

IBM Investor Briefing 2016



Cognitive Solutions

Dr. John E. Kelly III

IBM
Investor
Briefing
2016

Senior Vice President,
Cognitive Solutions and Research

Cognitive Solutions

\$17.8B

2015 Revenue

\$7.2B

2015 Pre-tax Income

Transformation Progress

Created integrated units with industry orientation

- Analytics, Security, Commerce

Expanded Watson Platform (2-3x)

- API's, languages, clients, partners, global footprint

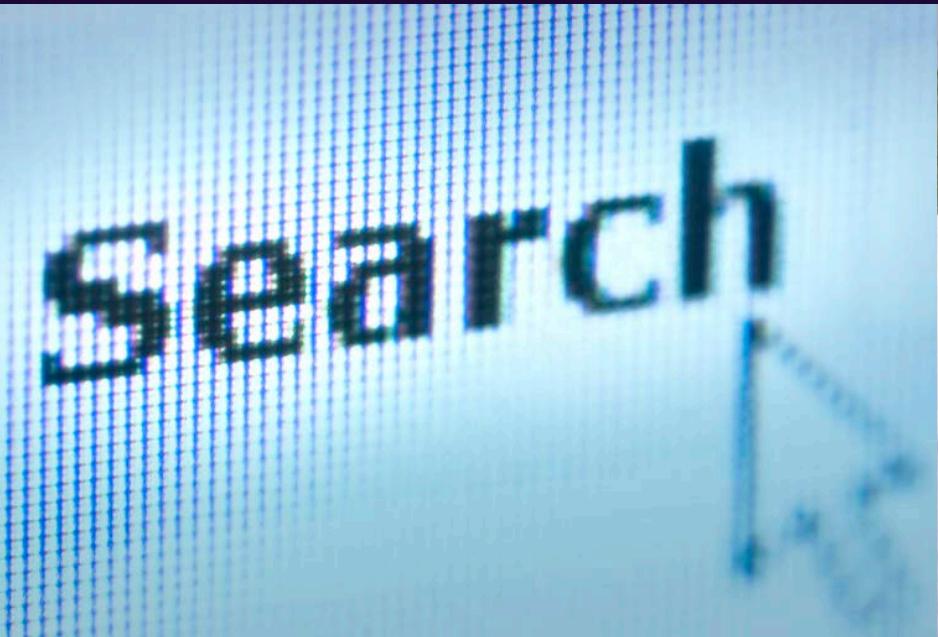
Built Watson Health Platform

- 4 acquisitions, 30+ partners

Established Watson IoT Platform

- Acquired The Weather Company

The way to
find information



The way to
make better decisions





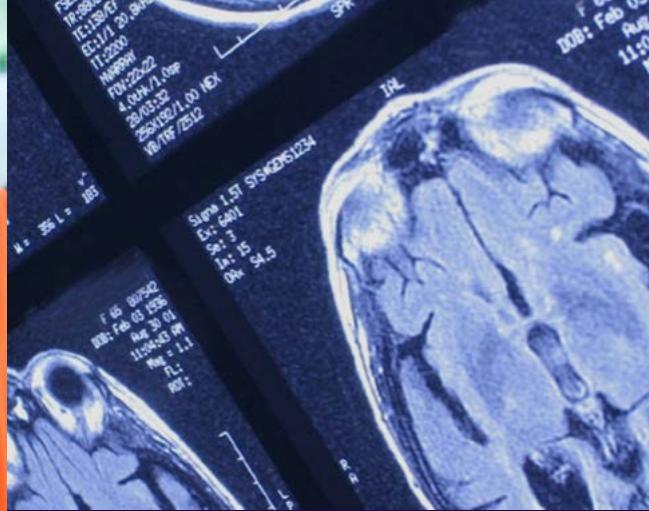
