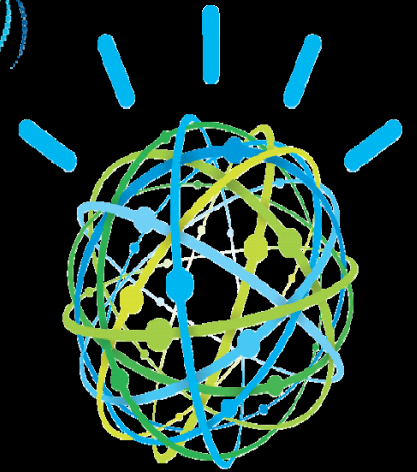
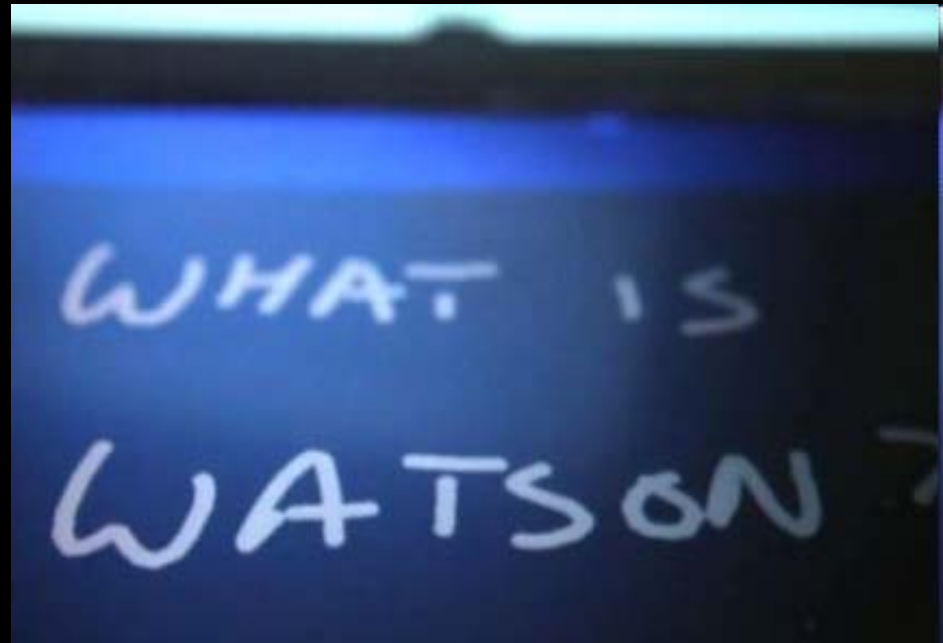


What is Watson?



