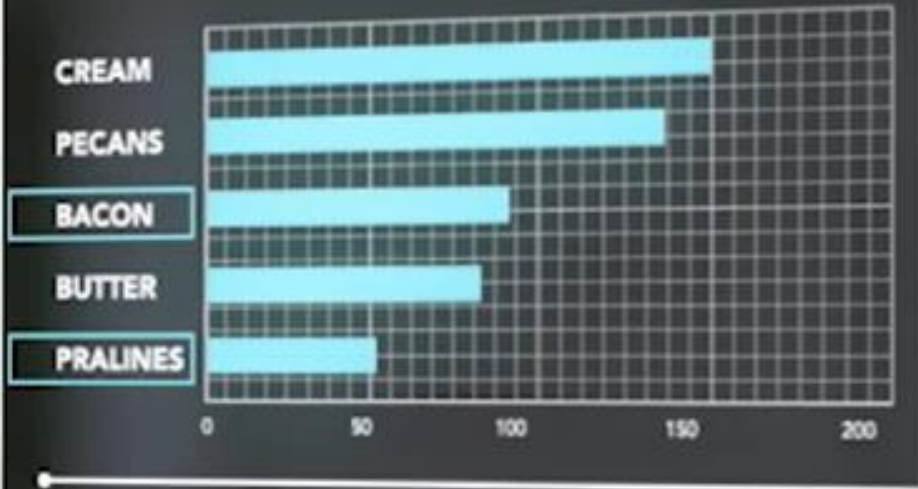


**BEST SELLER:
PECANS & CREAM**

□ SOCIAL AFFINITY SEARCH



SENTIMENT ANALYSIS: BACON + PRALINES



Cortana Analytics Suite

James Serra

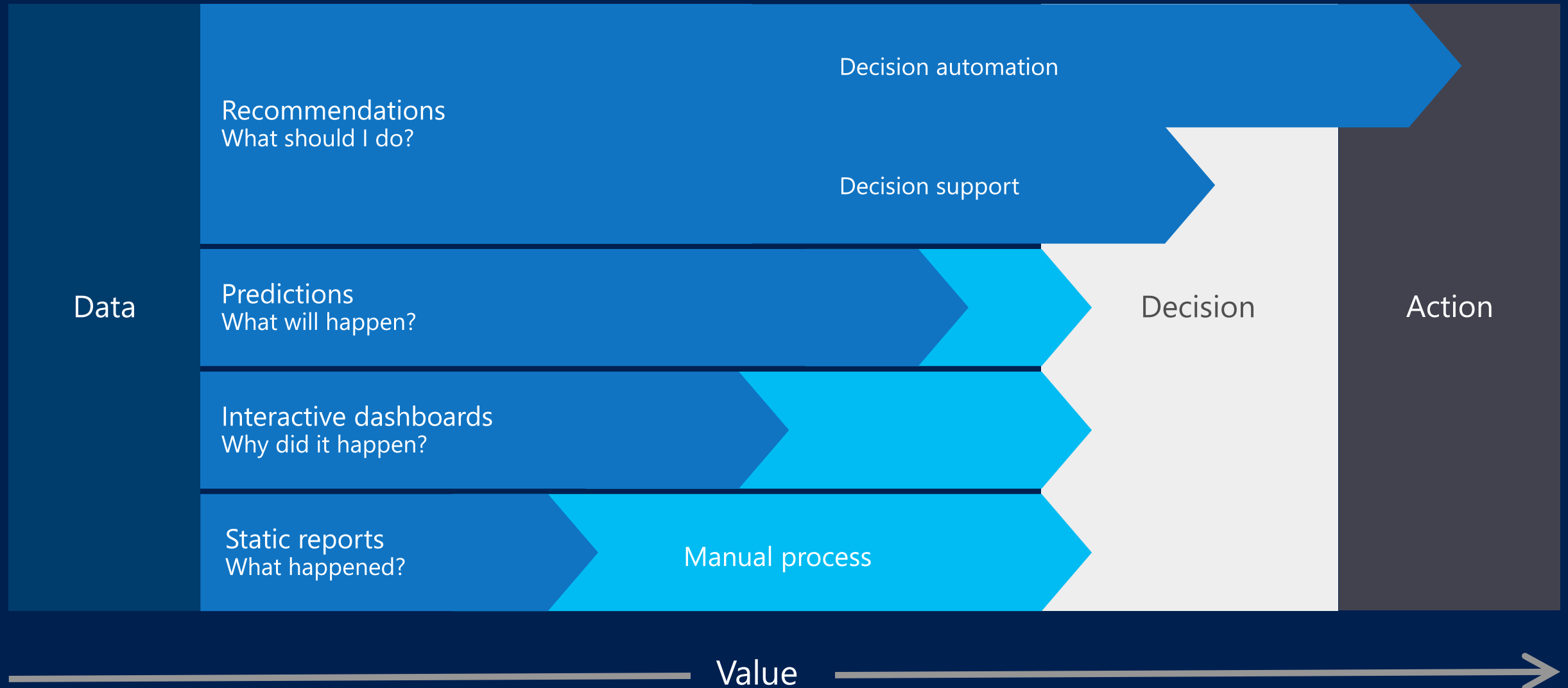
Data Platform Solution Architect

Cortana Analytics Suite

A fully managed Big Data and Advanced Analytics Suite that enables you to transform your data into intelligent action.