~\$12B

For a deep water project
in the Gulf of Mexico



>\$1T

Inaccurate retail
sales forecasting



~\$2T

Wasteful
healthcare spend

Cognitive opens new opportunities on top of traditional IT

**Opportunity for
decision-making
support
2025**

**Traditional global
IT spend
2016**



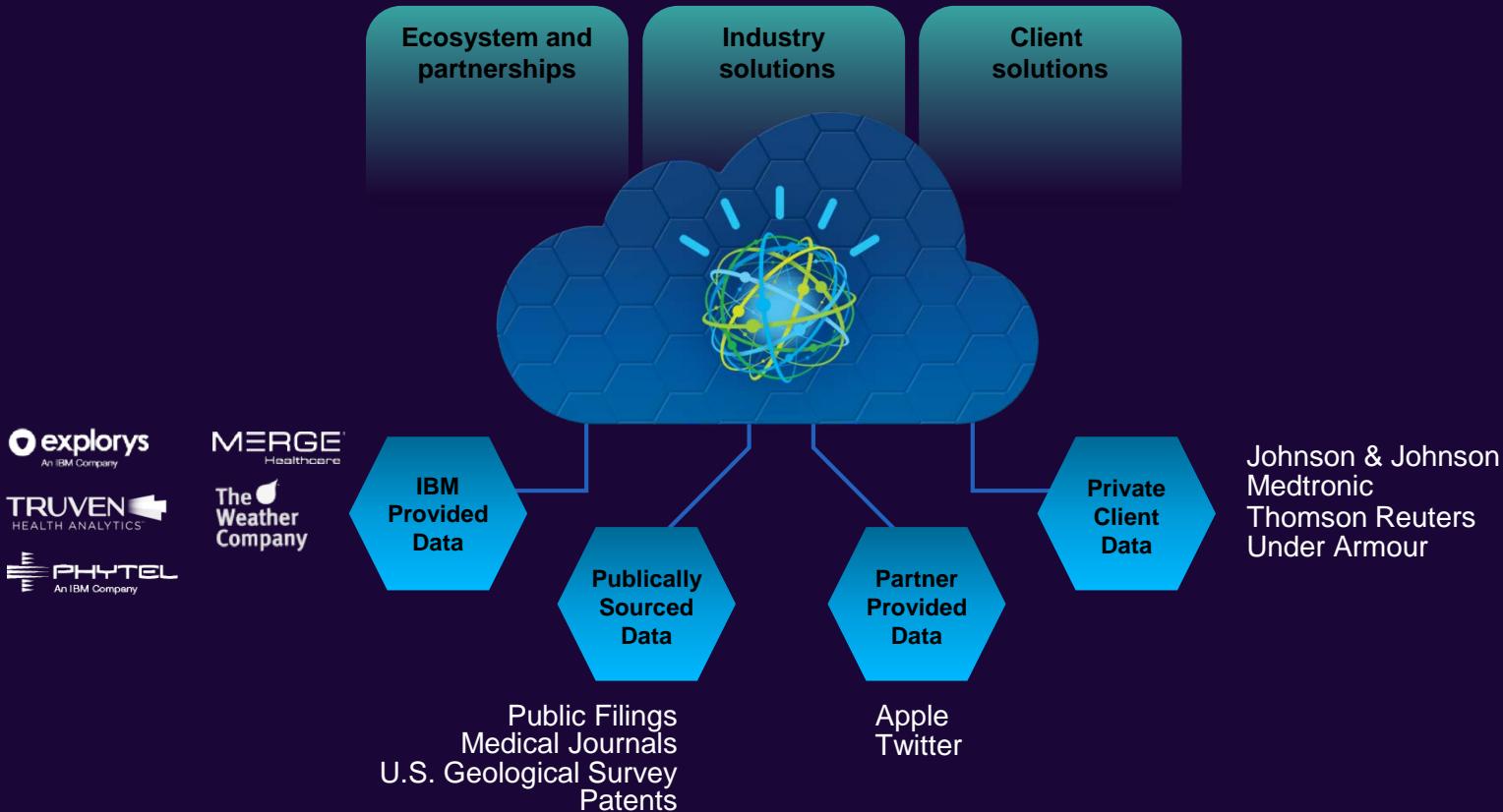
~\$2T

~\$1.2T

Cognitive is having an impact across industries



Innovation platform for Cognitive Business



Cognitive solutions bring about new revenue streams

Data access / Pay-per-Insight

Subscription (number of users)

Shared value with partners

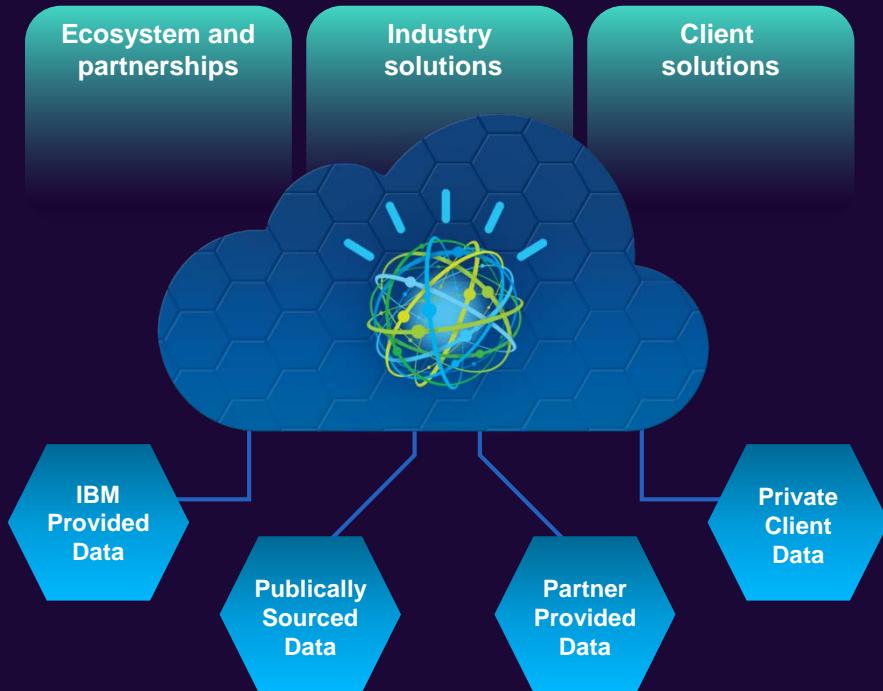
Revenue share (ecosystem)

Global partners (licensing)

:



