Cognitive Computing: A new era

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Beth Smith
General Manager,
IBM Watson AI

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Explosive market growth in AI investment 2011-16

Number of venture capital investments in AI start ups

Disclosed Funding ($M)

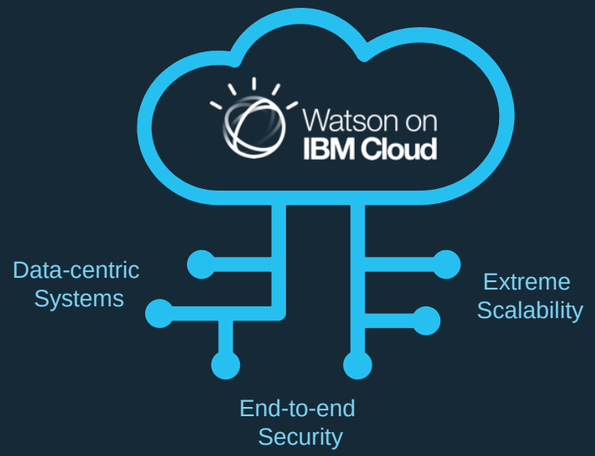
	2011	2012	2013	2014	2015	2016
Number of venture capital investments in AI start ups	67	160	253	364	493	658
Disclosed Funding ($M)	$282	$589	$1,039	$2,677	$3,125	$5,021

Source: CB Insights, Bloomberg Beta: “The Current State of Machine Intelligence 2.0”

Fueling the shift to AI

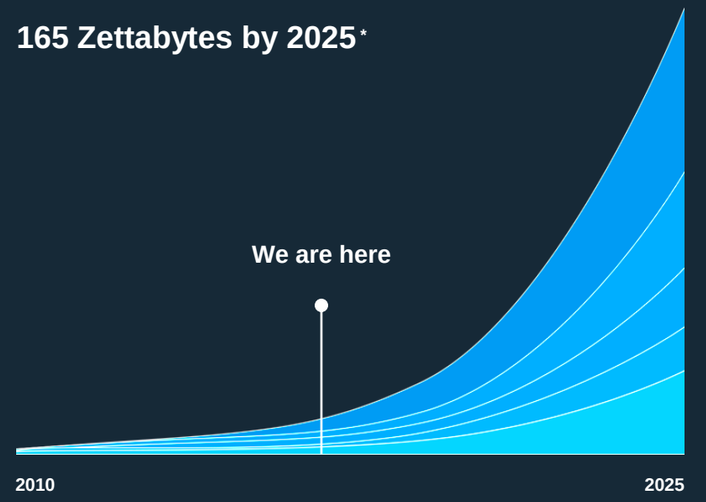
Advances in neural networks, machine learning and deep learning

Cloud



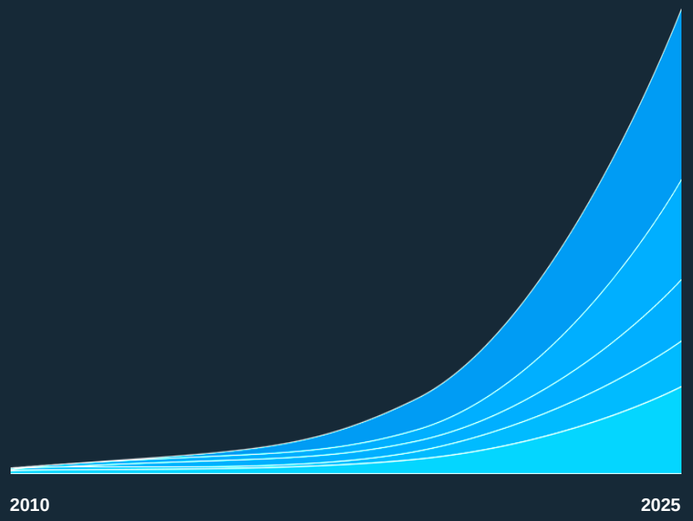
Computing power

Data growth



*Source IDC. IBM projections based on analyst report

2017: Data is changing every domain, industry, profession…



102 Million

wearables shipped in 2016, growing to 237,000,000 by 2021

100 Thousand

new cancer articles published every year

80 Million

MRIs taken every year, up from 3,000,000 in 1980

2.2 Billion

locations generating hyperlocal weather forecasts across the globe every 15 minutes

2,581,586

Emails every second

10,000

new software vulnerabilities recorded in 2016, up 30% since 2011

600 Million

forms of malware - with close to 400k variations introduced daily

500

hours of video uploaded to YouTube every minute

What if AI could make sense of all this?

What if you could…

Know

Know all the options to make the best decision?

Discover

Discover hidden insights in your data?