From data to decisions and actions



Accelerating the speed of business

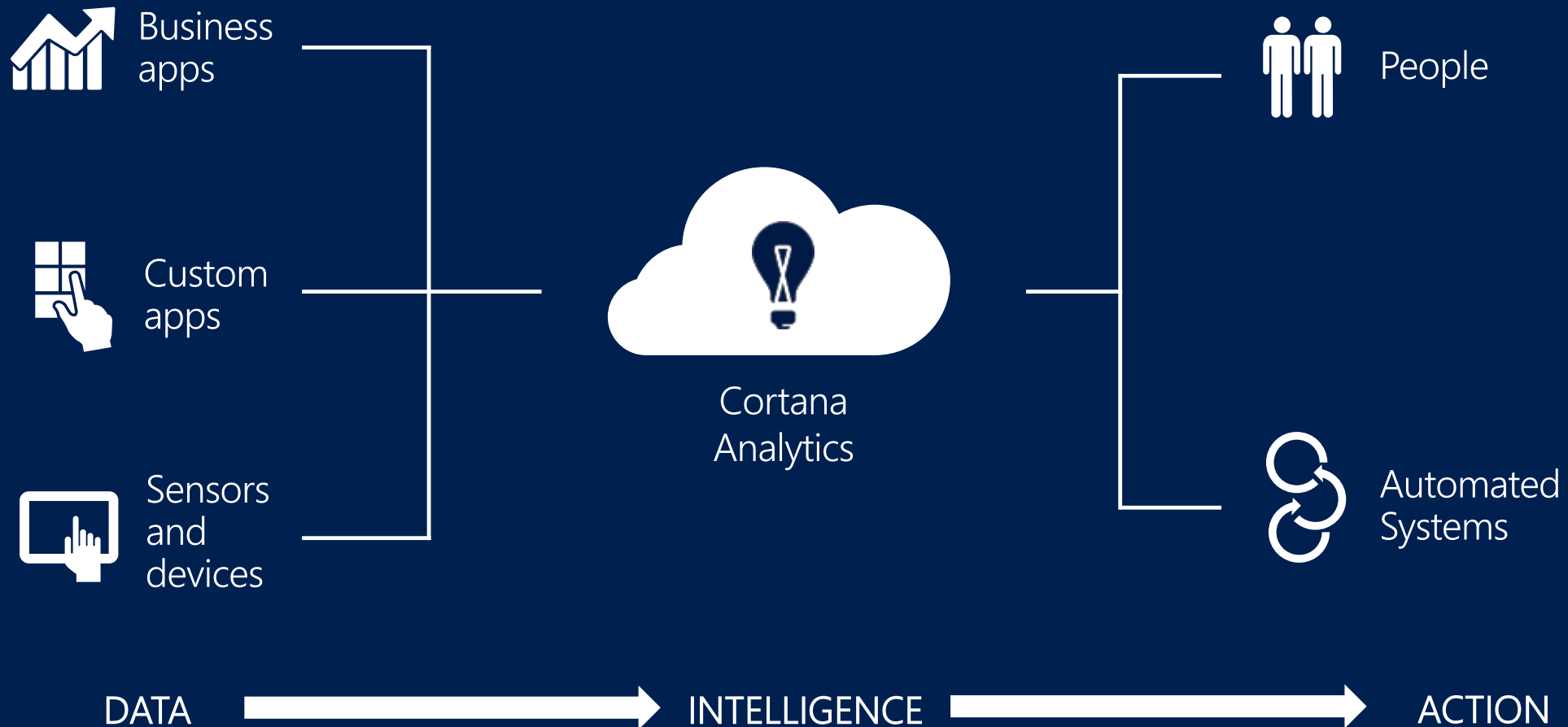
Reactive → Proactive

Historical data → Predictions

People and processes → Decision Automation

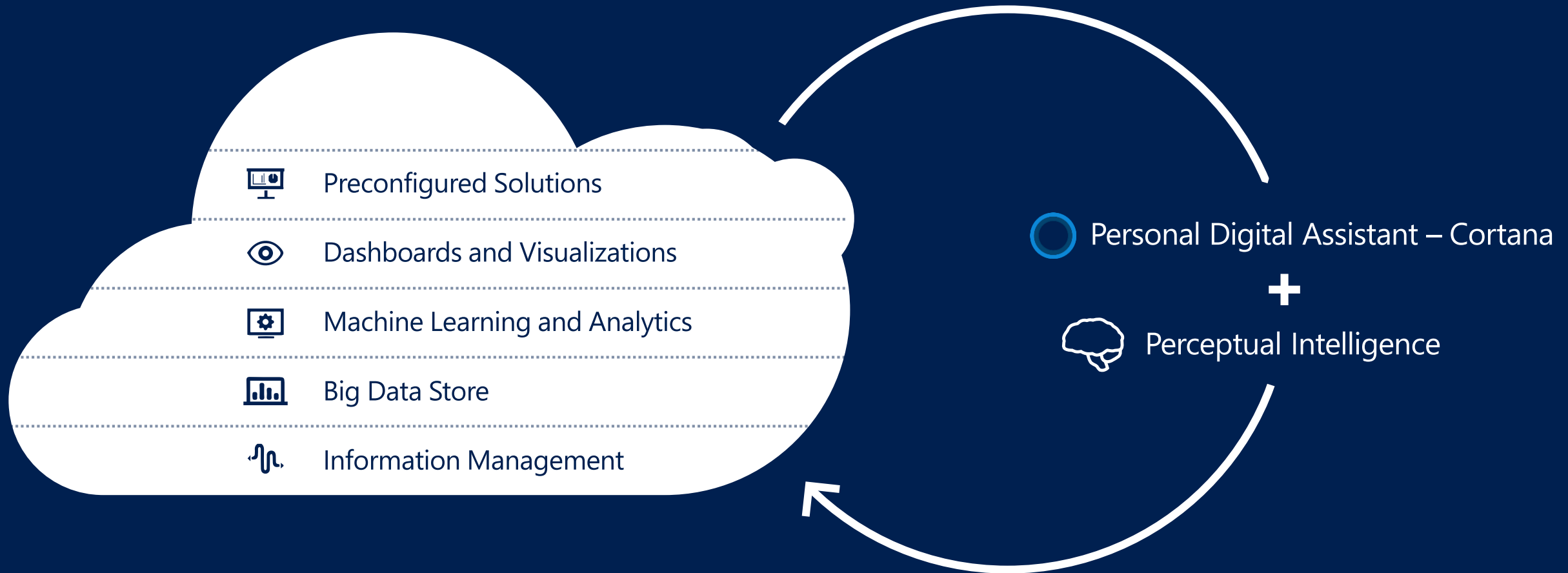
Cortana Analytics Suite

Transform data into intelligent action



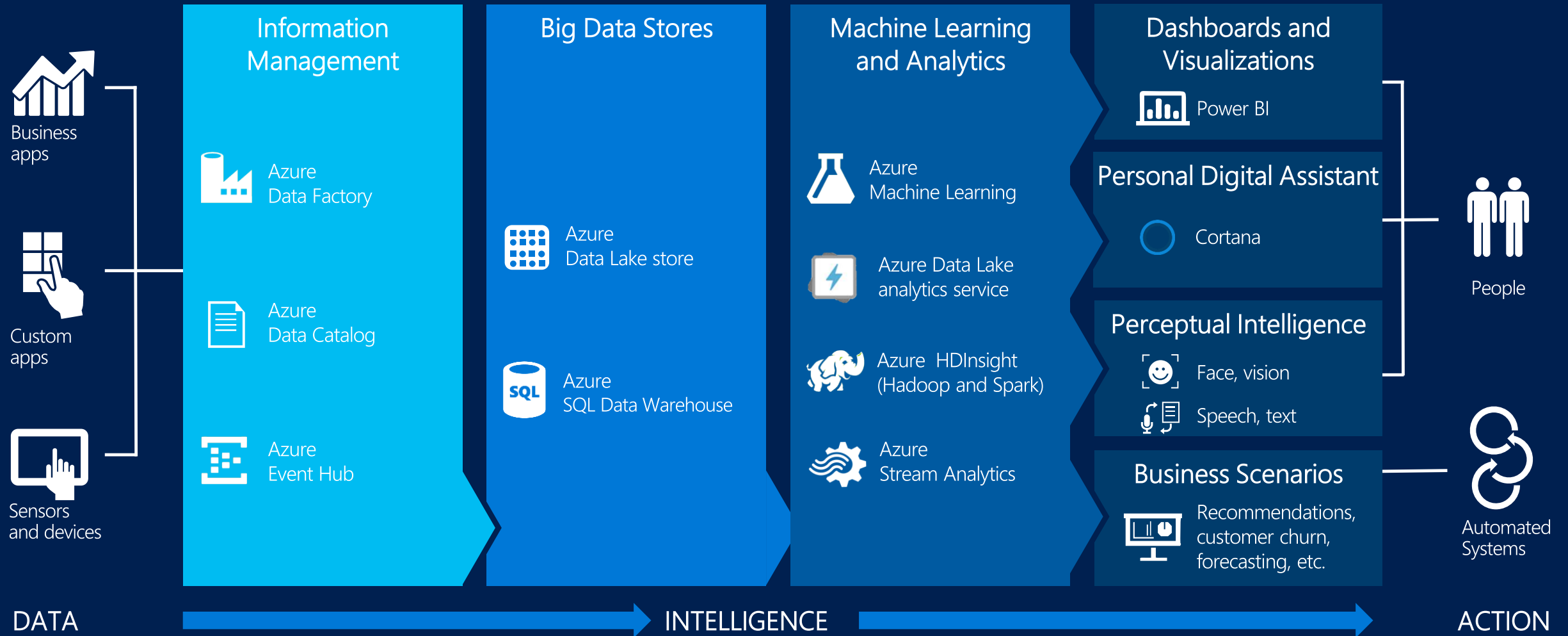
Cortana Analytics Suite

Transform data into intelligent action



Cortana Analytics Suite

Transform data into intelligent action



Cortana Analytics scenarios



EXAMPLE SOLUTIONS



Sales
and marketing



Finance
and risk



Customer
and channel



Operations
and workforce



Customer Acquisition



Fraud detection



Lifetime customer value



Pay for performance



Cross-sell and upsell



Credit risk management



Personalized offers



Operational efficiency



Loyalty programs



Product recommendation



Smart buildings



Marketing mix
optimization



Predictive maintenance



Supply chain
management

