

Muhammad Ibnu Fadhil

About Me

Muhammad Ibnu Fadhil Coder.Entrepreneur T: @mifmasterz / @gravicode

Founder of PT Gravicode Multinovative Plexindo

Initiator of Gadgeteer Indonesia https://www.facebook.com/netgadgeteerindonesia

Contributor in Makers.ID http://makers.id



Agenda Trends Opportunities Solutions Directions

Tech Trends: What's next?

- 80's Computer Faster Processing
 - 90's Software Productivity
 - 00's Web Information Retrieval
 - 10's Mobile App Store



Technology Singularity

It's possible because...

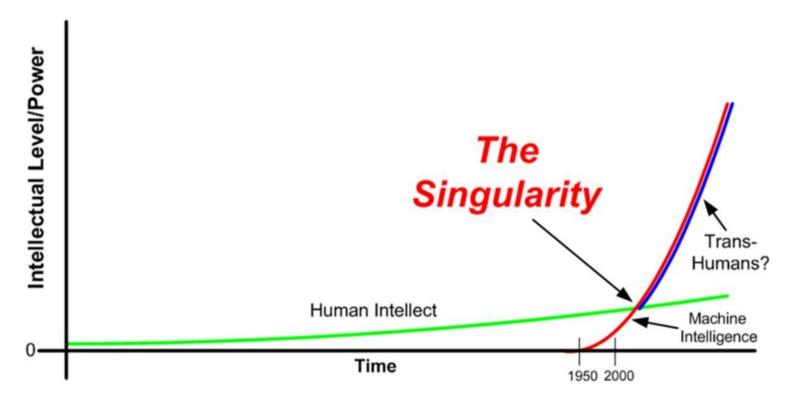


Data Everywhere

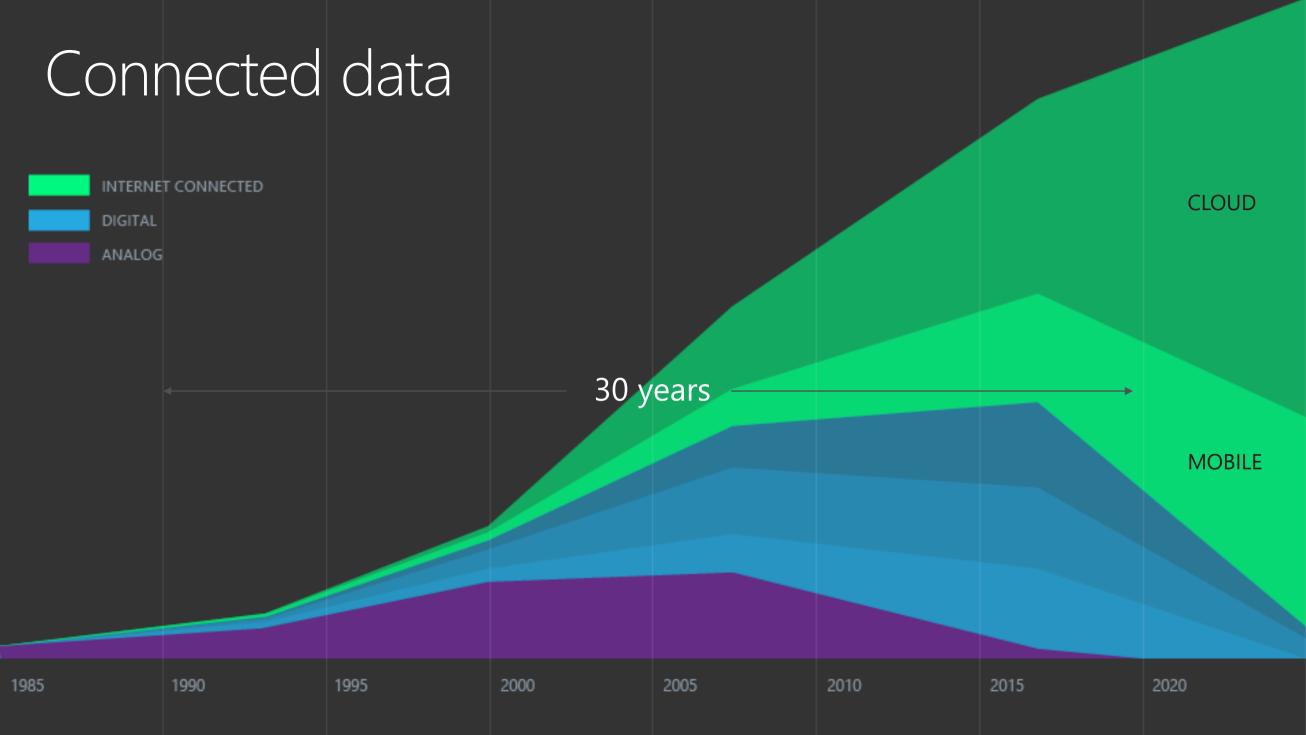
All Connected because of Web

Well Organized
Data and API

Faster Processing

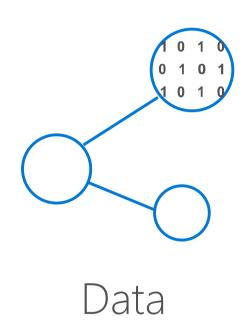


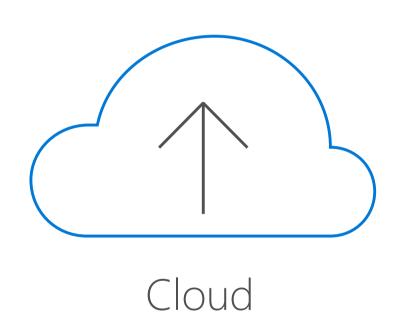
^{*} https://en.wikipedia.org/wiki/Predictions_made_by_Ray_Kurzweil

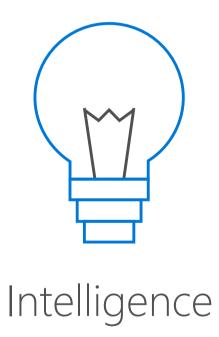


Connected data Machine learning Any data INTERNET CONNECTED In-memory CLOUD DIGITAL ANALOG Operational reporting Interactive Dashboards Ad hoc analysis Hadoop **MOBILE** Transactional systems Complex implementations ETL Spreadmarts OLAP Siloed data Enterprise data warehouse 1990 1995 2000 2005 2010 2015 1985 2020

