Environmental Information exchange Network

EN2017

DATA DRIVES GOVERNMENT

Amy O'Connor, *Cloudera*

2017 Exchange Network National Meeting

Innovation and Partnership

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Philadelphia, Pennsylvania
#EN2017
http://www.exchangenetwork.net/en2017

Imagine a world where we…

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Imagine a world where we…

use sensors to understand air quality triggers to infant asthmatic events.

Imagine a world where we…

track weather and crowds to reduce environmental impact while improving service.

Imagine a world where we…

use social media data to fight child sexual exploitation.

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Imagine a world where we…

use data for early detection
to save lives.

Imagine a world where we…

use data to simulate human travel to deep space.

We live in that world today because our relationship with data is **changing**.

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Data is now a strategic asset

Today, becoming data-driven is a government imperative.

Today, everything that can be measured will be measured.

Today, data IS the application.

Big data != traditional analytics & data warehousing

Proactively build your data asset

1. Collect data in native format – enables agility and re-use over time
2. Build history by collecting data prior to its use

Securely share

3. Security at the data layer increases flexibility and ability to protect privacy
4. Create community data and drive innovation by sharing across your business

Innovate and integrate your insights into apps

5. Analyze data in near real-time as it streams into your data asset
6. Build and deploy machine learning models using full fidelity data
7. Deliver actionable insights via enterprise, mobile and web applications

Big Data is about data security

- Native Encryption
- Access Control
- Data Governance
- Regulatory Compliance

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Big Data is about using ALL your data

Intelligence

Activity-Based Data
Video / Surveillance
Online Activity
Mobile Activity
Sensors
Geospatial Data
Social / Sentiment
Associative Data

Defense

Inventory / Supply Chain
Theater Operations
Netflow / Packet Capture
Social / Sentiment
Warfighter Intelligence
Maintenance and Facilities Data

Environment & Regulation

Trade Data
Citizen Data
Research / Publications
Communications / Documentation
Environmental / Clinical
Policy Data
Internet of Things
Demographic/ Census

Education

Student achievement data
School performance
Demographic / Census Data
Communication / Documentation
Research
Student retention/success

Healthcare

EMRs / EHRs
Claims / Insurance
Policy Data
Citizen Data
Research / Publications
Clinical Studies
Population Health
Wearables

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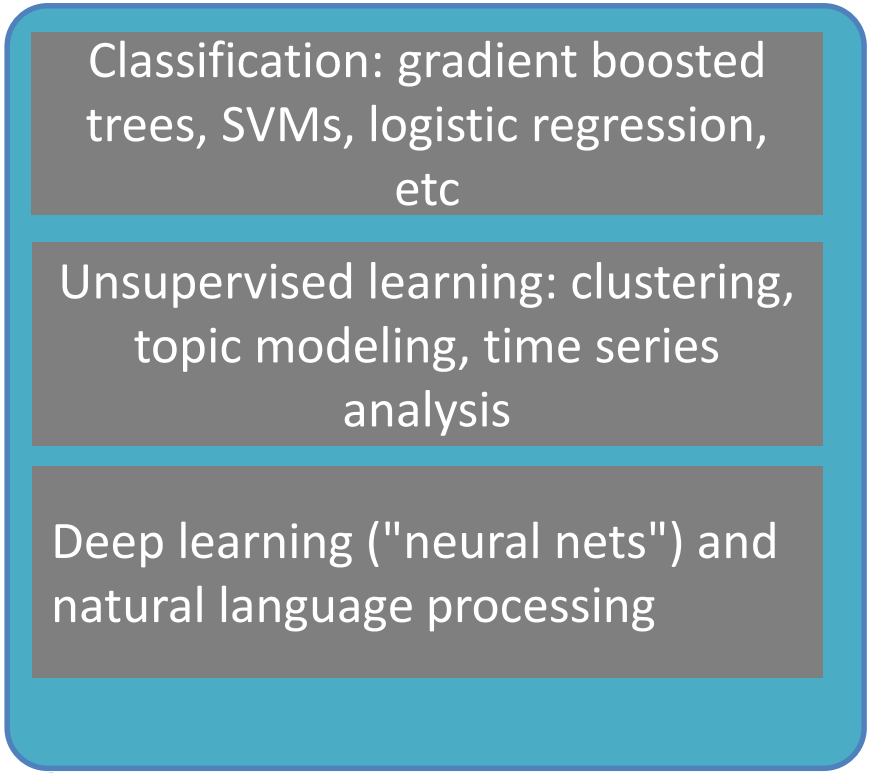
Big Data is about advanced analytics