Azure HDInsight

Hadoop in Azure

HBase as a columnar NoSQL transactional database running on Azure Blobs

Storm as a streaming service for near real time processing

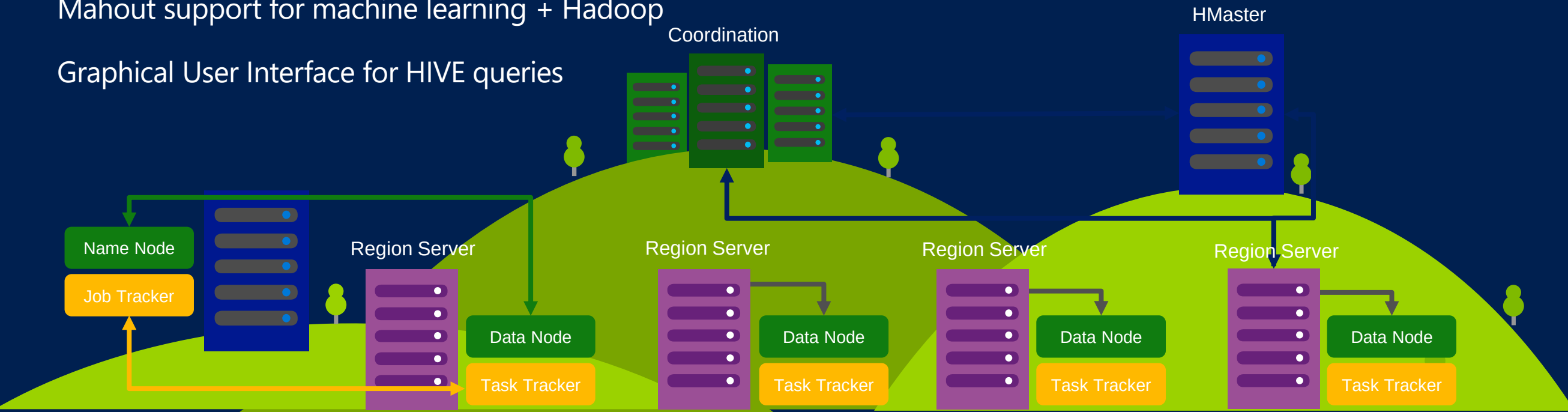
Hadoop 2.4 support for 100x query gains on Hive queries

Mahout support for machine learning + Hadoop

Graphical User Interface for HIVE queries

Support HBase as NoSQL columnar database on Azure Blobs

Support Storm as stream processing



Publish-subscribe data
distribution

Managed PaaS (Platform
as a Service) solution

Azure Event Hubs

Scales with your needs to
millions of events per
second

Provides a durable buffer
between event publishers
and event consumers

Azure Stream Analytics

Process real-time data in Azure using a simple SQL language

Consumes millions of real-time events from Event Hub collected from devices, sensors, infrastructure, and applications

Performs time-sensitive analysis using SQL-like language against multiple real-time streams and reference data