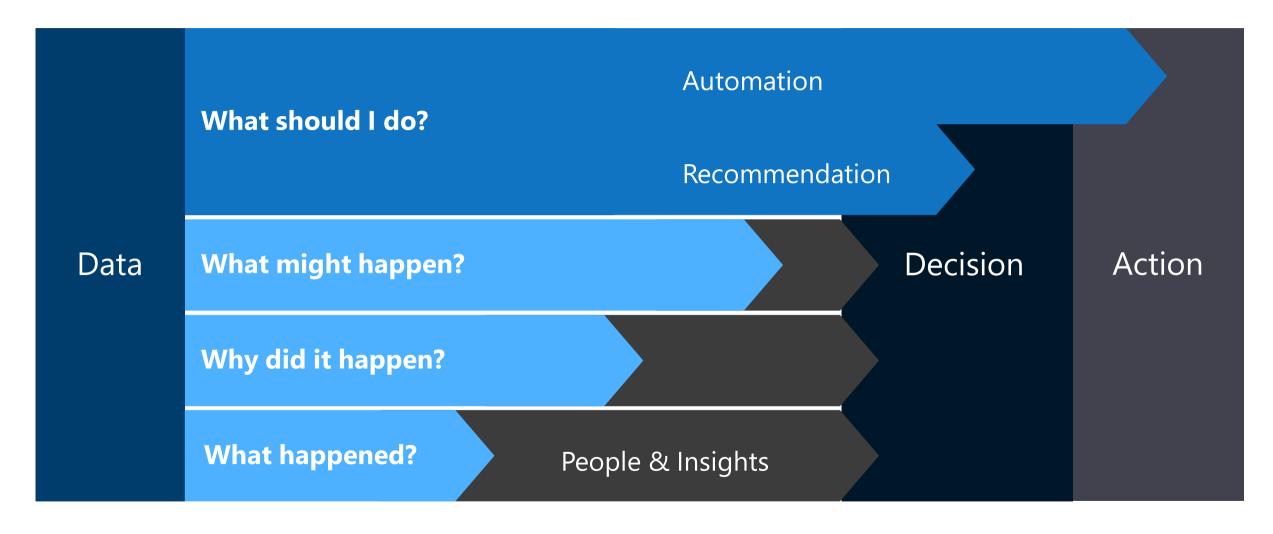
Three major trends converging



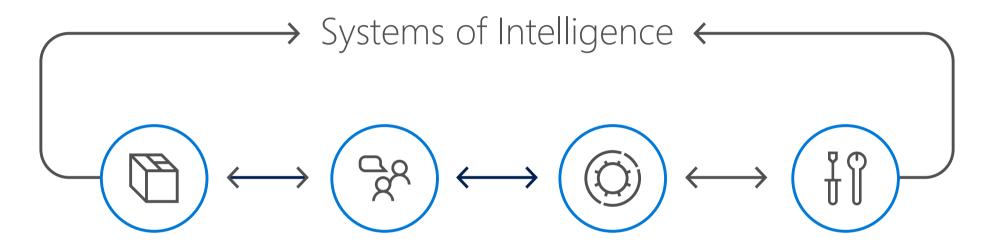




Big Data + Predictive Analytics = Business Value



Transforming key aspects of business



Transform your products

Engage your customers

Optimize your operations

Empower your employees

Data is a key strategic asset

\$1.6