IBM's advantage in the Cognitive era



Largest cognitive ecosystem

Deep domain expertise

Most powerful and scalable cognitive platform

Most essential industry datasets



David Kenny
General Manager,
IBM Watson Platform



Deborah DiSanzo
General Manager,
IBM Watson Health



Harriet Green
General Manager,
IBM Watson IoT,
Commerce and Education

IBM Watson

David Kenny

IBM
Investor
Briefing
2016

General Manager,
IBM Watson



100TB
ingested per day

2.2B
locations

15–26B
API requests per day

IBM Watson differentiation



Trust and Security



Expertise Learning

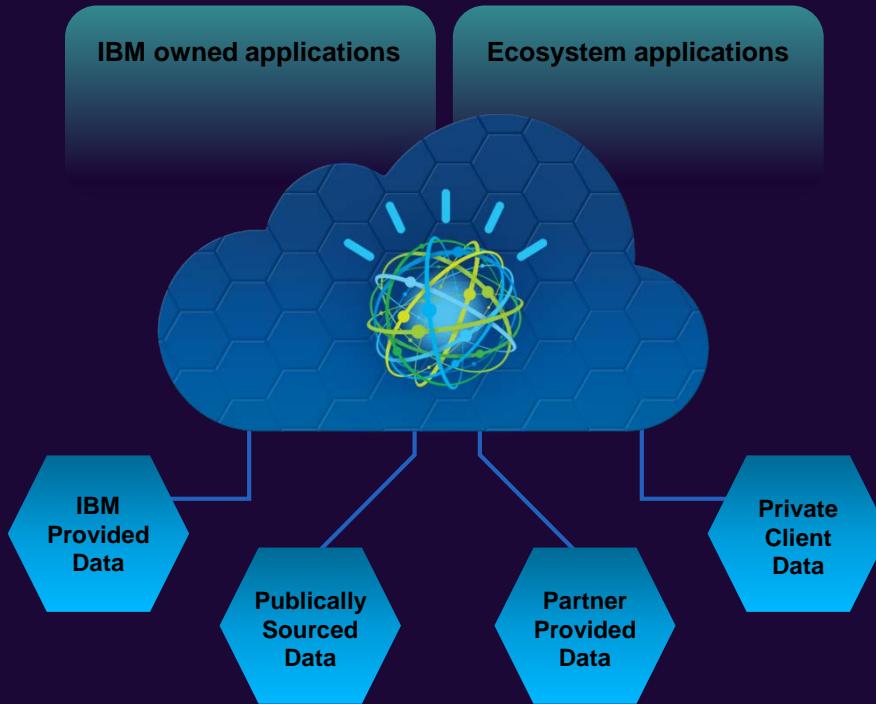


Domain Expertise



Cognitive Business Services

Watson-as-a-Service



Scaling IBM Watson

Ecosystem Partners

300%+ growth Yr/Yr



Clients

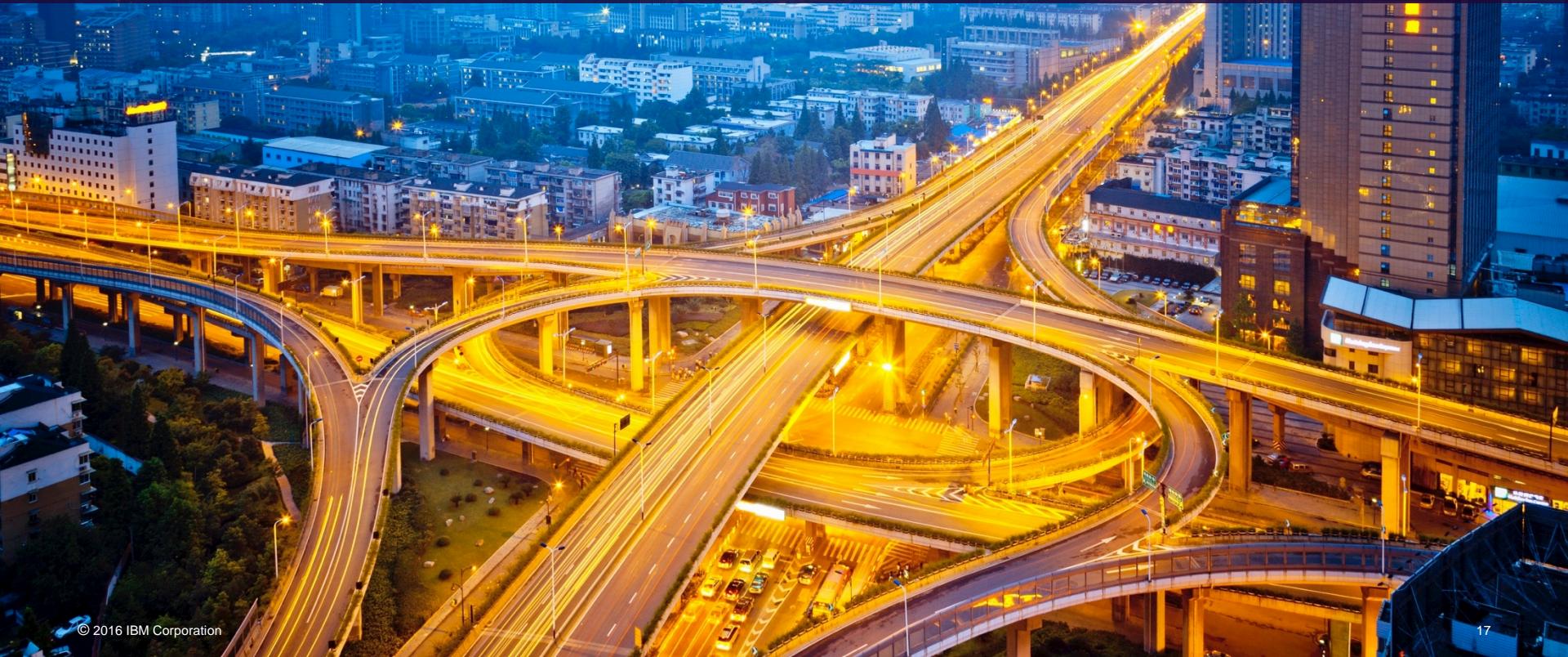
72% growth Yr/Yr



Mike Turillo

Co-Founder and Chairman of the Board

Inno360





Before Watson

Client sales cycle
6 - 9 months

PoC pricing per seat
Standard

Time to “upsell” to full license
Average 6 months

Pricing on standard license
\$100–150k / year

After Watson

Client sales cycle
3 weeks - 2 months

PoC pricing per seat
2x higher with Cognitive

Time to “upsell” to full license
1 month

Pricing on standard license
\$500k–\$2M





Before Watson

Decision making
Days of manual keyword searches through thousands of documents

Expertise Availability
Expertise and historical references isolated with the most experienced engineers

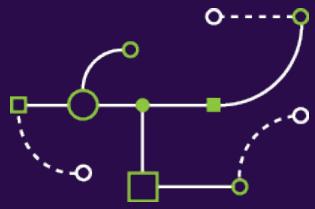
Cultural transformation
Knowledge base lost with employee retirement

After Watson

Decision making
In seconds, evidence-weighted insights from over 20K documents

Expertise Availability
Over 30 years of expertise at the fingertips of 1000+ engineers/staff

Cultural transformation
Corporate memory and legacy of experts emerged with open access for all



