



IBM Watson - AI platform for business



IBM – Deep Blue and Watson

1997 – chess matches between IBM Deep Blue machine and Garry Kasparov

2011 - the IBM Watson computer system competed on *Jeopardy!* against legendary champions Brad Rutter and Ken Jennings winning the first place prize of \$1 million

Watson is an AI system capable of answering questions posed in natural language developed by a research team led by IBM Research. Watson was named after IBM's first CEO, industrialist Thomas J. Watson.

What is Deep Blue ?



IBM Deep Blue

World chess champion Garry Kasparov in 1997



THINK

ΣΚΕΨΟΥ

\$2,000

\$5,000

\$5,000

ken

WATSON

BRAD

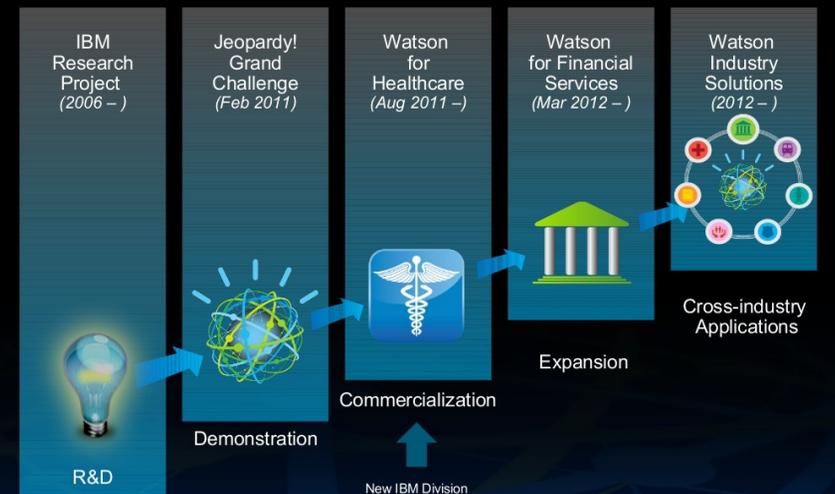
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IBM Watson – How it works

- Structured and unstructured data is off line feed to Watson
- Questions are sent in text form to Watson
- Questions in text form are used as search query to search in database
- Search result with questions are used to retrieve support evidence from database
- Each result forms hypothesis and than is evaluated based on available evidence and scored
- The hi-dimension scored answers are ranked using some merge algorithm, and then someone will win
- Watson to answer