Additional business value captured by companies that are leaders in using data assets to their advantage

Source: IDC, 2014

10%

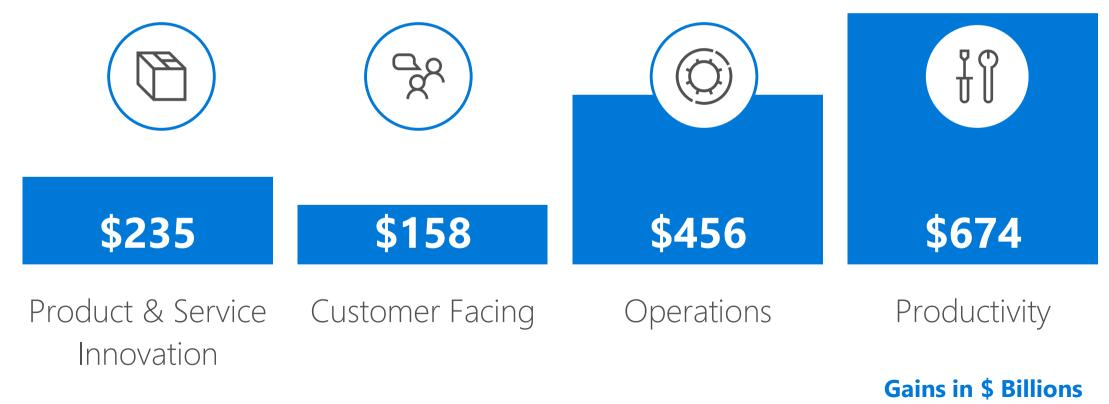
Percent of organizations expected to have a highly profitable business unit specifically for productizing and commercializing their data by 2020

Source: Gartner, 2016

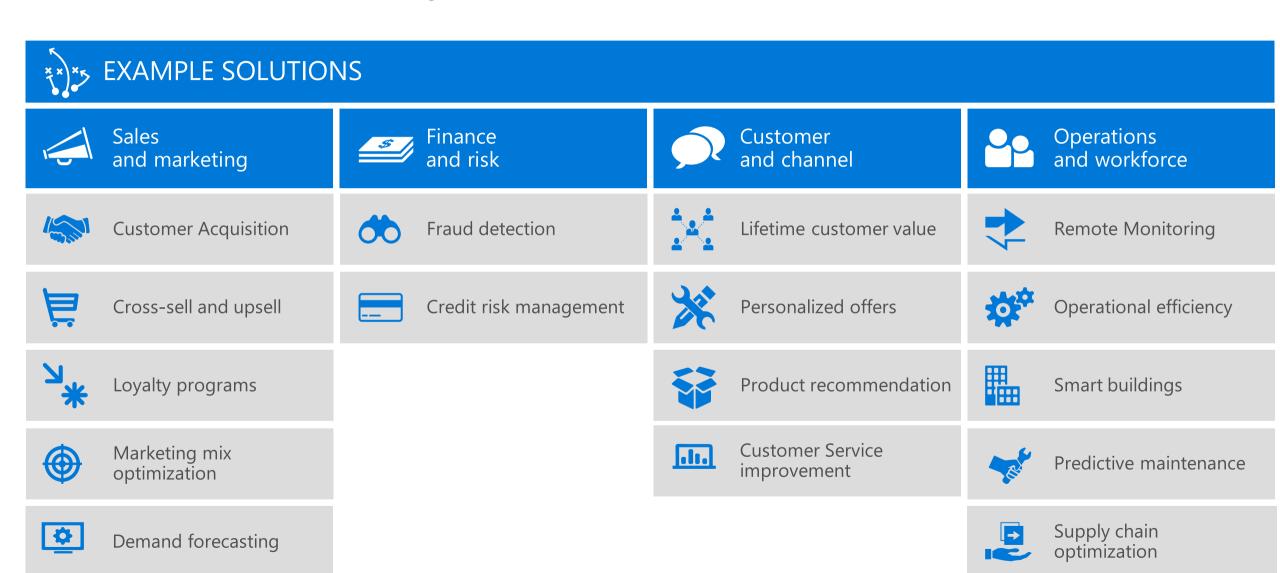
Capitalizing on a 1.6 trillion \$ data dividend