Science



Simplify



Scale

Building out Watson Health

Deborah DiSanzo

IBM
Investor
Briefing
2016

General Manager,
Watson Health

Healthcare disruption is underway

150+ exabytes

Amount of U.S. healthcare data³

50%

Expected alternative payments from the
Centers of Medicare and Medicaid by 2018⁵

\$47 trillion

Global economic impact of five leading
chronic diseases by 2030⁴

75%+

Percentage of patients expected to use
digital health services in the future⁶

The data and cognitive opportunity is significant

Global
healthcare
spending



Waste in
healthcare
spending

~\$8T

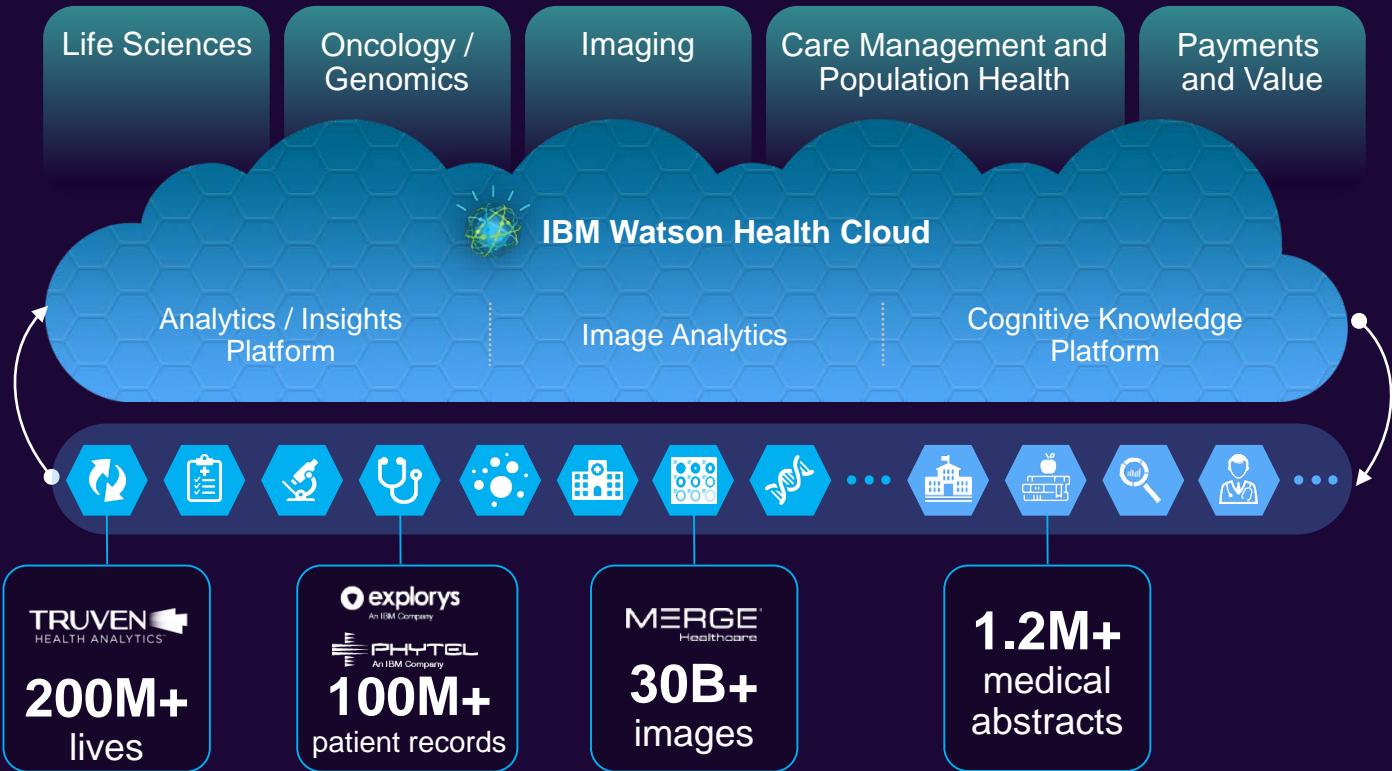
IBM
addressable
market

~\$200B

Health solutions
Life Sciences solutions

~\$2T

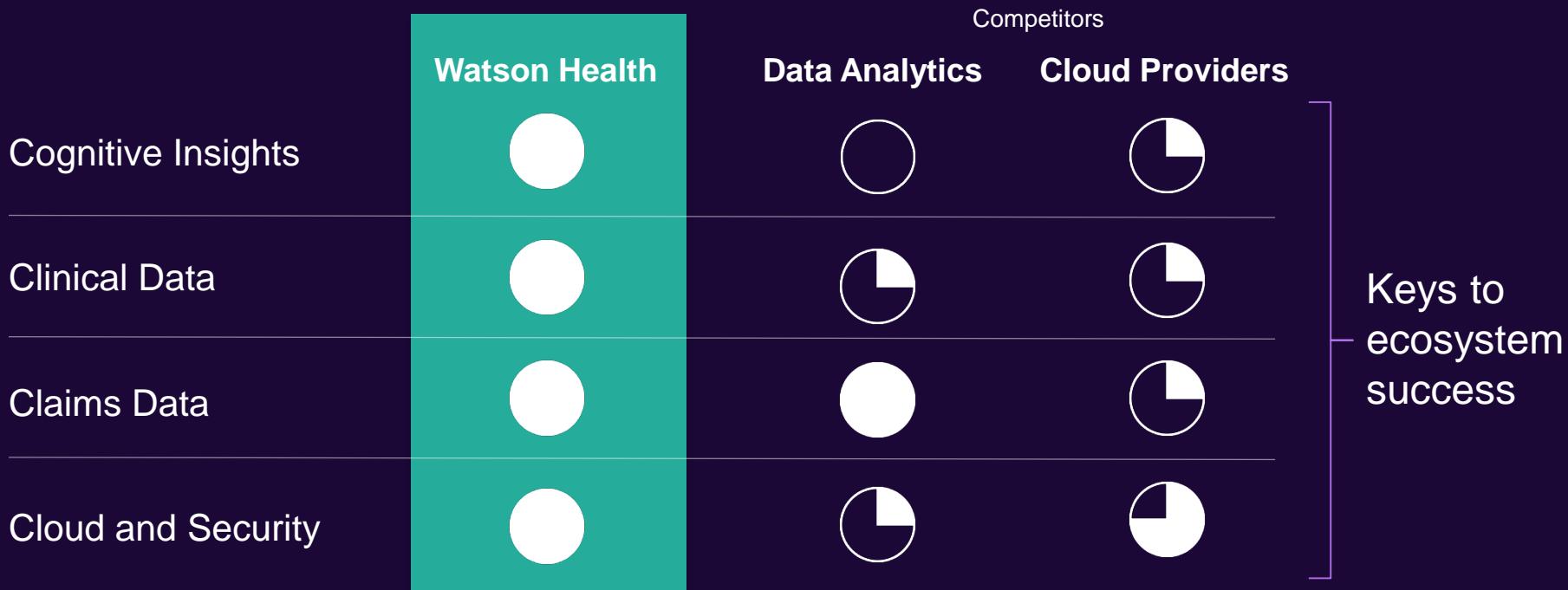
Watson Health Cloud: A platform for innovation



Watson Health is well-positioned to lead in the health market

Capabilities / Assets / Positions

Full circle = Leadership capability
Empty circle = Minimal / no capability



Watson oncology
solutions use
cognitive computing to
help doctors make
evidence-based
treatment decisions



