

Open Source Analytics – New York

March 21st 2016

Streaming Analytics Use Cases by Thomson Reuters,
Mezzobit, Lightbend and IBM



THOMSON REUTERS



Lightbend

mezzobit



AGENDA

Introductions by IBM: Open source analytics market trends

Nick Dimtchev - Open Source Analytics Program Office Worldwide Leader, **IBM**

Metadata: The foundation for big data analytics

Daniel Meisner, Head of Open Data, **Thomson Reuters**

Reactive Streams: The glue of the real-time organization

Kevin Webber - Enterprise Advocate, **Lightbend**

Using Spark to create the Internet's first audience data firewall

Joseph Galarneau, CEO and co-founder, **Mezzobit**

Networking Reception - food and drinks

Utility

The value of data tends to decrease over time.



Patient
Sensors

Weather
Data



Vehicle Fleet
Sensors



Traffic
Sensors



Video
and Audio



Utility
Sensors



Employee
Sensors



Location
Data



Test
Results

Twitter
Data

Time

Top trends in Big Data

Fast Data

big data in motion
drives streaming
analytics innovations

- Decision support
- Embed in processes
- Increase engagement

Dark Data

big data generated
by enterprises but
not used

Data-as-a-Service

external big data /
open data / cloud

- IoT growth
- Curation
- Capacity / Cost

Applications

accelerating adoption
of open source big
data platforms

Some examples:

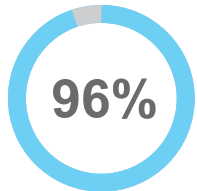
- Mezzobit on Spark
- 3,500 IBM developers
working on Spark

Top trends in Big Data

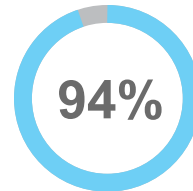
Cognitive Analytics
transforming
industries and
professions.

Cognitive systems can understand the world through sensing and interaction, **reason using hypotheses and arguments and **learn** from experts and through data.**

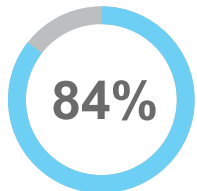
Among C-Suite executives familiar with cognitive computing:



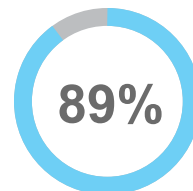
in **insurance** intend to invest in cognitive capabilities.



in **retail** intend to invest in cognitive capabilities.



in **healthcare** believe cognitive analytics will play a disruptive role in the industry



in **telecommunications** believe it will have a critical impact on the future of their business.

IBM WATSON COGNITIVE ANALYTICS

The foundation is Open Source analytics – Hadoop and Spark
IBM's Cognitive APIs are underpinned by over **50 technologies**:

Anaphoric Co-referencing
Colloquialism Processing
Content Management -- Versioning
Convolutional Neural Networks
Curation
Deep Learning
Dialog Framing
Ellipses
Embedded Table Processing
Ensembles and Fusion
Entity Resolution
Factoid Answering
Feature Engineering

Feature Normalization
Focus and Spurious Phrase Resolution
HTML Page Analysis
Image Management
Information Retrieval
Knowledge (Property) Graphs
Knowledge Answering
Knowledge Extraction Annotators
Knowledge Validation and Extrapolation
Language Modeling
Latent Semantic Analysis

Learn To Rank
Linguistic Analysis
Logical Reasoning Analysis
Logistical Regression
Machine Learning
Multi-Dimensional Clustering
Multilingual training
n-Gram Analysis (word combinations and distance)
Ontology Analysis
Pareto Analysis
Passage Answering
PDF Conversion
Phoneme Aggregation

Question Analysis
Question-answering Reasoning Strategies
Recursive Neural Networks
Rules Processing
Scalable Search
Similarity Analytics
Statistical Language Parsing
Support Vector Machines
Syllable Analysis
Table Answering
Visual Analysis
Visual Rendering
Voice Synthesis