Outputs to persistent stores, dashboards or back to devices

lightsensor PREVIEW

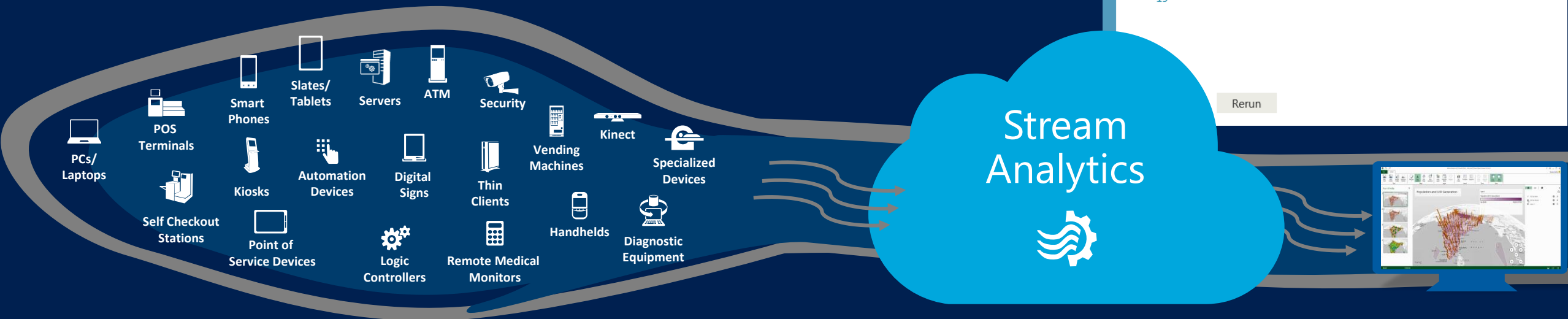
[DASHBOARD](#) [MONITOR](#) [INPUTS](#) [QUERY](#) [OUTPUT](#) [SCALE](#) [CONFIGURE](#)

query

Query can't be edited while a job is running.

```
1 SELECT
2   'LightSensor' AS alerttype,
3   dsp1 AS dsp1alert,
4   'The Light is turned OFF' AS message,
5   MAX(time) AS timestart
6 FROM
7   StreamInput TIMESTAMP BY time
8 GROUP BY
9   HoppingWindow(DURATION(s, 5), HOP(s, 5)),
10  dsp1
11 HAVING
12   AVG(light) < 0.02
13   AND COUNT(*) >= 2
14
15
```

Rerun



Azure Data Factory

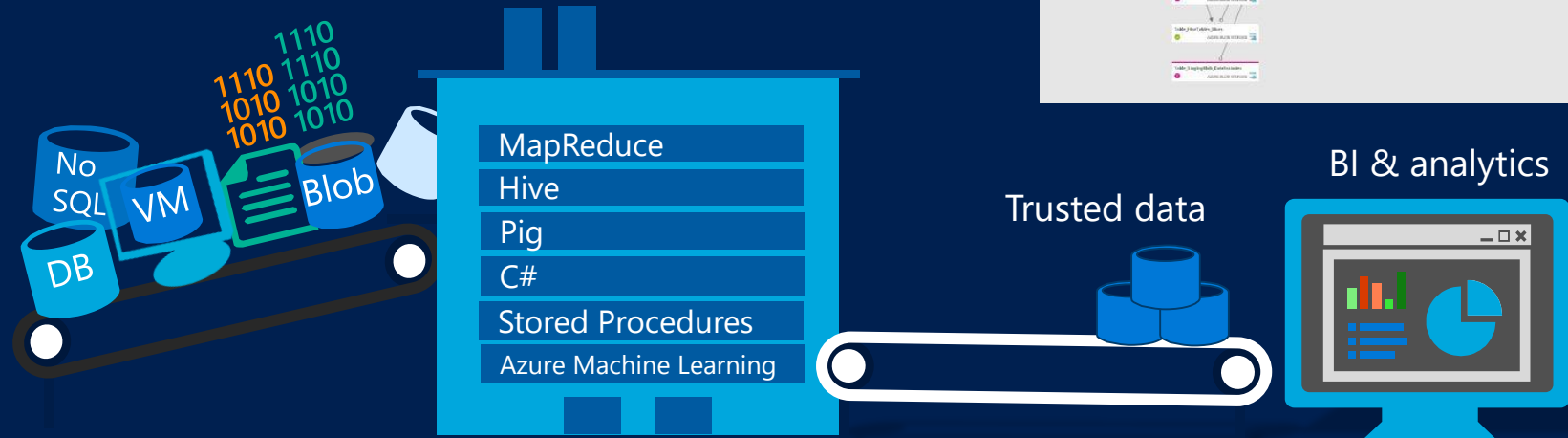
Compose and orchestrate data services at scale

Fully managed service to support orchestration of data movement and processing

Connect to relational or non-relational data that is on-premises or in the cloud

Single pane of glass to monitor and manage data processing pipelines.

Publish to Power BI



Azure Machine Learning

Powerful predictive analytics in Azure

ML Algorithms are best of breed and embrace OSS

- MS + R + Python + BYOA

ML Studio for productive development

- Faster experiments results in faster improvements
- Visual Workflows & ML Experiments