Dr. Craig B. Thompson

President & Chief Executive Officer
Memorial Sloan Kettering Cancer Center

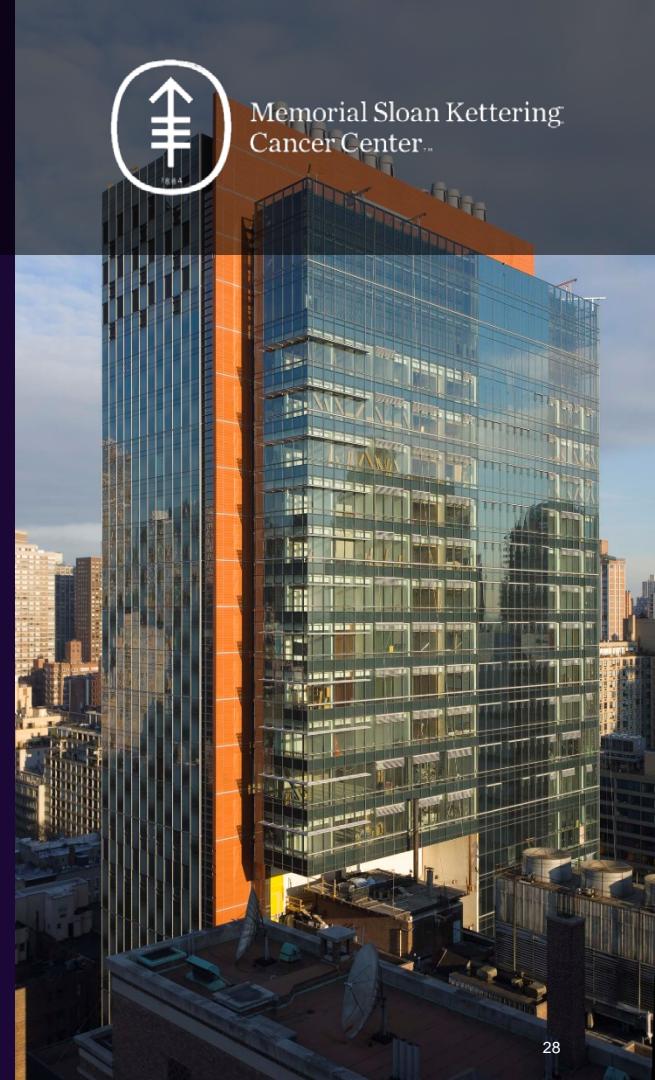
Oncology is evolving, providing opportunity for cognitive technology

MSKCC trained Watson in the field of Oncology

Watson is a “learned colleague” to support physicians



Memorial Sloan Kettering
Cancer Center..



Dr. James S. Miser

Chief Medical Information Officer
Bumrungrad International Hospital



Around the world, the number of people suffering from a chronic disease is increasing.

Watson Health is working with leading organizations to build global offerings that address unmet health needs.