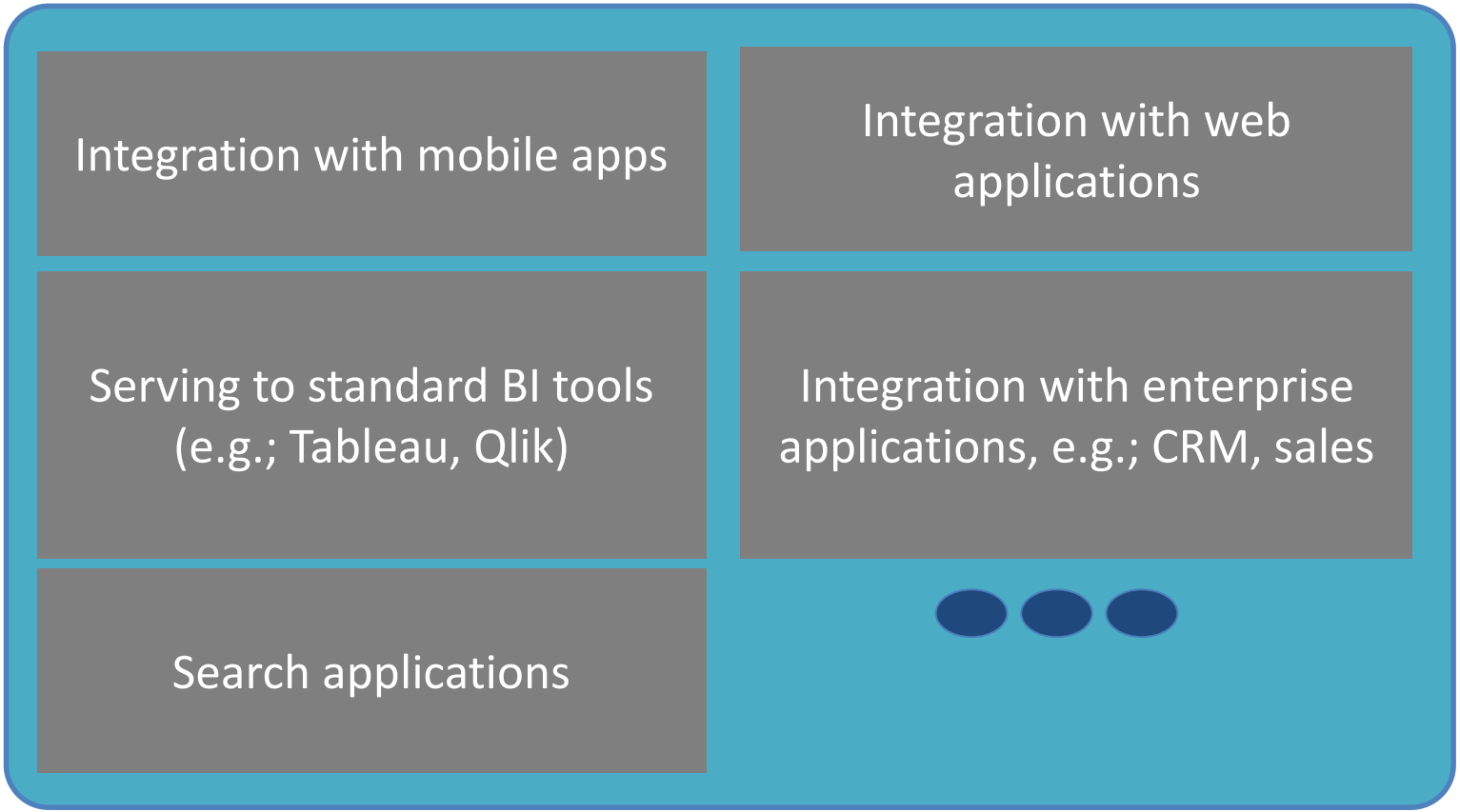


→ Score entities by behavior (e.g.; facility/pollutant analytics)

→ Detect anomalous events (e.g.; predictive maintenance)

→ Classify or cluster unstructured data (e.g.; images or text for cyber threats)

Big Data is about actionable insights



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Big Data is about
using data and analytics
to satisfy the
expectations of citizens today.

How do you ensure success?

Our most successful customers
do these five things.

1. Build a data driven culture
2. Develop the right team and skills
3. Be agile/lean in development
4. Leverage DevOps for production
5. Right-size data governance

Big Data is a journey, not a project.

Think Big.

Start Small.

Iterate Often.

The future of government is powered by data.

What's your strategy?

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