Engage

Engage in completely new ways?

Understand

Understand the big picture?

Harness

Harness and be in control of more data?

Surface

Surface ideas you hadn’t thought of before?

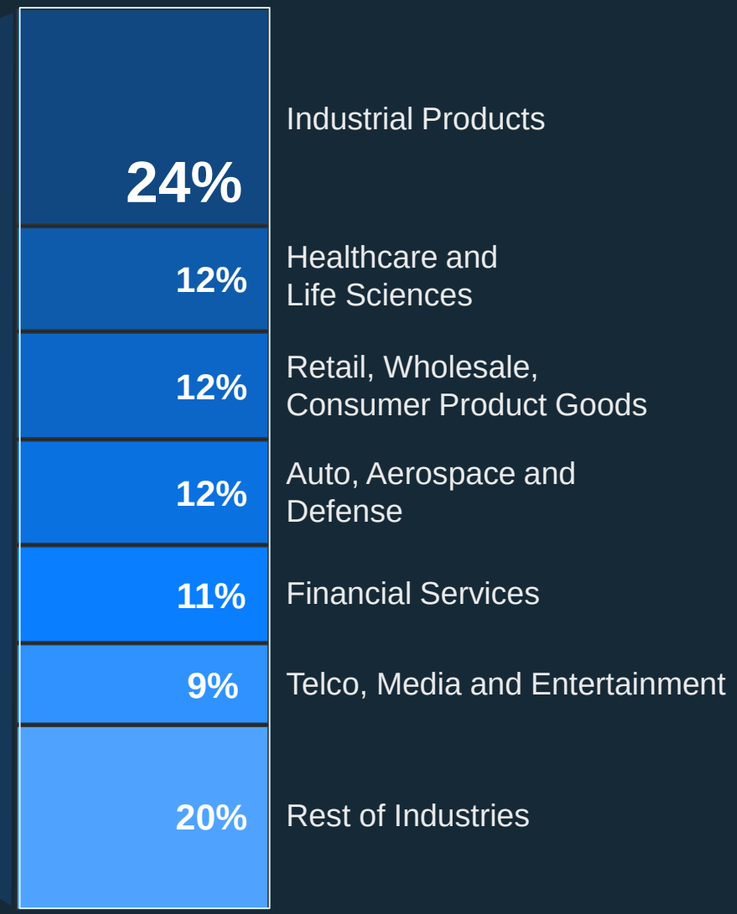
The AI opportunity for enterprise and industry

Opportunity for decision-making support **2025**

~$2T

Traditional global IT spend **2020**

~$1.4T



Industrial Products

Healthcare and Life Sciences

Retail, Wholesale, Consumer Product Goods

Auto, Aerospace and Defense

Financial Services

Telco, Media and Entertainment

Rest of Industries

Source: MDI Analysis, Oxford economics, CapitalIQ, McKinsey Global Institute

Watson 2017: Strategic differentiation

Industry and Process Specialization

Depth of Ecosystem Collaboration

Enterprise-scale Cognitive Platform

Public, Private, Multimodal

Built for Security

Data
(Public, Private, Partner)

IBM Provided Data

MERGE Healthcare
The Weather Company
explorys An IBM Company
TRUVEN HEALTH ANALYTICS
PHYTEL An IBM Company