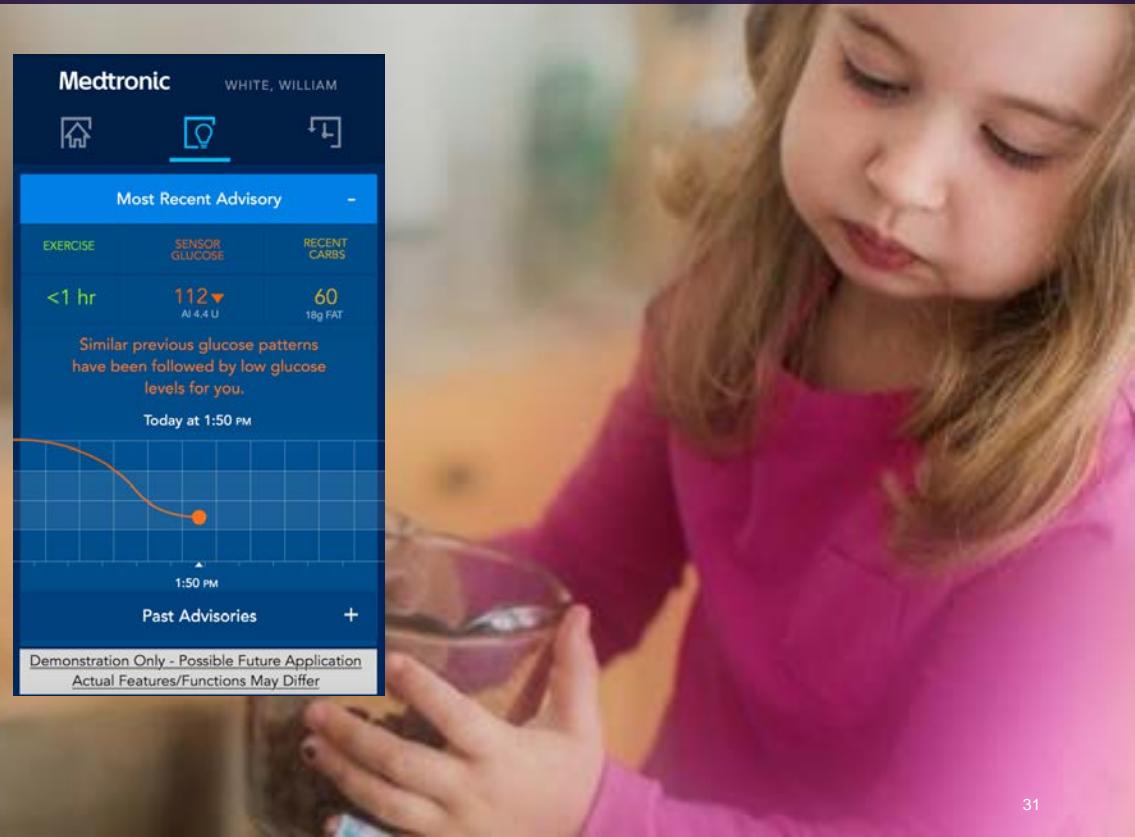


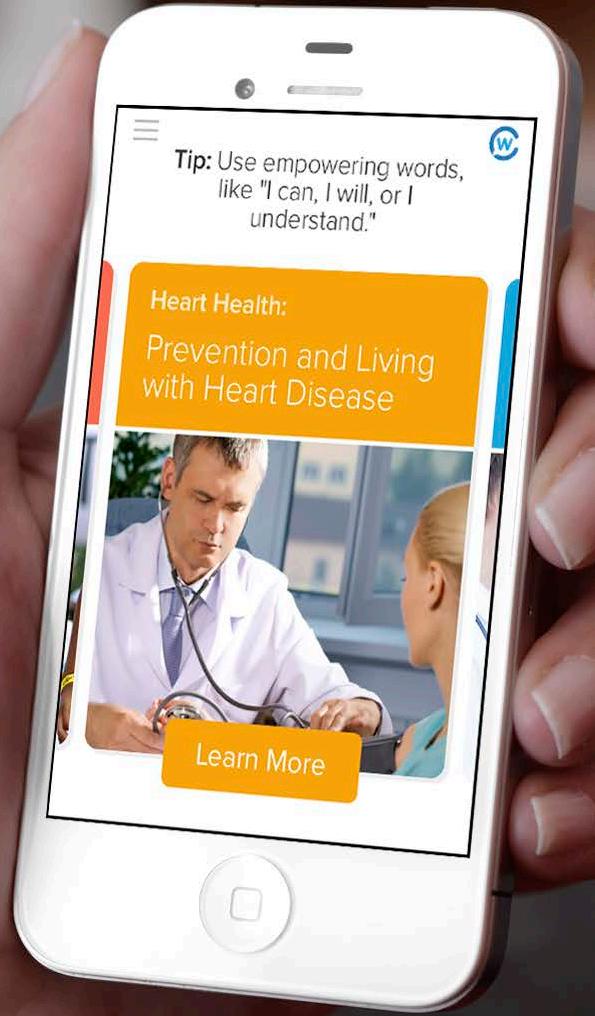
Jeff Ruiz

Vice President, Diabetes Service & Solutions

Medtronic

Medtronic
Further, Together





Watson Health capturing the market



Data



Insights



Ecosystem

IBM Watson Internet of Things (IoT)

