DataStax Hands-On Workshop

Aaron Regis & Richard Henderson

Introducing DataStax the Company

Founded in April 2010

Santa Clara (HQ) • San Francisco • Austin
• London • Paris • Berlin • Tokyo • Sydney

Diverse customer base

ebay ING Walmart

SAFEWAY sky

First Utility Capital One UBS

Microsoft MACQUARIE

CISCO SONY COMCAST

30% + FORTUNE 100

Forbes — 2017 World's Best 100 Cloud Companies

Gartner — Ranked #1 in multiple operational database categories

The power behind the moment. | DATASTAX

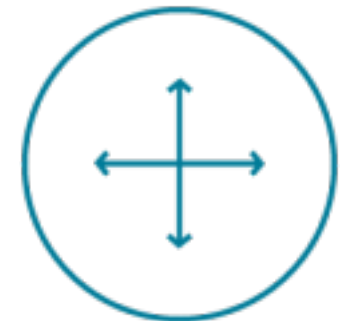# Cloud Application Characteristics

Contextual   Always-On   Real-Time   Distributed   Scalable

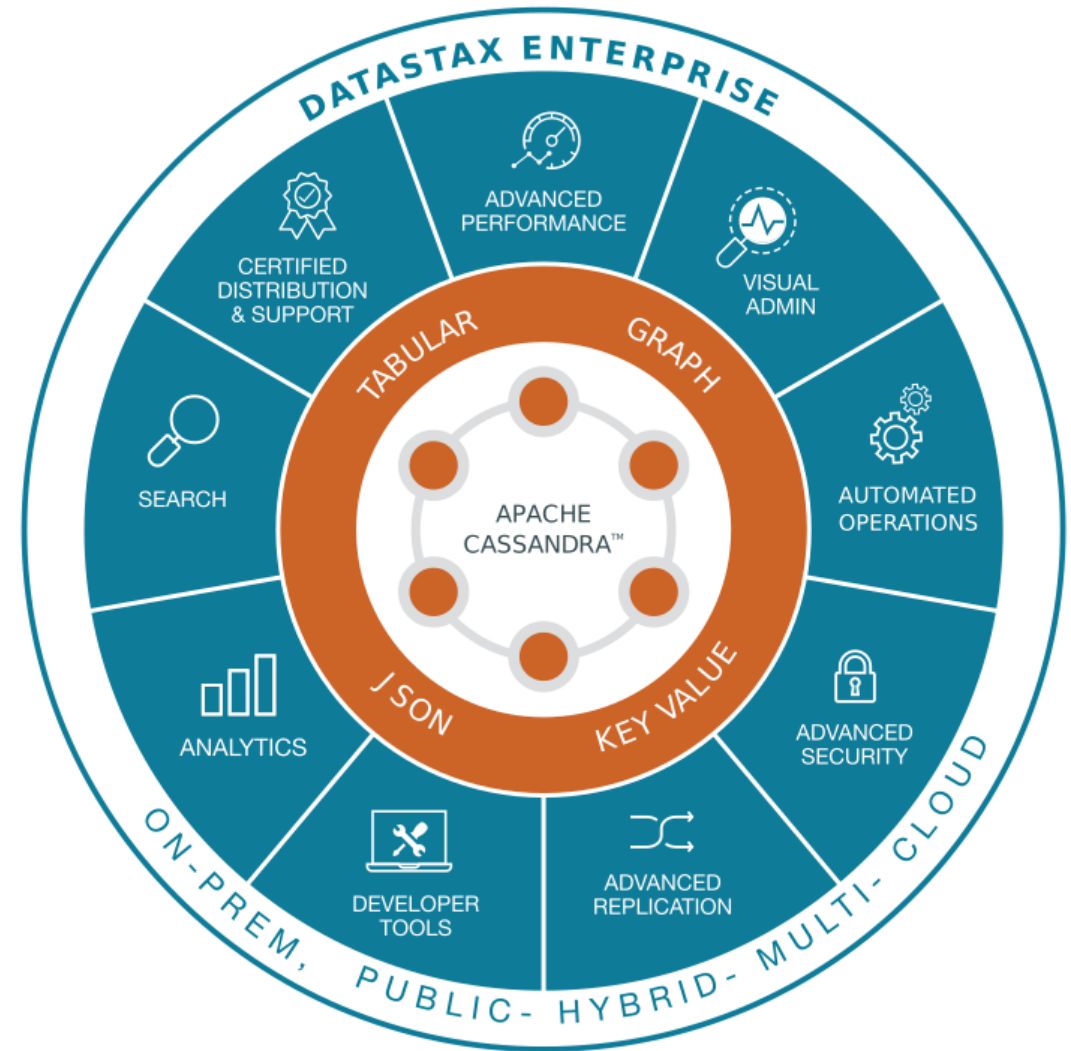DATASTAX

Powering Cloud Applications

Always-on

- Designed to handle any failure, no matter how catastrophic.
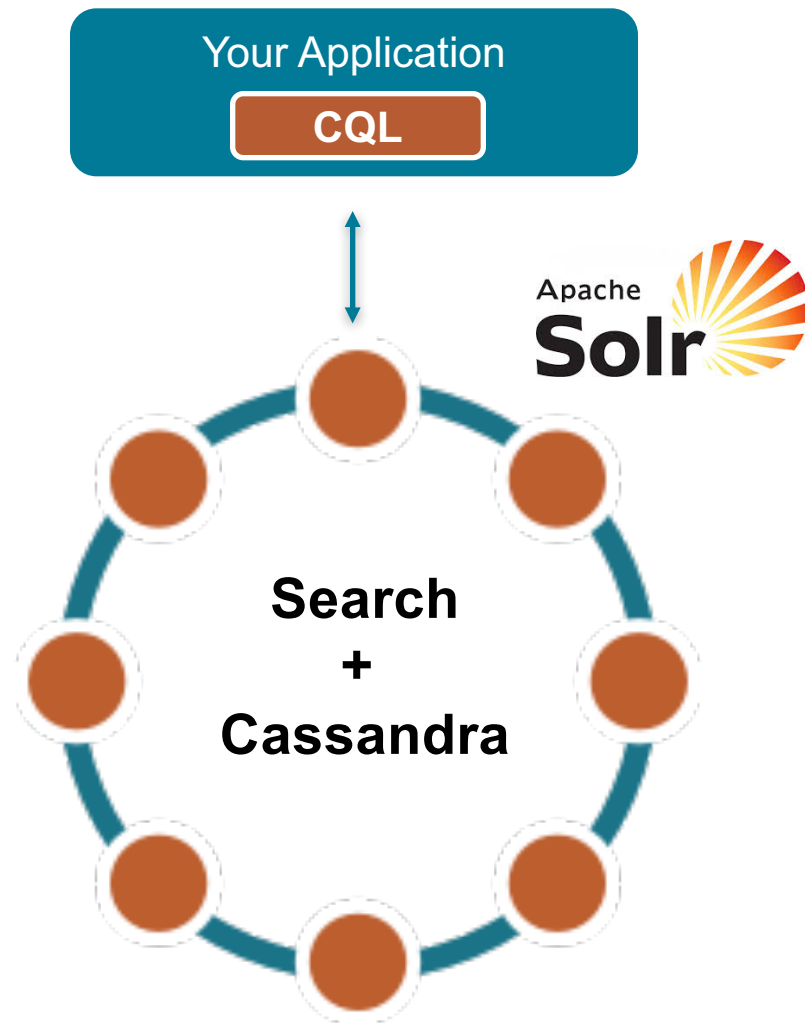
Effortless scale

- Take advantage of every opportunity.
- Focus on what matters most to you.

Instant insight

- Built into your application to create actionable, modern experiences.

