serverless Spark Platform

- Platform as a Service (PaaS)



Infrastructure as a Service on demand

- Simple, low-cost, scale-out, pay-as-you-go

Databricks: cloud-agnostic killer app

Databricks Data Science Workspace

- Software as a Service (SaaS)



Databricks Serverless Spark Platform

- Platform as a Service (PaaS)



On-prem market for Spark

- Huge demand for Databricks platform on-prem
 - Hadoop vendors commoditized storage through data lakes
 - Most on-prem enterprises struggling with Spark
 - Big void due to Databricks keeping enterprise value out of Spark

We plan to bring Databricks to wherever there is data

Databricks: unified analytics platform

Databricks Data Science Workspace

- Software as a Service (SaaS)



Databricks Serverless Spark Platform

- Platform as a Service (PaaS)



Unified Analytics Platform on-top of cloud and on-prem storage



Databricks Finance

Great Metrics All Around

**ARR of
\$21.9 mm**
(as of 3/31/17)

**ARR
Annual
Growth =
248%**
(3/31/17 vs. 3/31/16)

**Average
Customer
ARR=\$118k**
(up 112% yr/yr)

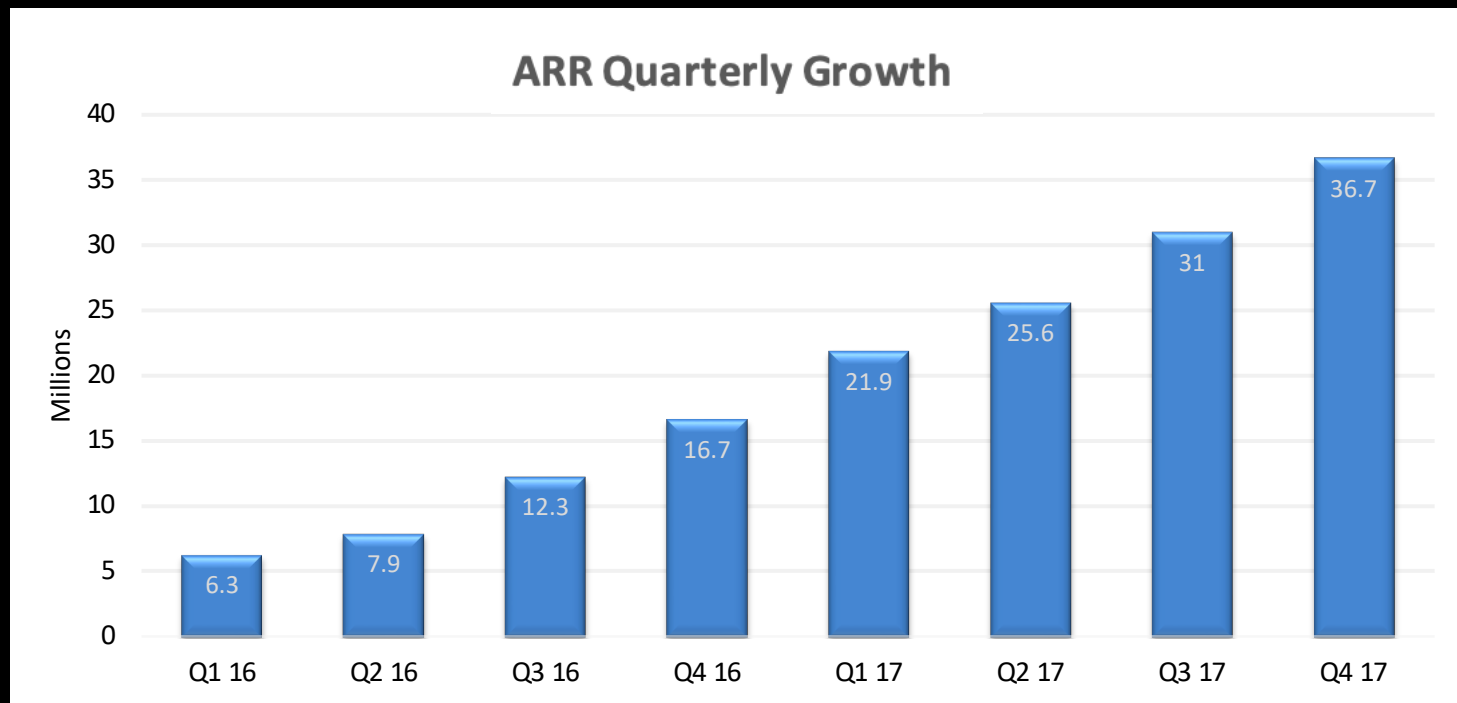
**Net \$
Retention
of 136%**
(3/31/17 vs. 3/31/16)