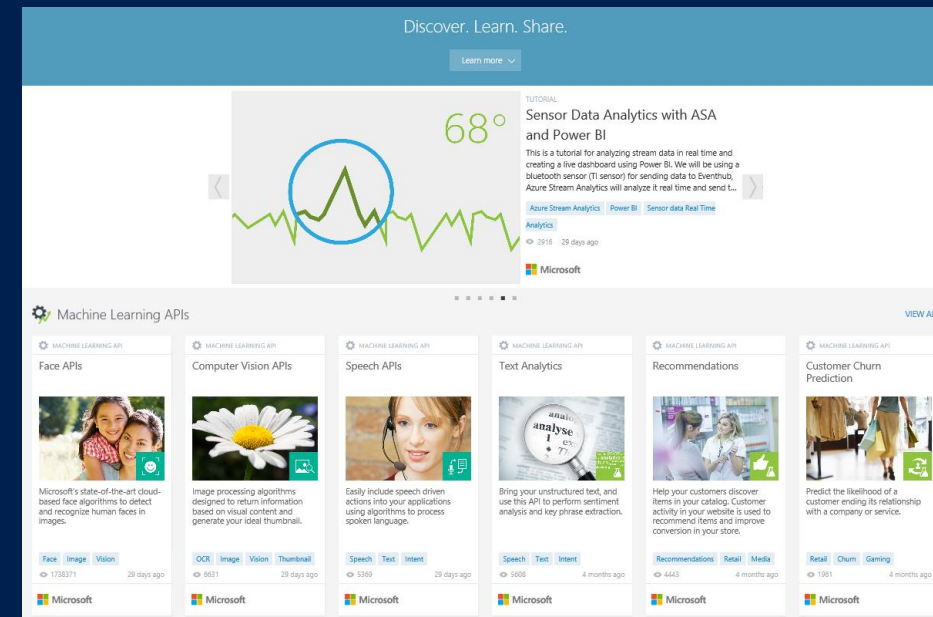
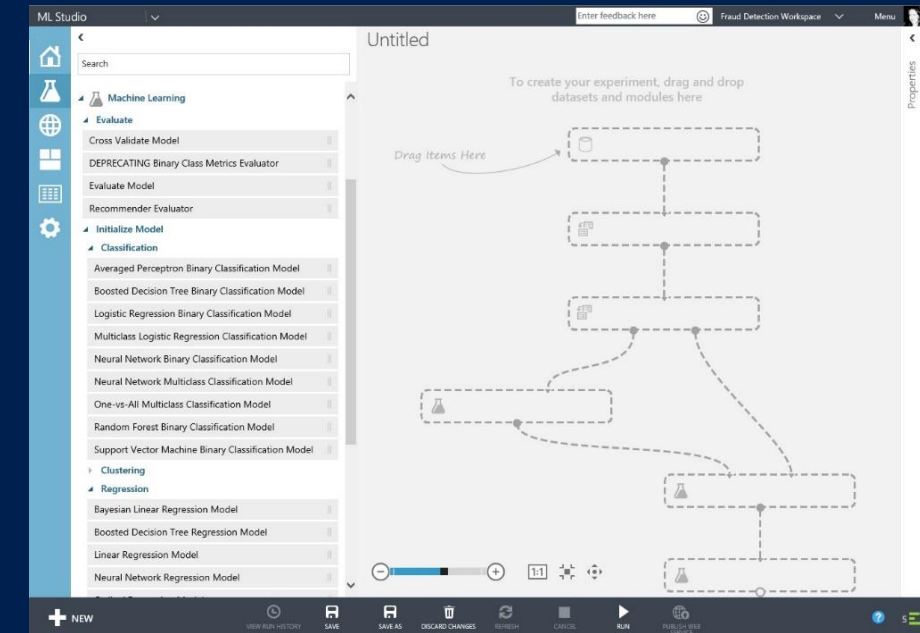
ML Operationalization to remove deployment friction

- Build entire ML Apps & Deploy as Cloud APIs

ML Gallery

- Provide ML applications like apps in an 'app store'
- Publish/consume APIs in a 2 sided market

Help organizations eliminate undifferentiated heavy lifting



Azure Data Catalog

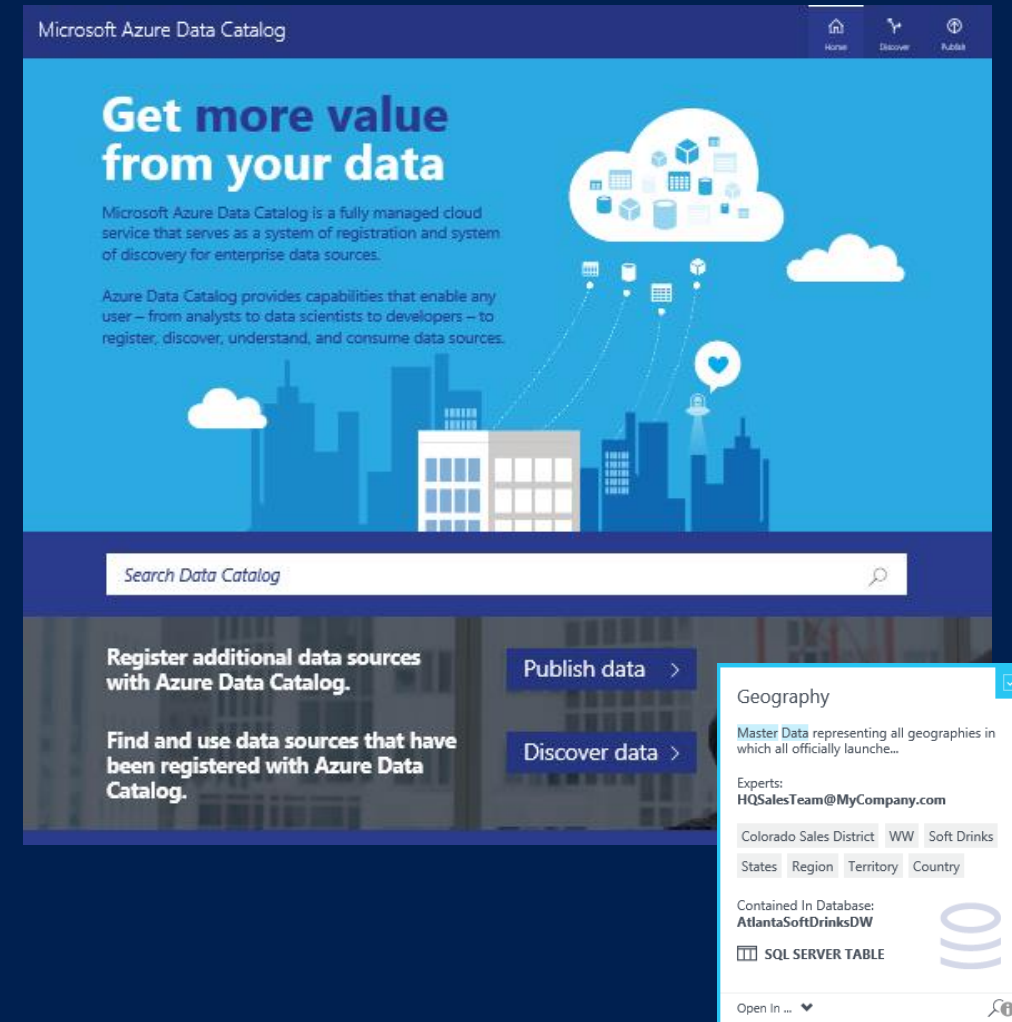
Enable enterprise-wide self-service data source registration and discovery

A metadata repository that allow users to register, enrich, understand, discover, and consume data sources

Delivers differentiated value though

- **Data source discovery**; rather than data discovery
- Support for data from **any source**; Structured and unstructured, on premises and in the cloud
- Publishing, discovery and consumption through **any tool**
- **Annotation crowdsourcing**: empowering any user to capture and share their knowledge.