Data Dividend

Incremental Gains Made by Leaders in Data and Analytics



Advanced Analytics scenarios



Industries applying advanced analytics



Retail & Consumer Products



Financial Services & Insurance



Government



Manufacturing



Healthcare



Success requires convergence of skills



Barriers to analytics adoption

Talent Scarcity

- Academic Rigor
- Talent Competition

Low Productivity

- Integration Complexity
- Tool, Skill & Culture Gaps

Complex Infrastructure

- Data Volume, Diversity
- Security & Governance Constraints
- Rapid Platform Evolution

Slow Innovation

- Low Experimentation Rate
- Complex Operationalization

High Cost

- Legacy Products
- Irregular Workload

Earning our credibility

We needed to leverage data and analytics to grow our products.

Key Innovation...

More experiments by more people!

So we...

Built an Exabyte-scale data lake for everyone to put their data.

Built tools approachable by any developer.

Built machine learning tools for collaborating across large experiment models.

Using vastly accelerated experimentation cycles:







30% BETTER IN SPEECH AND GESTURE RECOGNITION

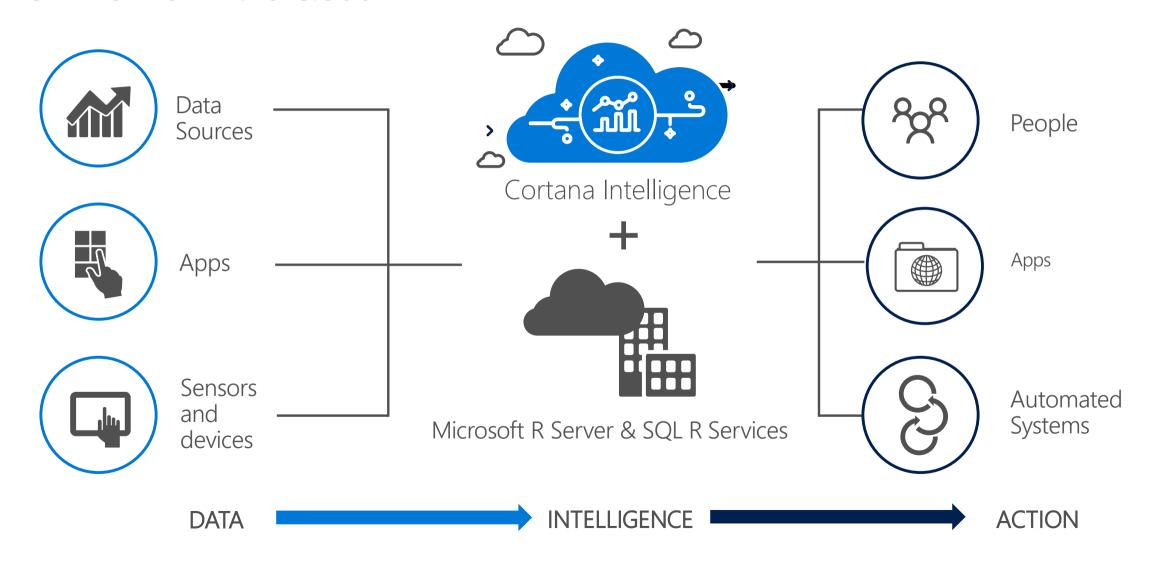


NEW CAPABILITIES LIKE OFFICE GRAPH & CLUTTER

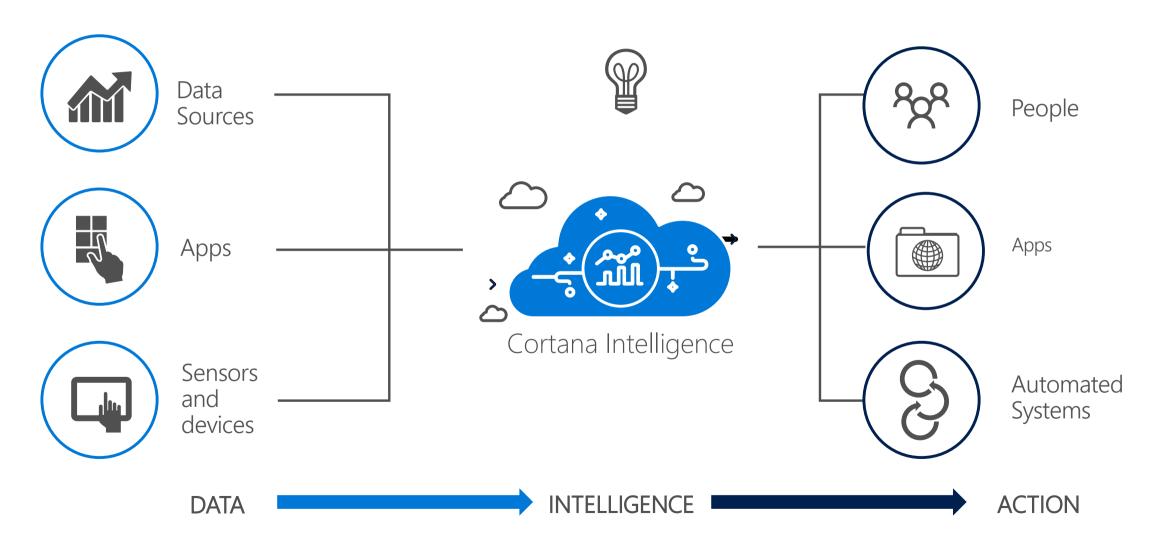


From data to intelligence to action

On Prem or in the Cloud



Cortana Intelligence Suite Transform data into intelligent action in the cloud



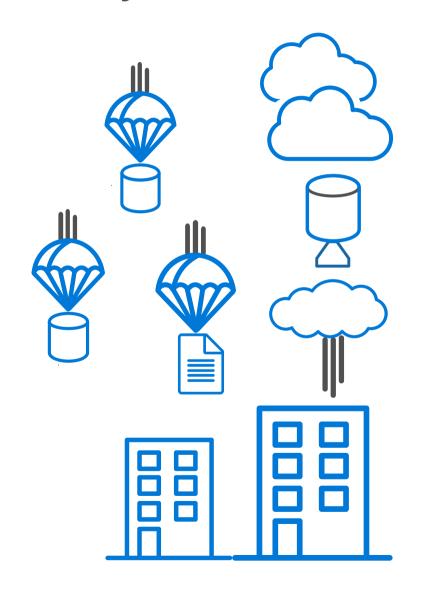
It combines relevant data from anywhere

Reduce costs by collecting, storing, and processing data in the cloud

Scale infinitely and manage planned or unexpected events with elastic data stores

Aggregate any type of data and connect information to wherever you need it

Aggregate any type of data and connect information to wherever you need it

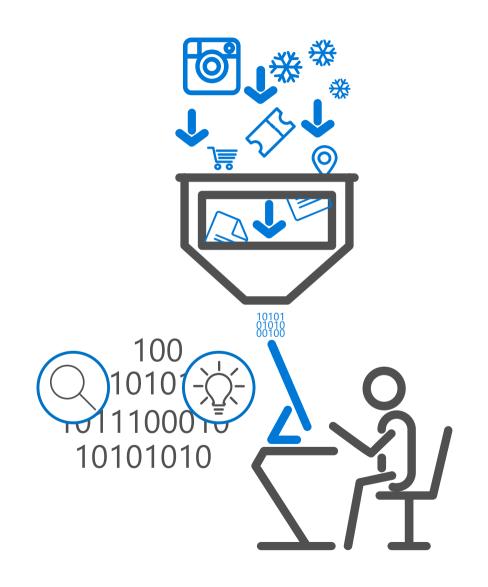


And leverages advanced analytics

Detect subtle patterns and insights by analyzing massive amounts of data from many sources