Chris Bahr
Director, IBM Software Korea

March 3, 2011



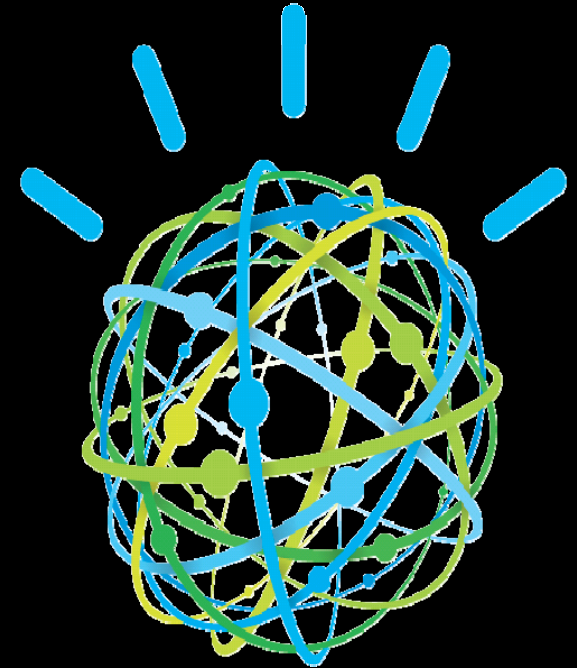
Fifteen Minutes on Watson



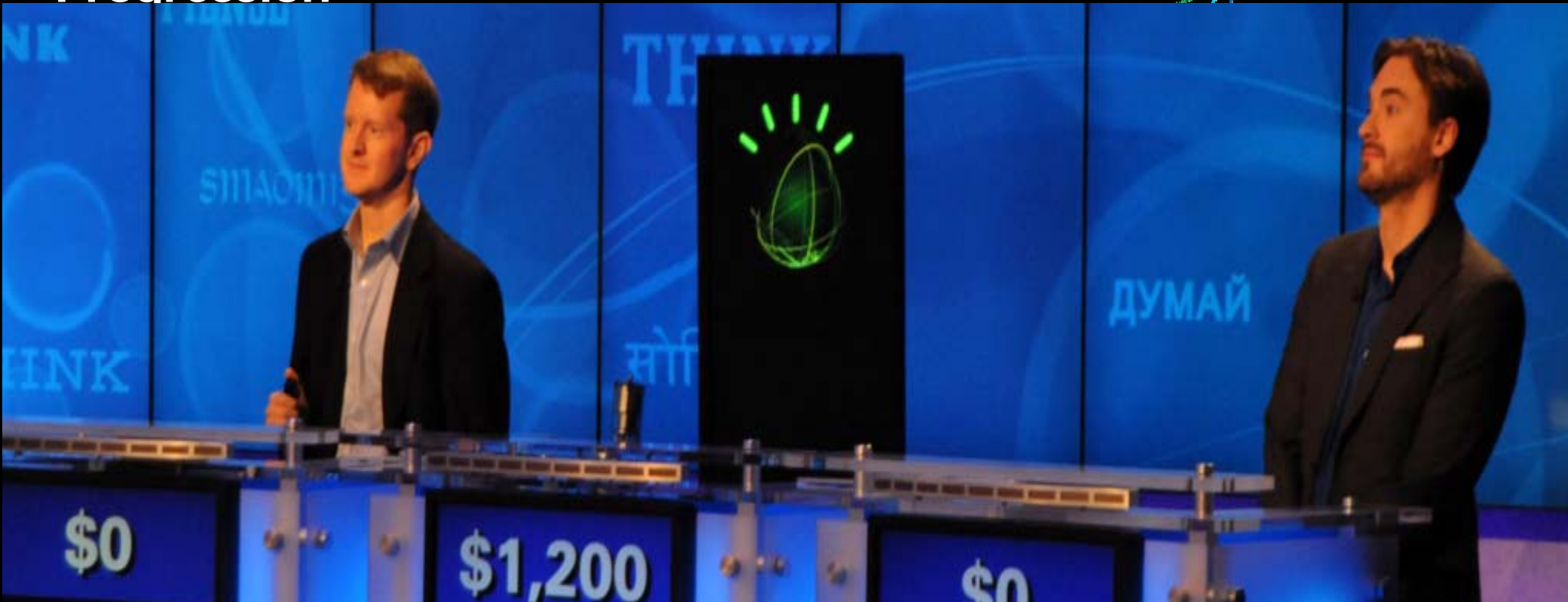
- 1) What is Watson?**
- 2) How did IBM create Watson?**
- 3) What does Watson mean for you and your business?**

What is Watson?

- **Watson is a workload optimized computer system** that battled the best human players in the TV quiz show, Jeopardy!
- A computing system built by a team of IBM scientists who set out to create a **system that rivals a human's ability to answer questions posed in natural language with speed, accuracy and confidence**
- A system with the **capability to understand the meaning and context of human language**, and rapidly process information to find precise answers to complex questions – which holds **enormous potential for businesses**