DSE Search

Your Application

CQL

Apache **Solr**
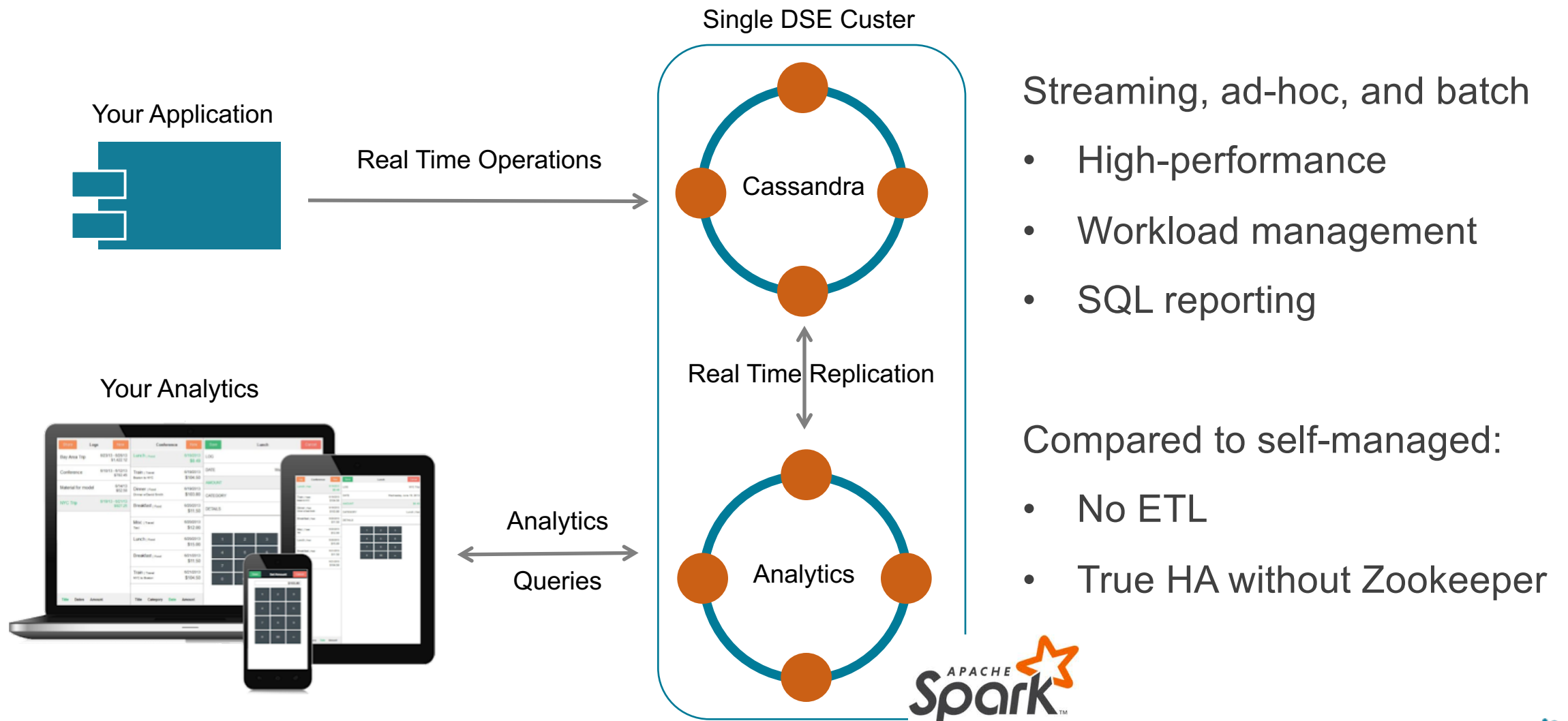
Search + Cassandra

Live indexing engine with powerful search

- Automatic indexing on insert
- Higher ingestion throughput
- Distributed query optimization

Compared to self-managed:

- No separate search cluster to manage
- Probably less total hardware required
- No "Split Brain" data inconsistencies
- No ETL or synch to build and maintain
- No app level data management code

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DSE Analytics

Single DSE Custer

Cassandra

Your Application

Real Time Operations

Real Time Replication

Your Analytics

Analytics

Queries

Analytics

APACHE **Spark**™

Streaming, ad-hoc, and batch

- High-performance

- Workload management

- SQL reporting

Compared to self-managed:

- No ETL

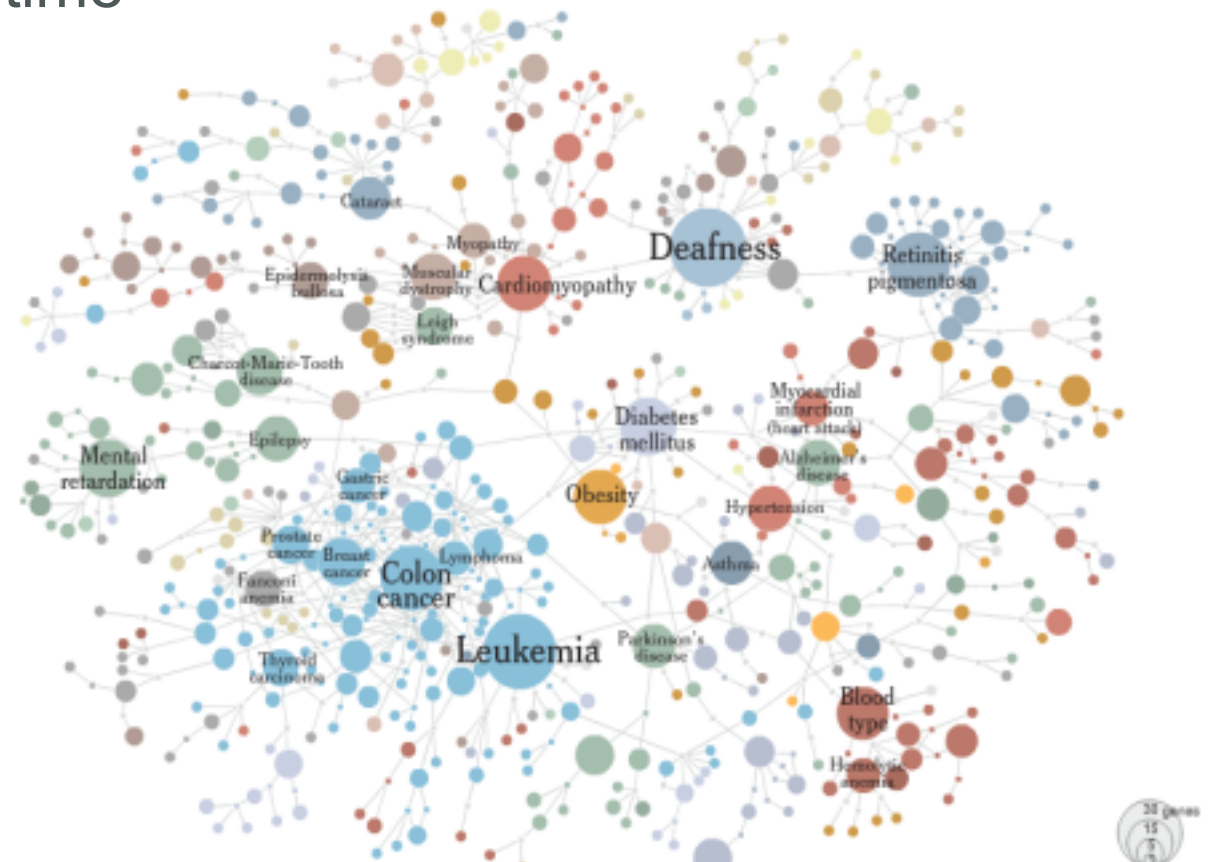- True HA without Zookeeper

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DSE Graph

A scalable, distributed graph database that is optimized for storing, traversing and querying complex graph data in real time