Cognitive
Platform
foundation



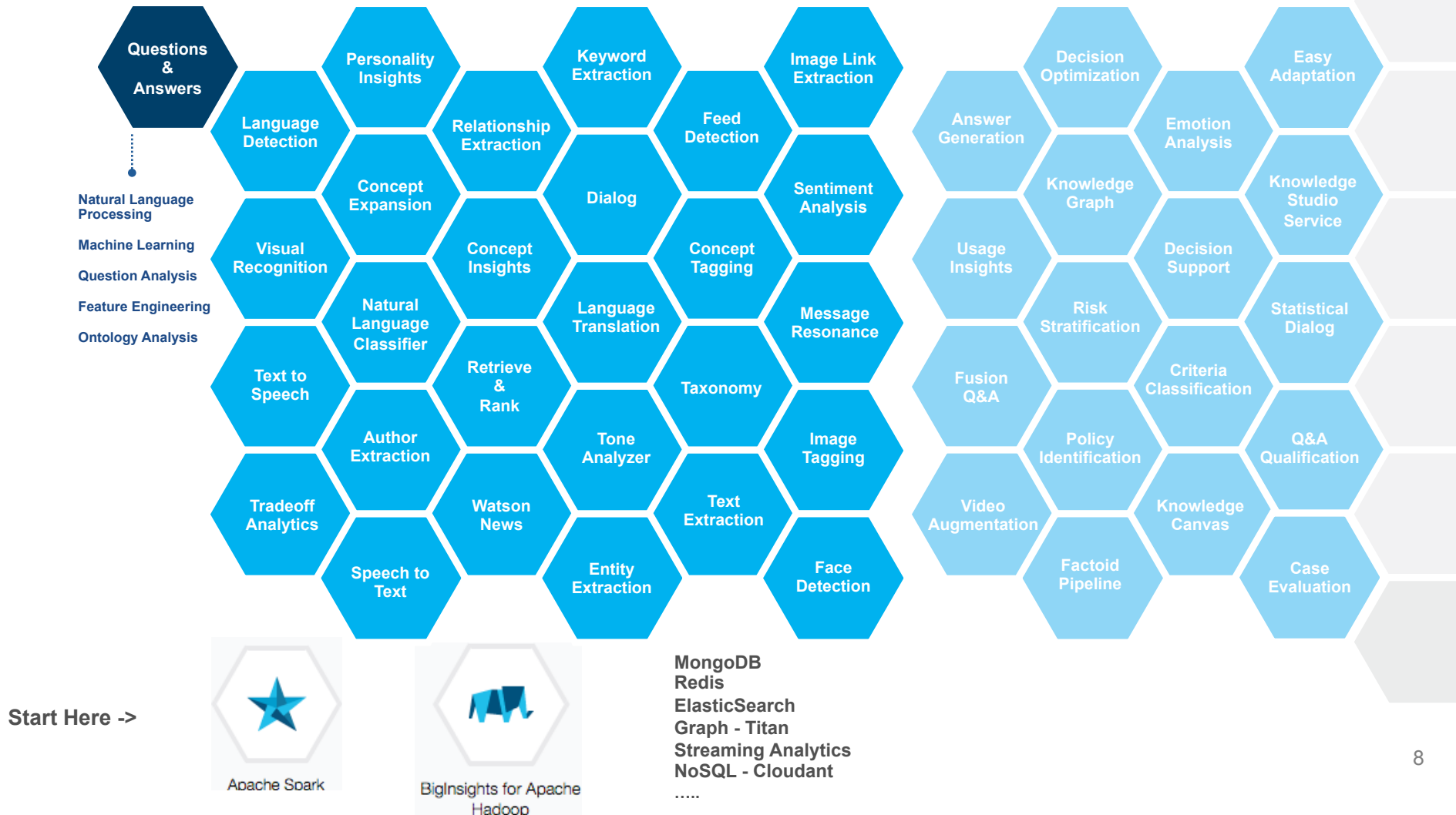
Apache Spark
Apache Hadoop
ecosystem of open source analytics projects

IBM COGNITIVE ANALYTICS

The Watson that competed on *Jeopardy!* in 2011 comprised what is now a single API—**Q&A**

Since then, Watson has grown to a family of **28 APIs**.

By the end of 2016, there will be nearly **50 Watson APIs**—with more added every year.



THANK YOU

Q&A