Shape new business outcomes by predicting what may happen in the future

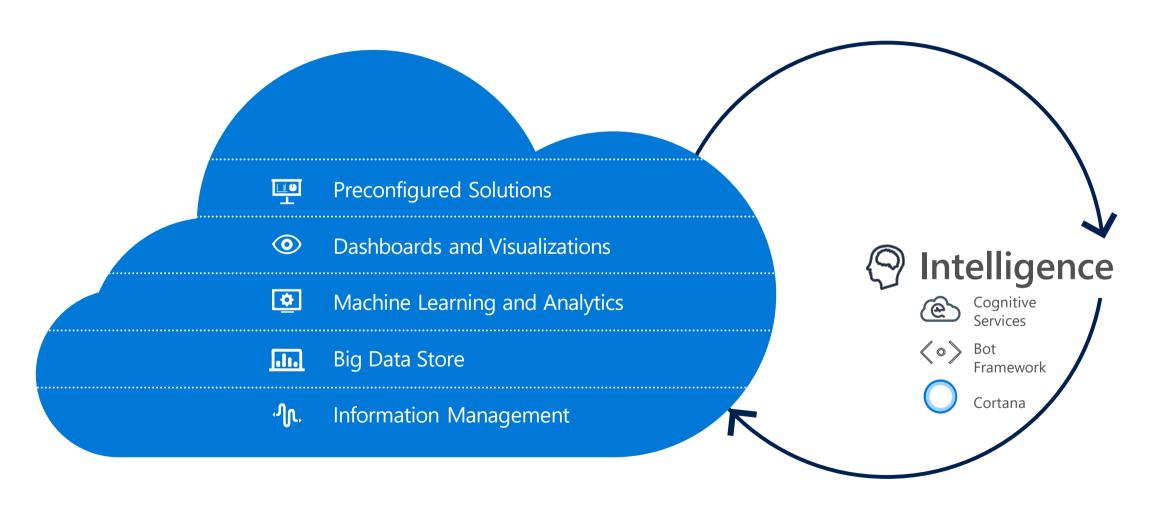
Automate decision-making to accelerate business and aid competitive advantage