Harriet Green

IBM
Investor
Briefing
2016

General Manager,
IBM Watson IoT, Commerce and Education

The Opportunity

90%

Data never acted upon

29 Billion

Connected devices by 2020

\$1.7 Trillion

In value added by the IoT to the
global economy in 2019⁴

\$400+ Billion

IBM addressable market by 2019⁵

Watson IoT leading the market



4,000+

IoT clients

750+

IoT patents

10,000+

Security clients

1,700+

Partners

30+

Industry solutions



Boosting operational efficiency



Transforming the customer experience



Disrupting industries

Digitization of the physical world



IBM addressable IoT industry market opportunity by 2019

Manufacturing

 \$142B
Opportunity

Transportation

 \$37B
Opportunity

Consumer

 \$43B
Opportunity

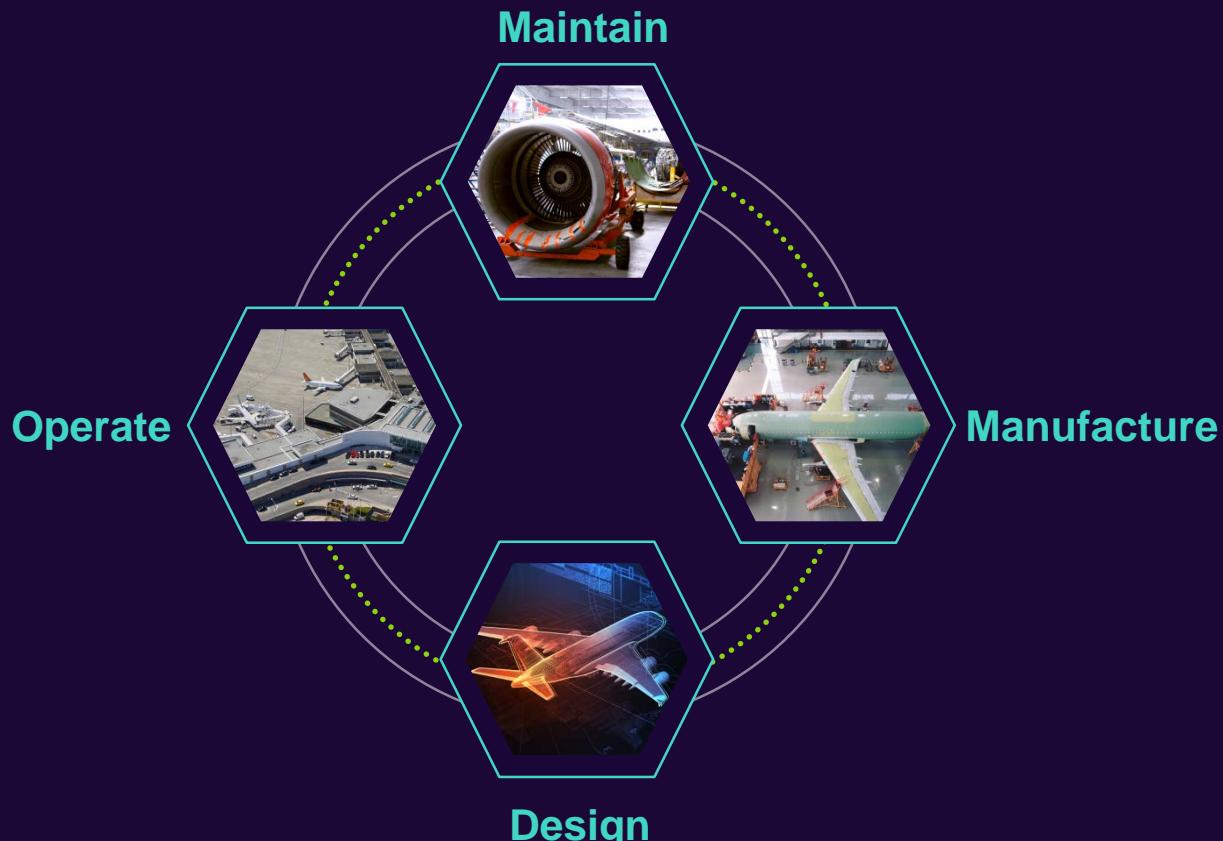


Watson IoT transforming air transportation

Aircraft manufacturers, suppliers, airlines, and airport operators



Connecting the air transportation ecosystem



Clients pioneering transformation

الإمارات
ETIHAD
AIRWAYS
ABU DHABI

DELTA

Heathrow
Making every journey better

Toronto Pearson
For You. The World.

SIEMENS

KONE

Operate

AIRBUS
GROUP

Maintain

 **Pratt & Whitney**
A United Technologies Company

AIRBUS
GROUP

 **Rolls-Royce™**

Manufacture

 **BOEING**

Design



Scaling IoT solutions across industries

- Invent new business models
- Develop differentiated solutions
- Improve operational efficiency
- Drive better customer engagement
- Utilize IBM innovation

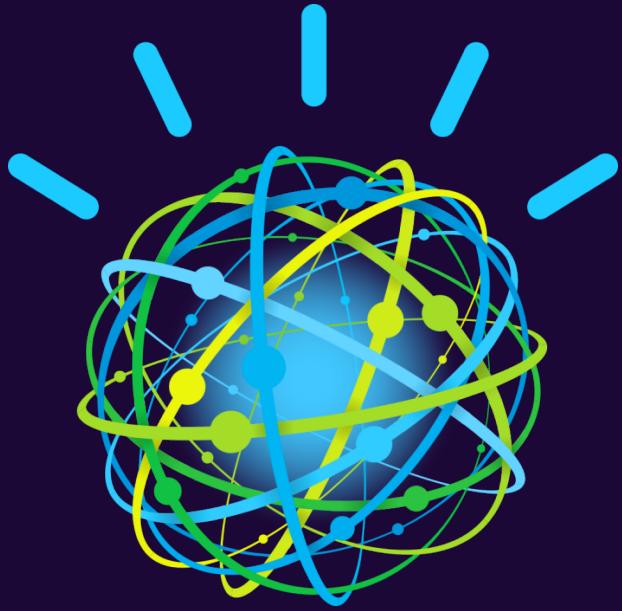


Watson IoT growing momentum

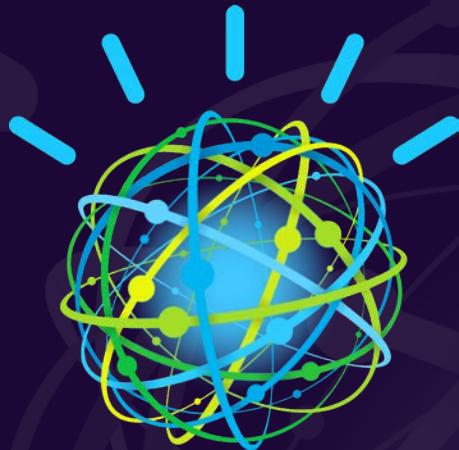
- Munich Centre global headquarters
- 67,000 square meters of pure potential
- 8 global experience centers
- 1,000 researchers, developers, designers
- New Watson APIs
- Acquisition of The Weather Company
- Client focused leadership



Watson IoT
Global Headquarters
Munich, Germany



Cognitive solutions: An engine for growth



Big, incremental opportunity