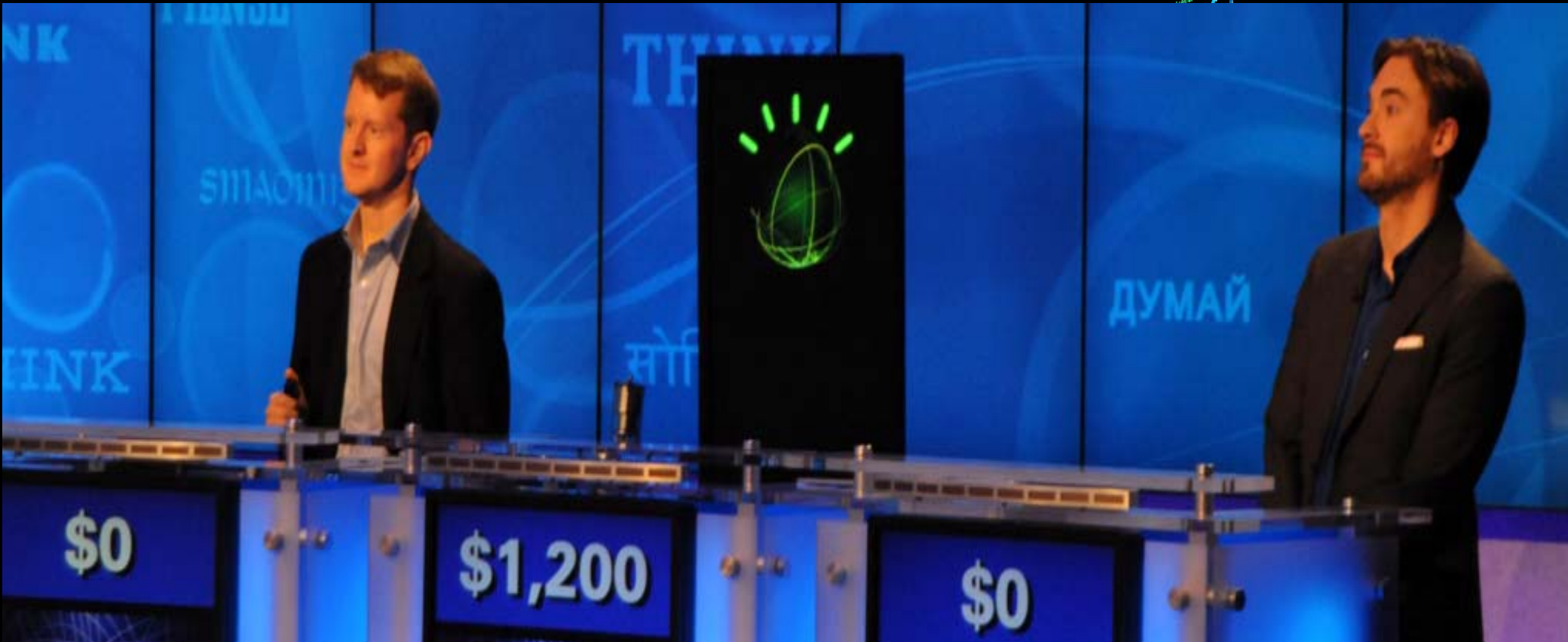


Watson, Tool for New Innovation & Progression



Jeopardy Show!

1. Jeopardy! is a quiz show covering a broad range of topics, such as history, literature, politics, arts and entertainment, and science.
2. Jeopardy! poses a great challenge for a computing system due to its broad range of subject matter, the speed at which contestants must provide both accurate responses and determine a confidence they are correct, and because the clues given to contestants involve analyzing subtle meaning, irony, riddles, and other complexities.



제퍼디 쇼(Jeopardy Show)

1. 순수한 인간의 자연어로 진행되고, 영어뿐 아니라 온갖 뉘앙스, 지역적 특색, 속어, 약칭을 숙지해야 게임을 할 수 있고 힌트를 얻을 수 있습니다.
2. 힌트들은 반어법, 수수께끼, 미묘한 의미 분석, 전통적으로 사람만 할 수 있고 컴퓨터는 풀지 못하는 여타의 복잡한 문제들을 다룹니다. 100개 이상의 알고리즘을 동시에 사용하여 질문을 다양하고 정교하게 분석하고 또 다른 세트의 알고리즘들이 개연성에 따라 답변의 우선 순위를 정해야 합니다.

Taking on Jeopardy! – Real Language is Real Hard

- **Chess**

- A finite, mathematically well-defined search space
- Large but limited number of moves and states
- Everything explicit, unambiguous mathematical rules



- **Human Language**

- Ambiguous, contextual and implicit
- Grounded only in **human cognition**
- Seemingly infinite number of ways to express the same meaning



From battling humans at Jeopardy! to transforming business

To compete at Jeopardy!, humans and computers need to:

Tap into a broad, open domain of clues



Parse complex human language



Be highly precise at finding the answer and put a confidence behind that answer



Do all of that in under three seconds



Watson-like capabilities can now be applied to your business:

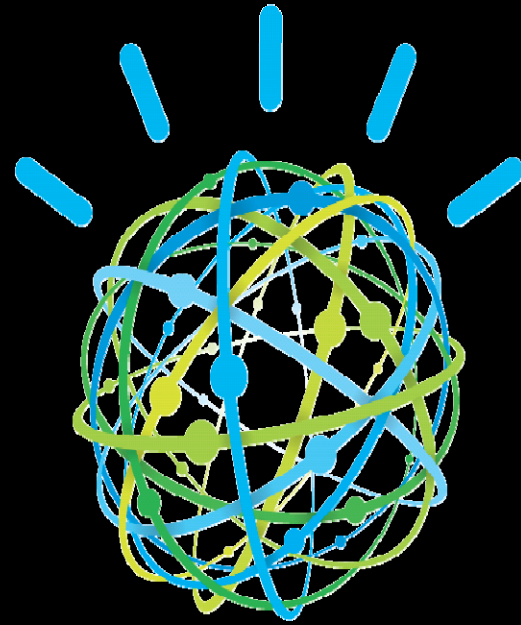
Manage massive amounts of data from business operations and an instrumented world