This, while allowing IT to maintain control and oversight



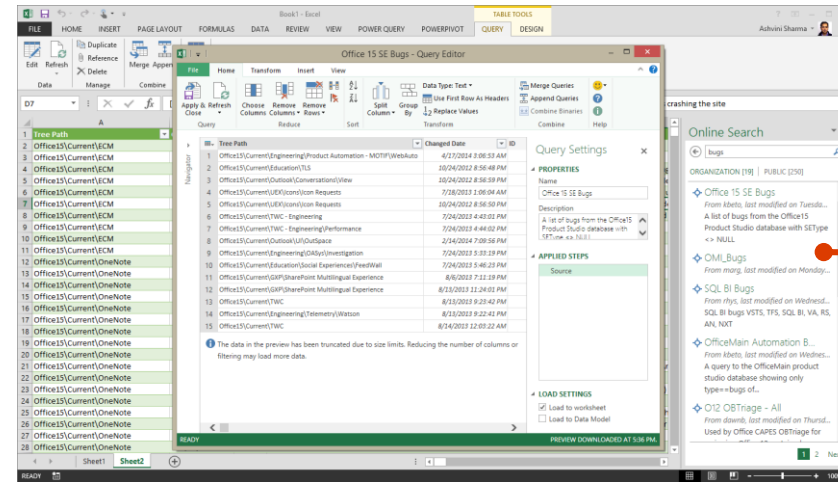
Excel BI Investments

Power Map with custom maps allows deeper geospatial explorations and storytelling

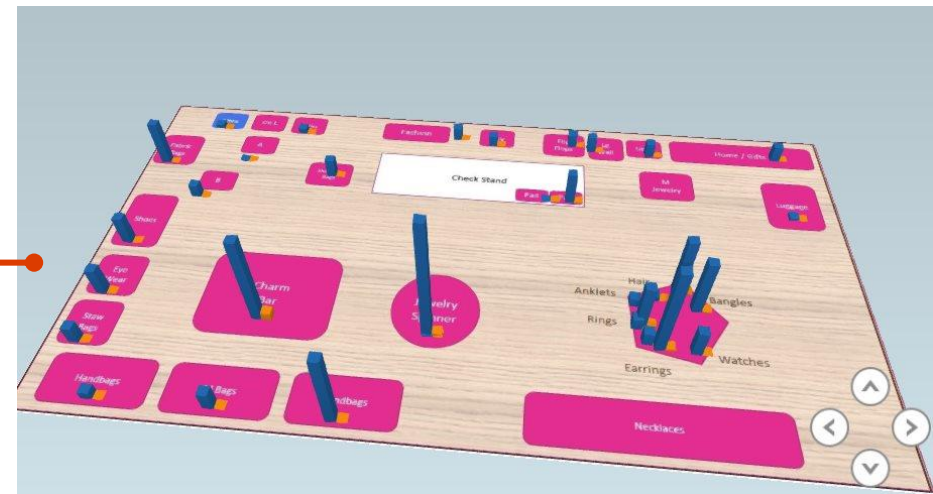
Power Query brings modern data discovery, connectivity, shaping and publishing to Excel

Analysis Services connectivity for Power View allows users to leverage existing IT investments

Support for more sophisticated data models in Power Pivot – date and calc tables, many-to-many relationships, etc



Power Query



Power Map
w/ Custom
Maps

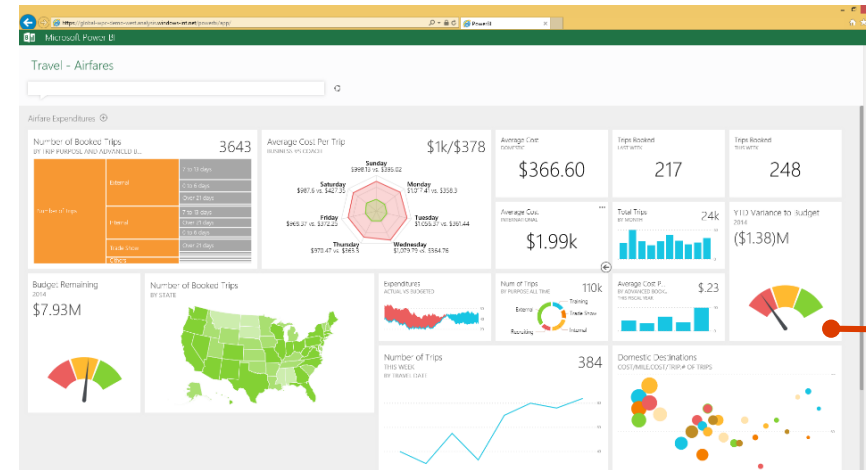
Power BI investments

Power BI dashboards and KPIs for monitoring the health of your business

New data visualizations and touch-optimized exploration in HTML5

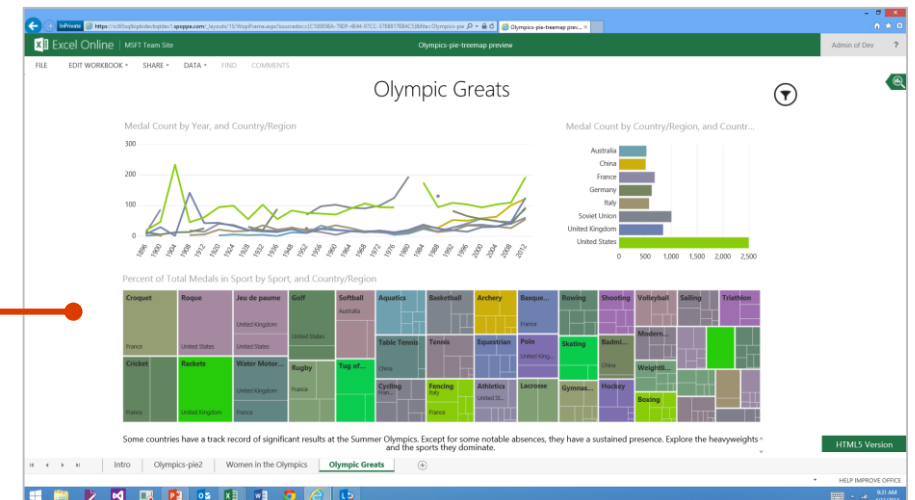
Power BI mobile apps across devices including iPad and iPhone

Support for new data sources including Salesforce.com, Dynamics CRM online and SQL Server Analysis Services