Publically Sourced Data

Public Filings
Medical Journals
U.S. Geological Survey
Patents

Partner Provided Data

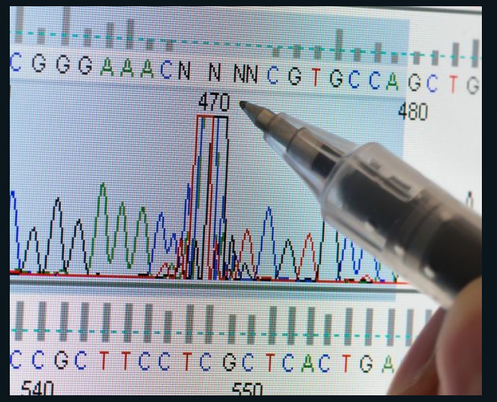
Apple
Associated Press
Twitter

Private Client Data

Medtronic
Thomson Reuters
Johnson & Johnson

Watson 2017: New revenue models

Data access/ Pay-per-Insight



Subscription

Shared value with partners

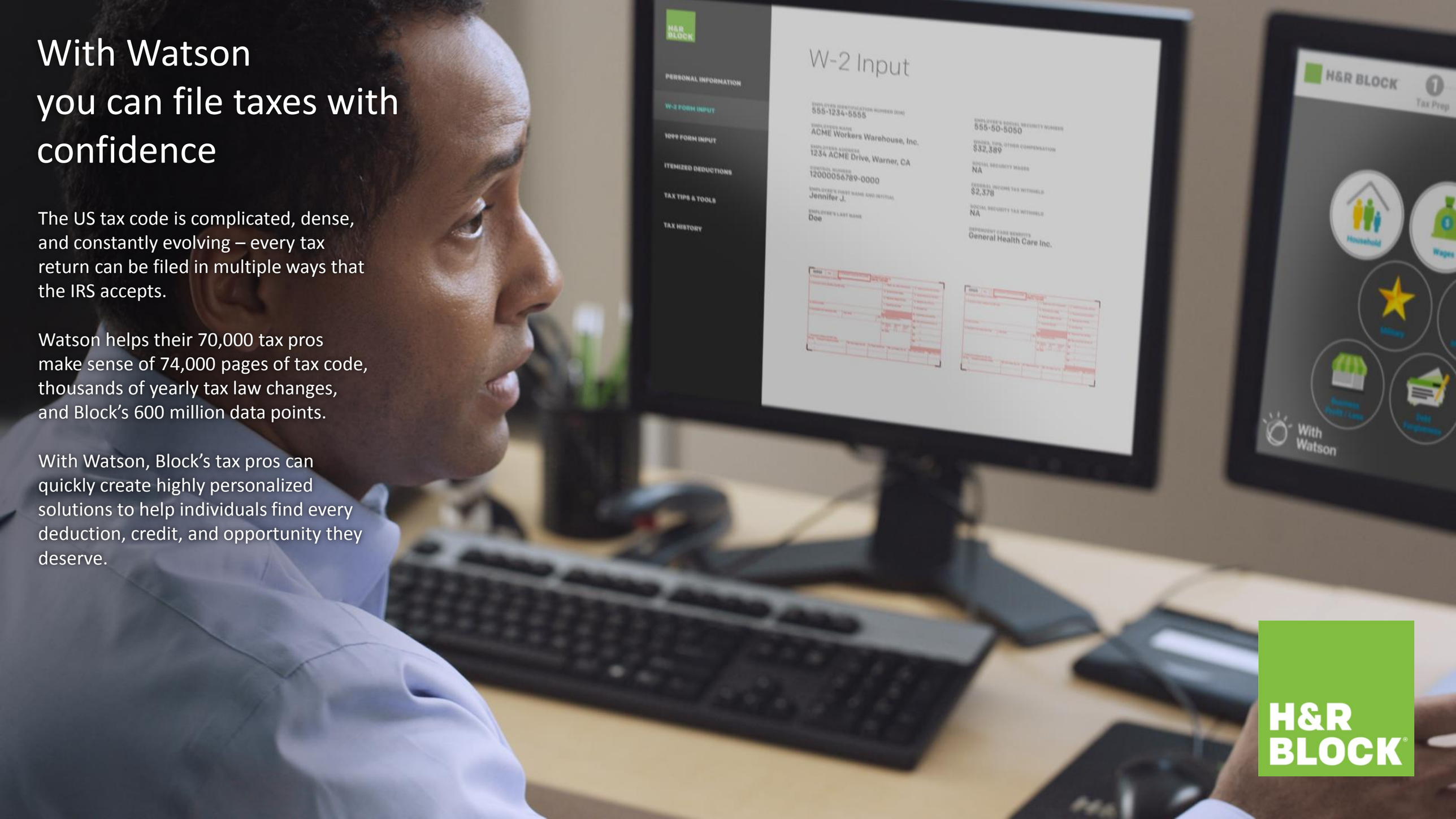
Licensing

With Watson you can file taxes with confidence

The US tax code is complicated, dense, and constantly evolving – every tax return can be filed in multiple ways that the IRS accepts.

Watson helps their 70,000 tax pros make sense of 74,000 pages of tax code, thousands of yearly tax law changes, and Block's 600 million data points.

With Watson, Block's tax pros can quickly create highly personalized solutions to help individuals find every deduction, credit, and opportunity they deserve.



H&R BLOCK®

With Watson you can talk to customers on their terms

Autodesk was faced with the challenge of scaling real-time customer service and support after shifting to a subscription-based business model.

With Watson, Autodesk created a solution that supports 20,000 conversations per month and recognizes 40 distinct use cases, freeing agents to focus on customers with complex issues.

The solution cut resolution time from 1.5 days to just 5.4 minutes for most inquiries.