Highly differentiated platform

Cognitive solutions are here now

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These charts and the associated remarks and comments are integrally related, and they are intended to be presented and understood together.

In an effort to provide additional and useful information regarding the company's financial results and other financial information as determined by generally accepted accounting principles (GAAP), certain materials presented during this event include non-GAAP information. The rationale for management's use of this non-GAAP information, the reconciliation of that information to GAAP, and other related information is included in supplemental materials entitled "Non-GAAP Supplemental Materials" that are linked to the company's investor relations web site at <http://www.ibm.com/investor/events/investor0216.html>.

The Non-GAAP Supplemental Materials are also included as Attachment II to the company's Forms 8-K dated January 19, 2016 and Attachment I to the company's Form 8-K dated February 25, 2016.

Footnotes

1. Source: GMV 1H16, McKinsey Global Institute, May 2013
2. Representative sample of data
3. Institute of Health Technology Transformation
4. Source: World Economic Forum
5. Source: U.S. Health & Human Services
6. Source: McKinsey & Company
7. Source: Health Affairs, Team analysis
8. Business Insider, “The ‘Internet of Things’ will be the world’s most massive device market and save companies billions of dollars,” John Greenough, April 14, 2015.
9. IDC's spend projections for Software and Services technology groups for IoT, from IDC Worldwide Semiannual Internet of Things Spending Guide, published November, 2015
10. Source: IDC's spend projections for Software and Services technology groups for IoT, from IDC Worldwide Semiannual Internet of Things Spending Guide, published November, 2015

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