**69% Gross
Margin**
(Q1 17)

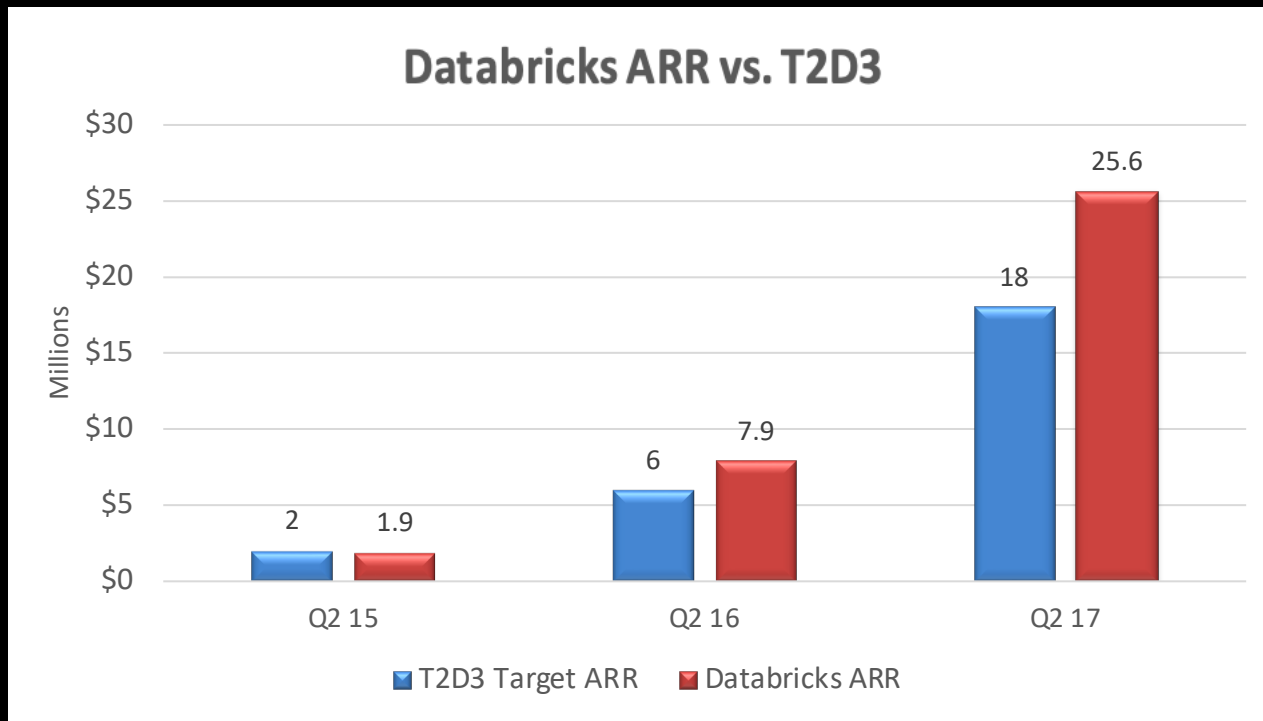
**LTV:CAC =
4.1**
(3/31/17 TTM)

**\$56.1mm
in Cash**
(3/31/17)

Incredible ARR Growth (5x growth for Q1 17 vs. Q1 16)



Databricks vs. T2D3 (triple, triple, double, double, double)



The Team



Ali Ghodsi, CEO and co-founder

- MBA, PhD, Adjunct Professor UC Berkeley, co-founder Peerialism



Ron Gabrisko, Chief Revenue Officer

- VP Sales at Cyclone pre-revenue to acquisition by Axway to IPO, Stanford M.B.A. & M.S



Rick Schultz, Chief Marketing Officer

- SVP marketing Alteryx pre-revenue to IPO, Oracle VP Product Marketing, UC Berkeley B.S.



John Winkenbach, SVP of Finance

- CFO at Jobvite, VP finance Technorati



Hatim Shafique, Chief Customer Officer

- CCO & CIO at AppDynamics pre-revenue to IPO



Patrick Wendell, VP of Engineering and co-founder

- UC Berkeley M.Sc., Princeton B.S.



Michael Hoff, SVP of BD and Partnerships

- VP of Channels at Tableau, Global VP of Sales EMC, GM Windows Azure MSFT

Try Apache Spark with Databricks

Try latest version of Apache Spark and preview of Spark 2.2

<http://databricks.com/try>





Thank You