Cortana Intelligence Suite Transform data into intelligent action

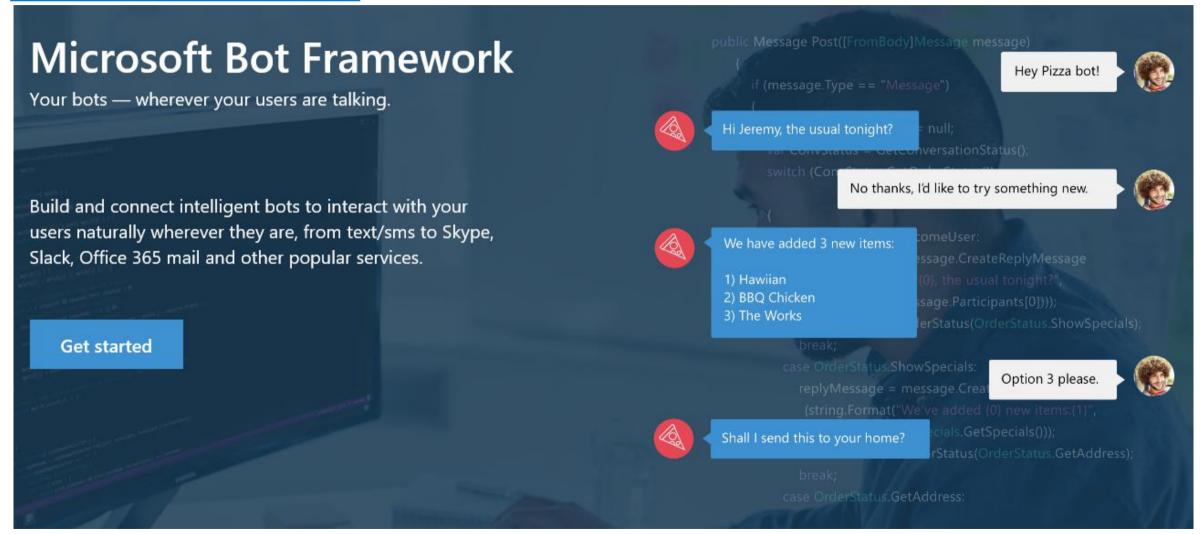


Cortana Intelligence Suite Transform data into intelligent action

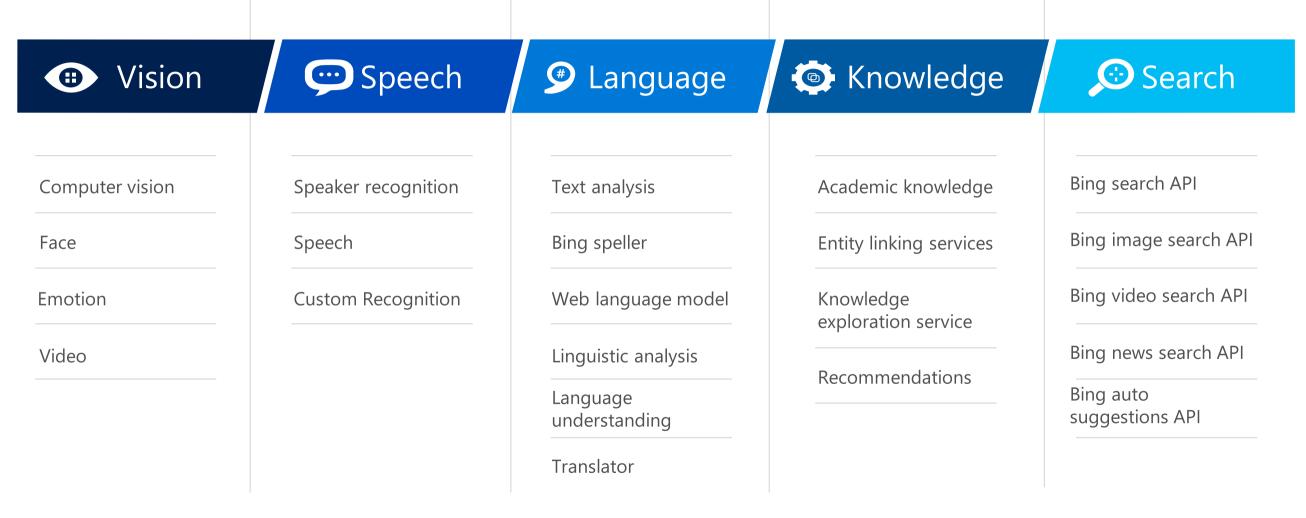


Bot Framework

www.botframework.com



Cognitive Services



http://gallery.cortananalytics.com

Face APIs



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

Computer Vision APIs



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

Text Analytics



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

Speech APIs



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

Along with innovative intelligence capabilities

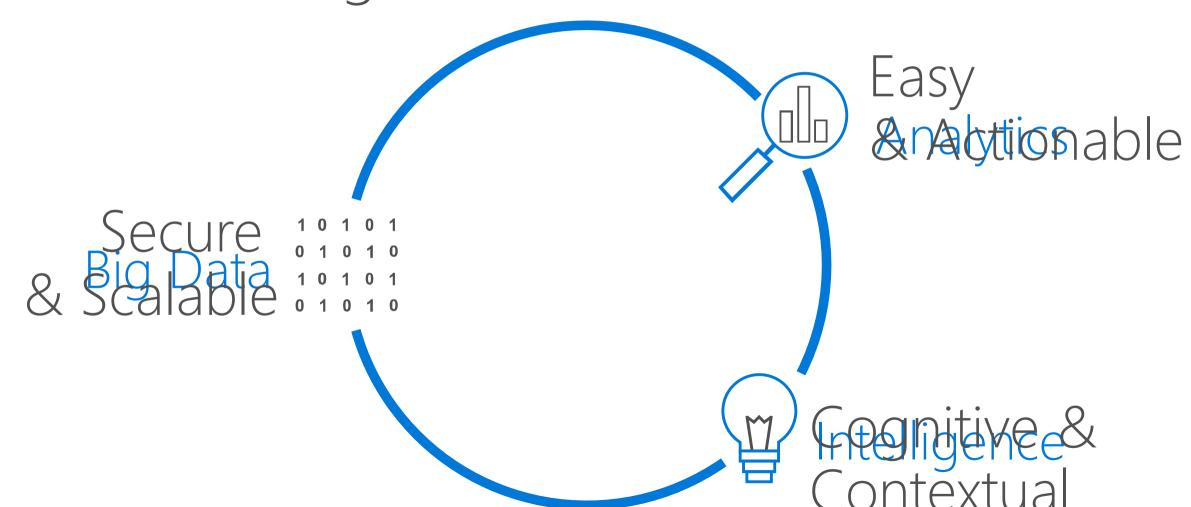
Learn more about your customers using speech, text, face and emotion analysis

Personalize customer interactions with intelligent agents that converse in contextual, natural ways