Deal with structured and unstructured data to gain meaningful insight into your business

Have a high level of confidence in analytics to make key business decisions

Do it at the speed of business, in real time

Play video



Watson: *What it means for you*



- **A new paradigm in IT**

- The computing paradigm for business has changed – traditional computing models are being replaced by systems that underlie every business process, and the hardware and software performance in those systems is closely tied to actual business performance

- **The future of business is in the data**

- Watson-like analytics applied to business can provide answers with a confidence ranking that can be gleaned from both structured and unstructured data
- Applying those innovations from Watson can help transform business models – meaningful insights from information can help anticipate and shape better business outcomes, improve business operations and boost service to customers

- **A “smarter” way to get things done**

- The technology can be adapted to help solve business and societal problems
 - diagnose disease, handle online technical support, parse vast tracts of legal documents

How was Watson created? Available products and services



IBM Smarter Industries Symposium
03 Mar 2011

- **Workload Optimized Systems/POWER7: Power is performance redefined**



Business Analytics Software & Solutions

- Analytic Applications
- Business Intelligence
- Content Analytics
- Data Warehousing and Big Data
- Financial Performance & Strategy Management
- Governance Risk & Compliance
- Predictive & Advanced analytics

Global Business Services – Business Analytics and Optimization (BAO)

- BAO Strategy
- BI & Performance Management
- Advanced Analytics & Optimization
- Enterprise Information Management
- Enterprise Content Management