Dashboard

Tree Map



Introducing Azure Data Lake Store

A **hyper scale repository for big data analytic workloads**

Built for Hadoop

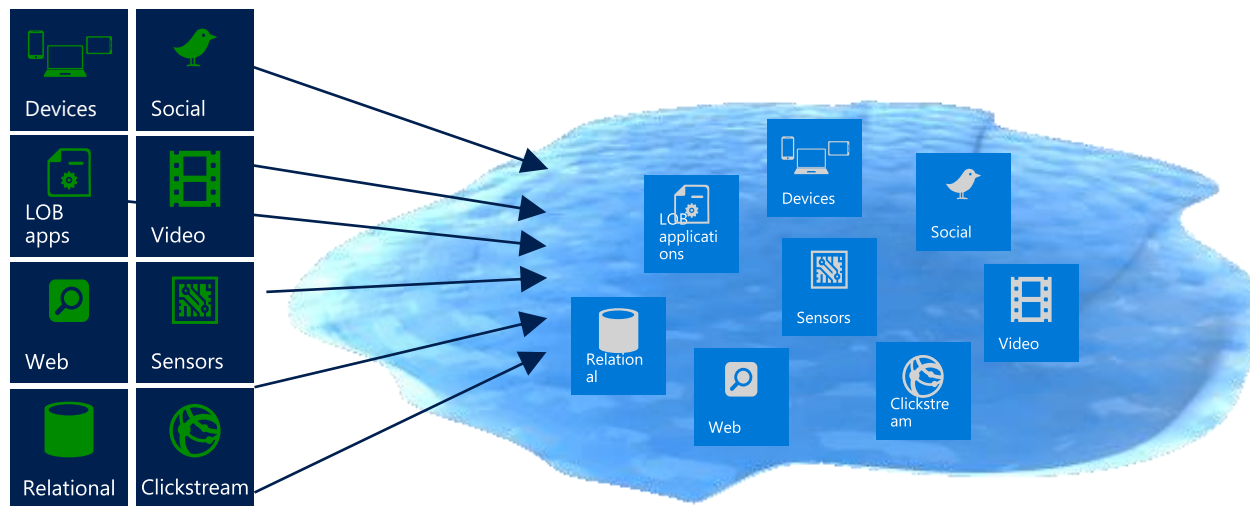
- Hadoop File System compatible with HDFS™
- Integrated with HDInsight, Revolution R, Hortonworks, Cloudera
- Based on YARN

Hyper Scale, Massive throughput

- Petabyte-sized files
- No size limits to data in single account
- Massive throughput to increase performance

Enterprise Ready

- AAD based access control
- Data management



Azure Data Lake Analytics Service

A new distributed
analytics service

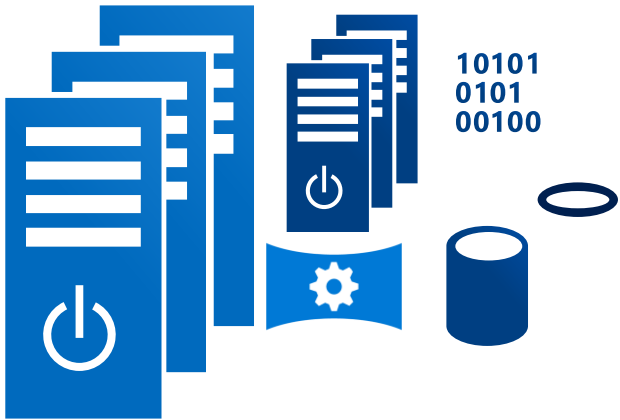


- ⚡ Built on **Apache YARN**
- ⚡ **Scales dynamically** with the turn of a dial
- ⚡ **Pay by the query**
- ⚡ Supports **Azure AD** for access control, roles, and integration with on-prem identity systems
- ⚡ Built with **U-SQL** to unify the benefits of SQL with the power of C#
- ⚡ Processes data **across Azure**

Introducing Azure SQL Data Warehouse Service

- A relational **data warehouse-as-a-service**, fully managed by Microsoft
- Scales to petabytes of data, based on massively parallel processing architecture
- First **elastic** cloud data warehouse with **enterprise-grade** capabilities and **dynamic pause**

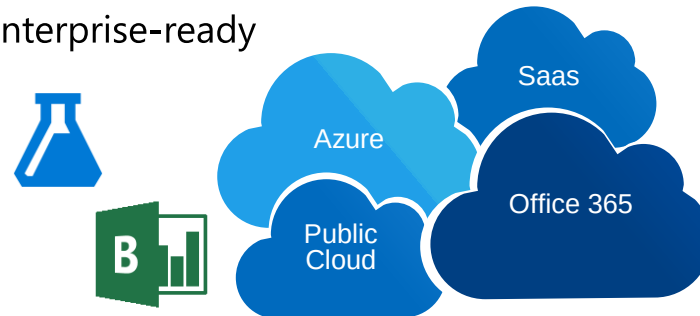
Elastic scale & performance



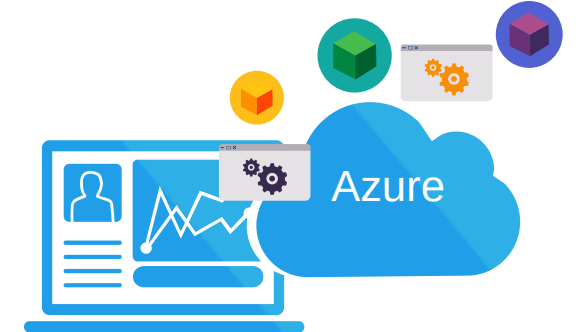
Scales to petabytes of data
Massively parallel processing
Instant-on compute scales in seconds
Query relational & non-relational