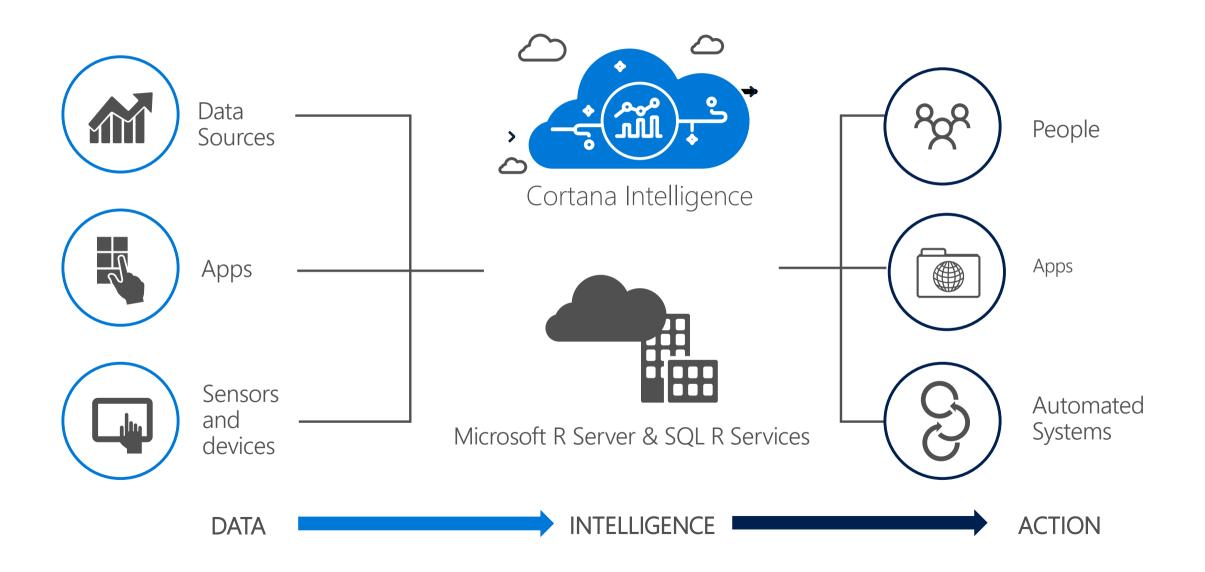
Build models that understand natural language and recognize what users want



Transform data into intelligent action with Cortana Intelligence

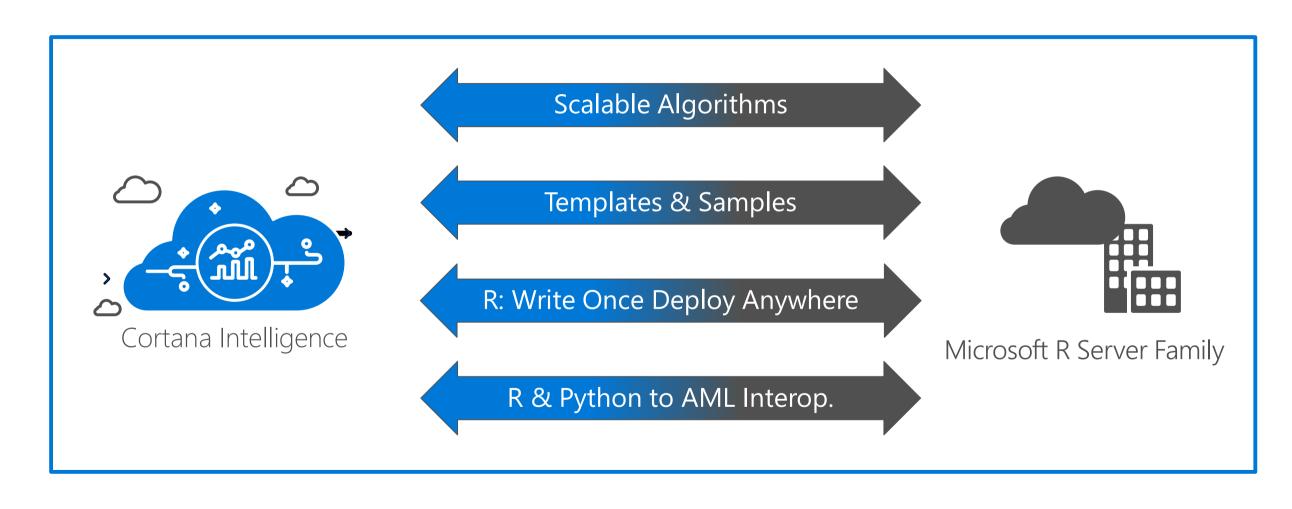


From data to decisions to action with Microsoft



Hybrid analytics platform

Convergence with Flexibility



Microsoft Advanced Analytics address barriers

Broaden The Talent Pool

- Democratize Data Science
- Skill Re-Use

Increase Productivity

- Transparent Scaling
- Facilitate Collaboration

Modernize Infrastructure

- Decouple Data Science from Platforms
- Leverage Hybrid Cloud Architecture

Maximize Innovation

- Accelerate Experimentation
- Streamline Deployment

Drive Down TCO

- Embrace Open Source
- Evolutionary Path to Cloud

Microsoft's roadmap for analytics

In 3 Years, we will help you achieve:

- Analytics-driven decision making
- Accelerated analytics lifecycle
- Dramatically lower analytics TCO
- Innovative uses of machine learning
- Continuity across cloud / on-prem environments



Demo Time!!

Demo 1: Make your own bot

Demo 2: How to create intelligence "app" assistant

Demo 3: Microsoft Translator

THANK YOU

Empower your business with intelligence app

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