Business intelligence &
performance management
2008



Predictive
analytics
2009



Trusted
Information



Governance, compliance,
risk management
2010

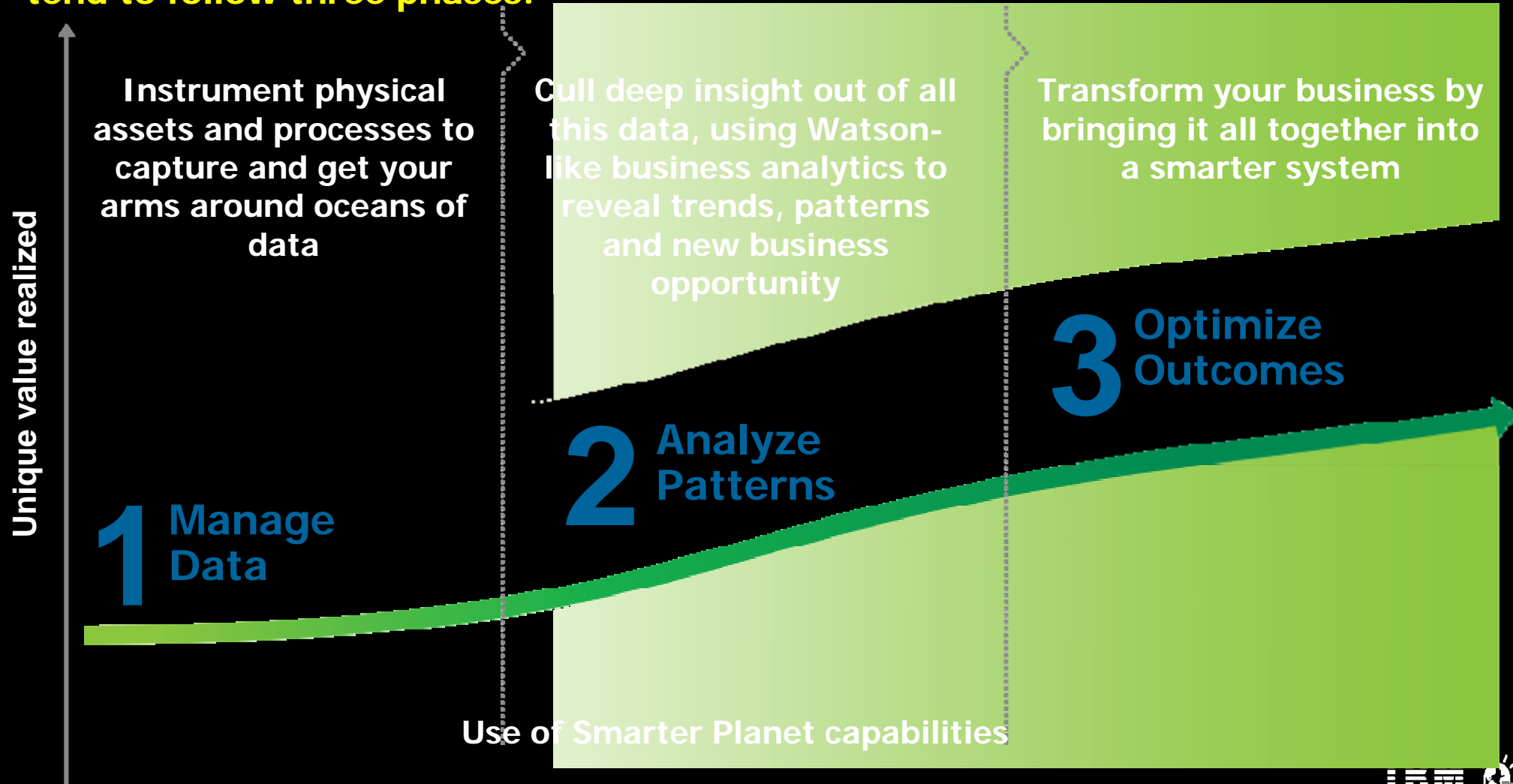


Financial
governance
2010



Getting started: Applying Watson's capabilities to your business

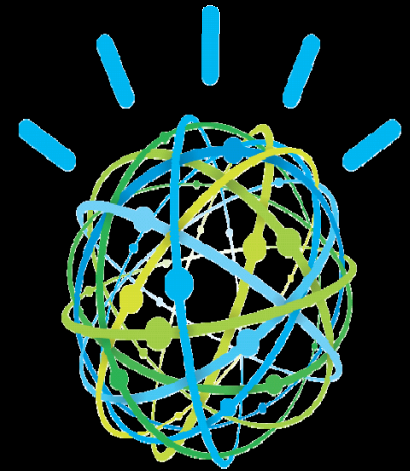
IBM has helped hundreds of clients with Smarter Planet deployments which tend to follow three phases:



Call to Action: What can Watson do for *your* business?

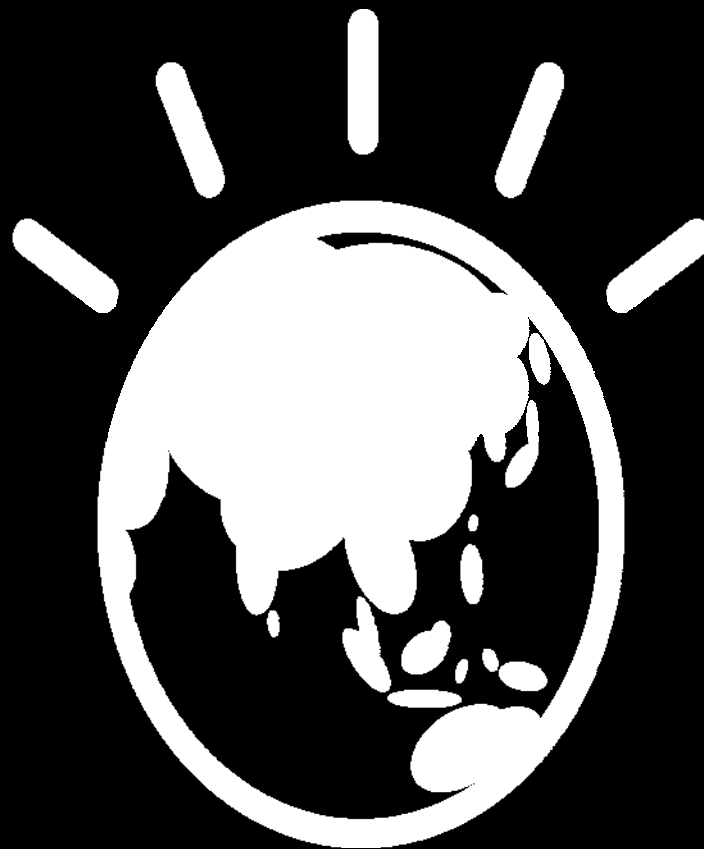
Watson's technology is a powerful tool for information gathering and decision support for your industry

- **Healthcare:** Announced collaboration with Columbia University Medical Center / Maryland University School of Medicine
- **Banking:** CRM, Business Intelligence, Compliance
- **Automotive:** Service advisory, Engineering knowledge transfer
- **Government:** Constituency service support, such as taxes





IBM Smarter Industries Symposium
03 Mar 2011



Let's build a smarter planet
ibm.com/Watson