- Value data between relationships

- DSE Analytics and Search integrated

- Perfect for use cases:
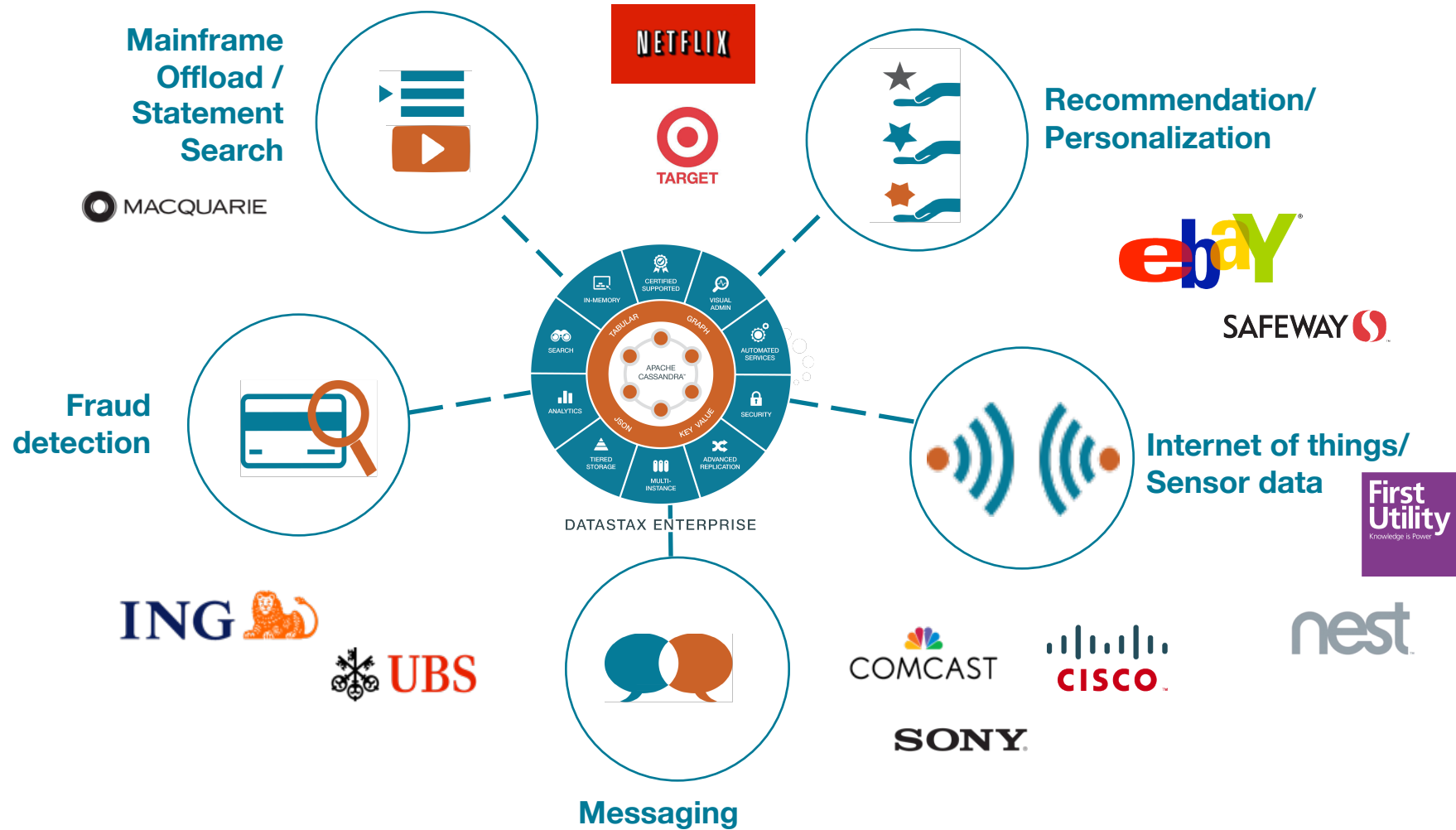
  Customer360

  Recommendations

  Fraud Detection

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Functional use cases

Mainframe Offload / Statement Search

Recommendation/ Personalization

Fraud detection

Internet of things/ Sensor data

Messaging

DATASTAX ENTERPRISE

DataStax Enterprise across all Industries

ENERGY & UTILITIES / OIL & GAS

World Fuel Services · first:utility · suez
petrolink · WESTERN POWER DISTRIBUTION · GE PREDIX
HITACHI · HALLIBURTON · Schlumberger

FINANCIAL SERVICES

Bank of America · First Data
NYSE · MACQUARIE · Fidelity · JPMorgan Chase & Co. · Capital One
RBC · USAA · UBS · VISA

TRANSPORTATION / LOGISTICS

UNITED STATES POSTAL SERVICE · Royal Caribbean INTERNATIONAL
American Airlines · DELTA · WM WASTE MANAGEMENT
BNSF · NS

MEDIA/ TELECOMMUNICATIONS

COMCAST · verizon · dish
CONDÉ NAST · The Walt Disney Company · HBO
abc · IHS Markit

RETAIL / FOOD & BEVERAGE

BED BATH & BEYOND · BEST BUY · THE HOME DEPOT · Kroger
macy's · Starbucks · McDonald's
SAFEWAY · Walgreens · Walmart

TECHNOLOGY & IT SERVICES

CISCO · DELL · ebay
intuit · Microsoft · ORACLE
NVIDIA · priceline.com · SONY

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Agenda

1	**Workshop:** Apache Cassandra™ Data Structures and Replication	9:15
2	**Workshop**: DataModelling with DataStax Enterprise and Apache Cassandra™	10:15
	BREAK	11:30
3	**Workshop**: DataStax Enterprise Search	11:45
4	**Workshop**: DataStax Enterprise Analytics with Apache Spark	12:15
5	DataStax Enterprise Graph	12:45
6	Discussion, Questions and Answers	13:00

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