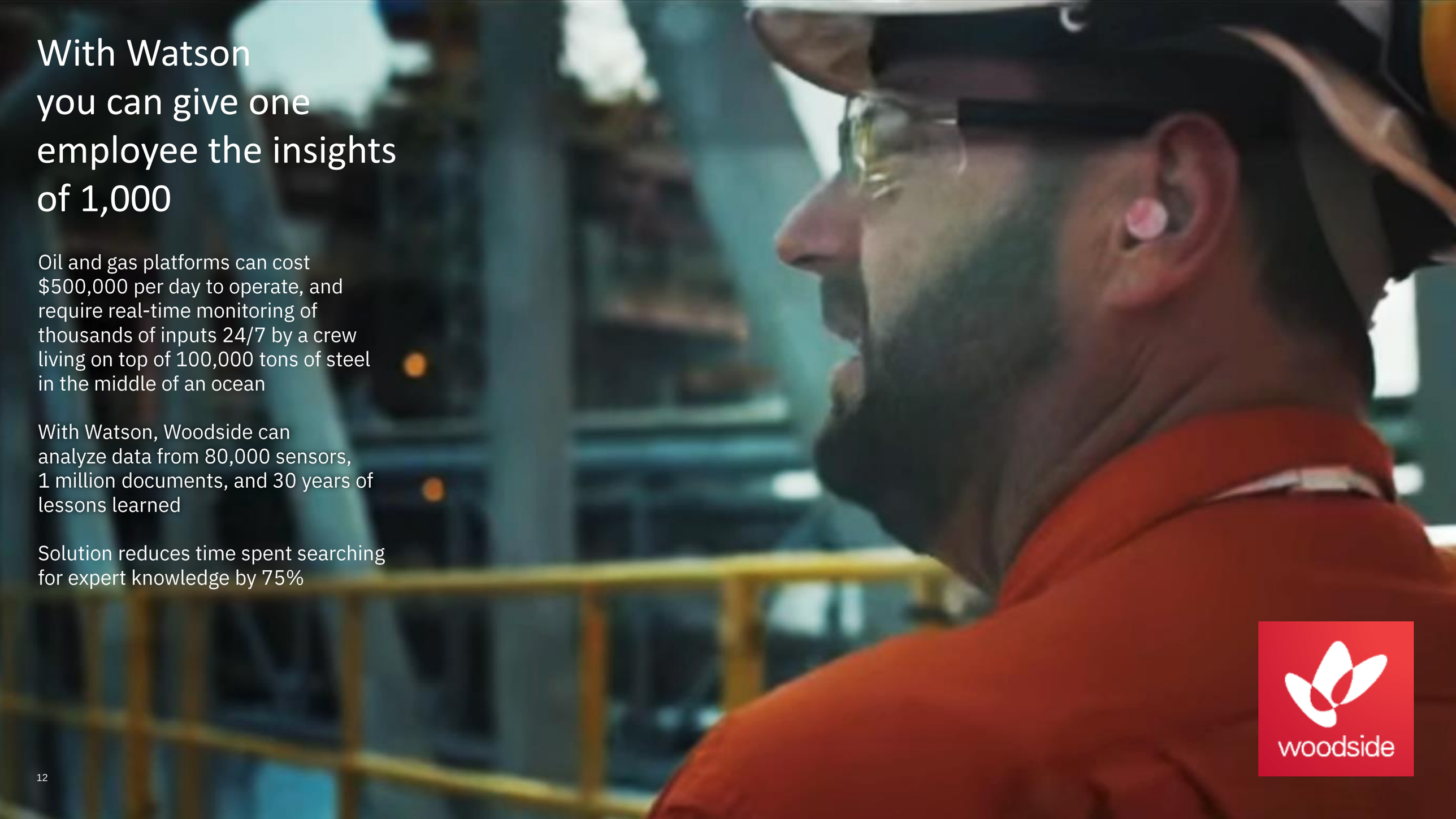
AUTODESK.

With Watson you can give one employee the insights of 1,000

Oil and gas platforms can cost $500,000 per day to operate, and require real-time monitoring of thousands of inputs 24/7 by a crew living on top of 100,000 tons of steel in the middle of an ocean

With Watson, Woodside can analyze data from 80,000 sensors, 1 million documents, and 30 years of lessons learned

Solution reduces time spent searching for expert knowledge by 75%



With Watson you can transform personal healthcare

415 million adults with diabetes in the world – a number that could grow to 642 million by 2040

Cost of diabetes and prediabetes in US at $322 billion

Sugar.IQ with Watson app features real-time, continuous glucose monitoring (CGM) to predict hypoglycemia 2 to 3 hours in advance, with an accuracy of 85-89%

With Watson, insights drive positive behavior changes among app users to control blood sugar levels

Medtronic

Key Takeaways:

Data is transforming every enterprise

The market for decision-making based on this data will be $2 trillion by 2025

IBM has built *the* AI platform for business

Watson is now scaling across industries – health care, financial services, energy, manufacturing…