Powered by the Cloud

Get started in minutes
Integrated with Azure ML, Power BI & ADF
Enterprise-ready

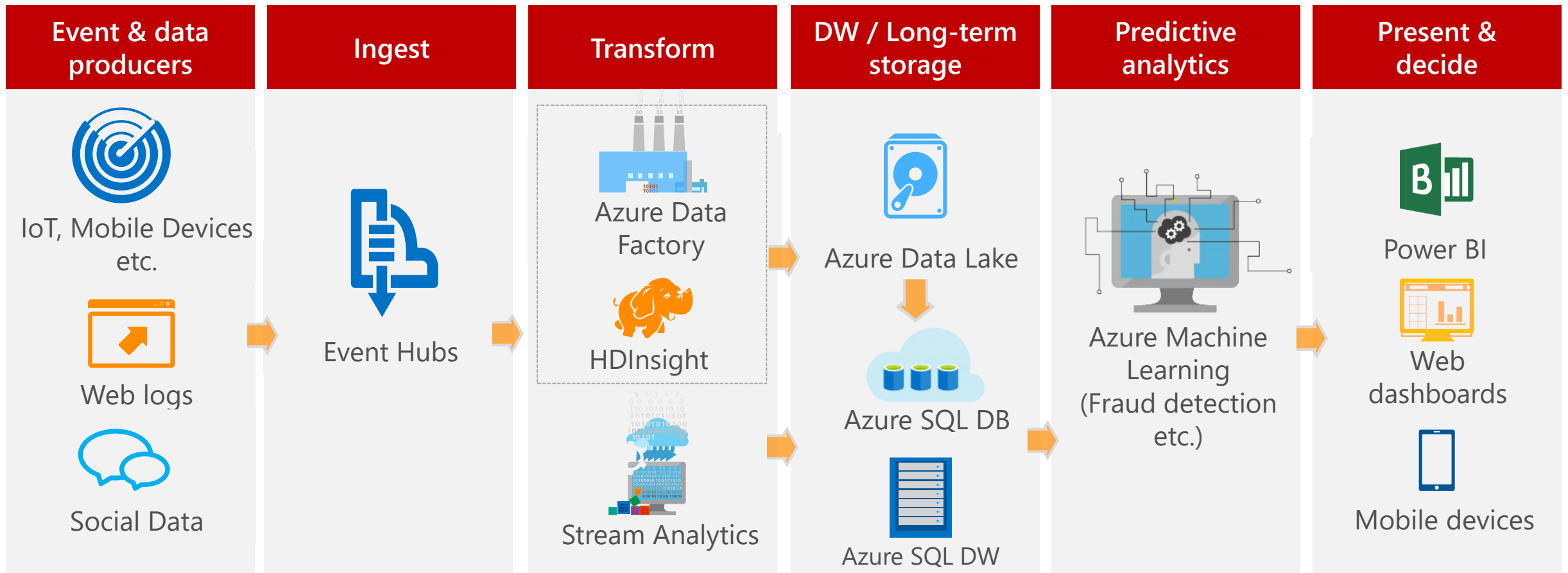


Market Leading Price & Performance



Simple billing compute & storage
Pay for what you need, when you need it with dynamic pause
Bring DW to the Cloud without rewriting

Example overall data flow and Architecture





The Internet of Things – Manufacturing



MANUFACTURING PLANT

Monitor production flow in near-real time to eliminate waste and unnecessary work in process inventory.

Manage equipment remotely, using temperature limits and other settings to conserve energy and reduce costs.

Implement condition-based maintenance alerts to eliminate machine down-time and increase throughput.

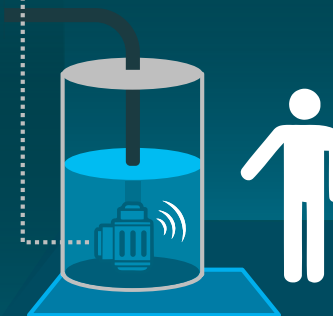
Aggregate product data, customer sentiment, and other third-party syndicated data to identify and correct quality issues.

GLOBAL FACILITY INSIGHT



CUSTOMER SITE

Transmits operational information to the partner (e.g. OEM) and to field service engineers for remote process automation and optimization.



Provide cross-channel visibility into inventories to optimize supply and reduce shared costs in the value chain.



GLOBAL OPERATIONS

Management



I can see my production line status and recommend adjustments to better manage operational cost.

R&D



I gain insight into usage patterns from multiple customers and track equipment deterioration, enabling me to reengineer products for better performance.

Field Service



I know when to deploy the right resources for predictive maintenance to minimize equipment failures and reduce service cost.



THIRD-PARTY LOGISTICS

Cortana Analytics Preconfigured Solutions

From zero to finished, analytical apps and scenarios

Pre-Configured Solutions designed to help customers jumpstart the creation of analytics solution

Allows customers to accelerates the process of building analytical apps

Go from zero to sample app in minutes, from sample app to finished solution in a week



Customer Churn



Product Recommendation



Sentiment Analysis

Project Oxford



Welcome to Microsoft Project Oxford

An evolving portfolio of REST APIs and SDKs enabling developers to easily add intelligent services into their solutions to leverage the power of Microsoft's natural data understanding



Face APIs

BETA

See your users with Face Detection and Recognition



Speech APIs

BETA

Communicate with your users with speech recognition and synthesis powered by Bing



Computer Vision APIs

BETA

Understand images and generate thumbnails



Language Understanding Intelligent Service (LUIS)

Invite only

Understand natural language commands tailored to your application

Azure ML Gallery

 Machine Learning APIs VIEW ALL

 MACHINE LEARNING API

Face APIs



Microsoft's state-of-the-art cloud-based face algorithms to detect and recognize human faces in images.

Face

Image

Vision

 1779465

3 months ago



 MACHINE LEARNING API

Computer Vision APIs



Image processing algorithms designed to return information based on visual content and generate your ideal thumbnail.

OCR

Image

Vision

 8288

13 days ago



 MACHINE LEARNING API

Text Analytics



Bring your unstructured text, and use this API to perform sentiment analysis and key phrase extraction.

Speech

Text

Intent

 7277

13 days ago



 MACHINE LEARNING API

Speech APIs



Easily include speech driven actions into your applications using algorithms to process spoken language.

Speech

Text

Intent

 6137

13 days ago



 MACHINE LEARNING API

Recommendations



Help your customers discover items in your catalog. Customer activity in your website is used to recommend items and improve conversion in your store.

Recommendations

Retail

Media

 5605

13 days ago



 MACHINE LEARNING API

Customer Churn Prediction



Predict the likelihood of a customer ending its relationship with a company or service.

Retail

Churn

Gaming

 2521

13 days ago



Summary

Cortana Analytics Suite

- Comprehensive offer for our Big Data and AA cloud portfolio
- Enables a broad class of business specific scenarios
- Integrates with investments in Perceptual Intelligence & Cortana
- Customers can get going in individual services today
- Available to transact as a simple monthly subscription

How do you get started?

microsoft.com/cortanaanalytics

Learn More on the Main Page

Microsoft.com/cortanaanalytics

Try CA services today

Microsoft.com/cortanaanalytics

Links on “What’s Included” page

Find (or become) a trained partner

cortanaanalyticspartners.microsoft.com

Stay tuned to our blog

<http://blogs.technet.com/b/machinelearning/>

Q&A