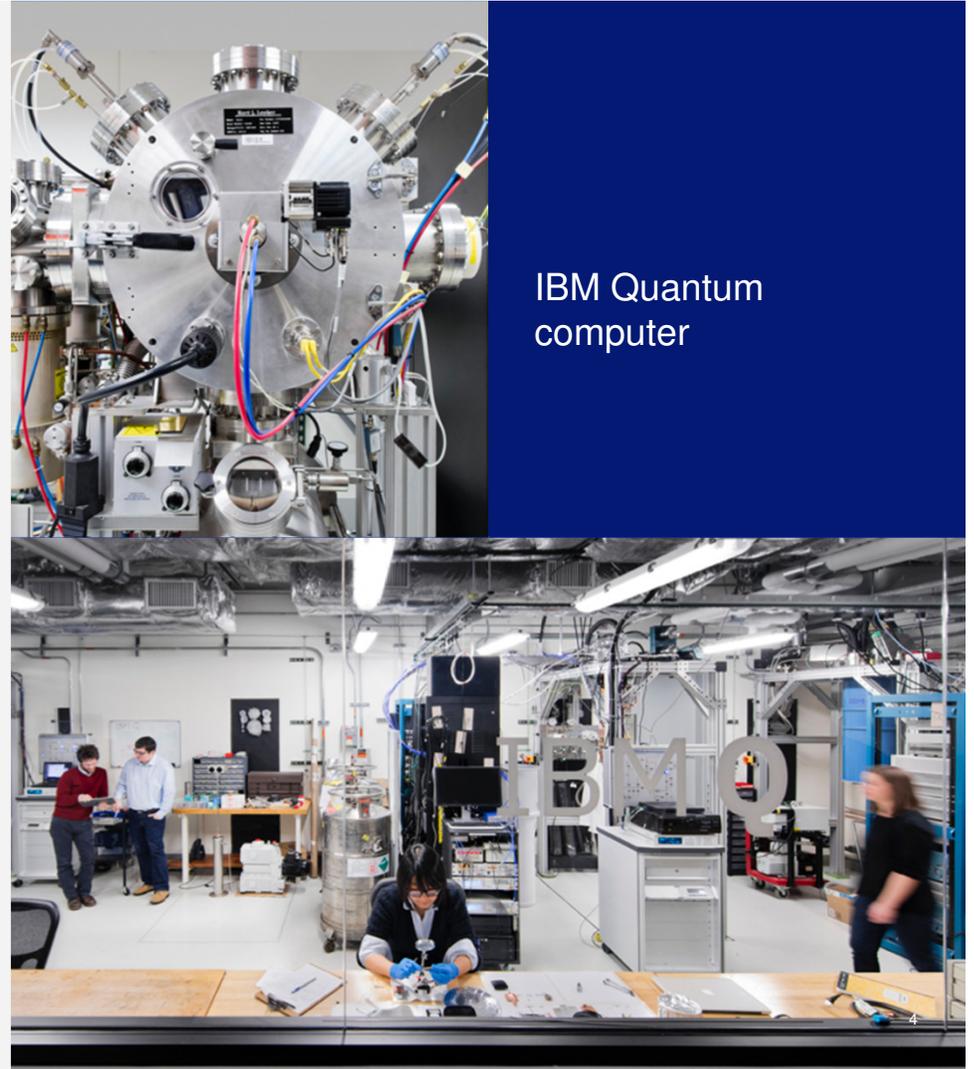


Brief History of IBM Watson



Requirements

- Machine learning and Deep learning need strong infrastructure platform
- IBM PowerAI provide excellent platform with using latest GPU accelerators: PowerAI makes deep learning, machine learning, and AI more accessible and more performant.
- To continue the pace of progress, we need to augment the classical approach to computing with a new platform. Here at IBM, we believe that [quantum computers](#) will augment classical computing to potentially open doors that we once thought would remain locked indefinitely.



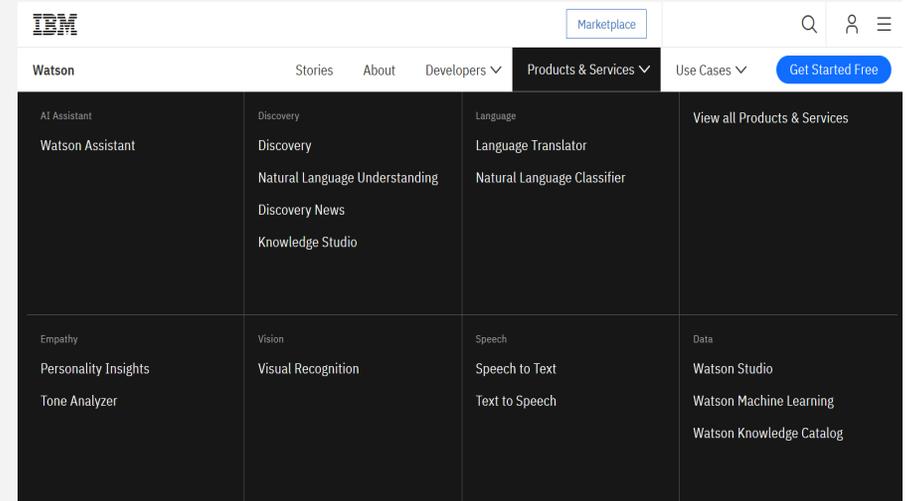
IBM Quantum
computer

IBM Watson products and services in cloud

Of which:

- **AI assistant** – assistants for messaging
- **Watson for Data** – embedded AI, machine learning and deep learning to drive insight from data
- **Vision** – identify and tag content, than analyze and extract detailed information found in image
- **Speech** – convert text and speech with ability to customize models
- **Language** – analyze text and extract meta data from unstructured content
- **Empathy** – understand tone, personality and emotional state

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Watson is the AI platform for business

Watson solutions are being built, used and deployed in more than 45 countries and across 20 different industries.

Watson technologies learn the language and nuances of industries and professionals –from doctors and lawyers to security experts and financial advisors.

Watson solutions are being built and deployed across global industries – clients and partners include household names and industry titans like H&R Block, Volkswagen, Autodesk, and Thomson Reuters.



Data Privacy - one of our key differentiators

- If data is the phenomenon of our time, then data privacy is one of our biggest issues. It is essential to be a data steward.
- At IBM, we believe that whoever has an organization's data is responsible for protecting it –and must be transparent about how they are using it.
- We protect an organization's data, never using or sharing any insights gained, ensuring clients fully own their IP –and it can be put to work for significant competitive advantages.
- IBM has published our approach to data, detailing what we will and won't do with our clients' data. We believe all companies and institutions need to be transparent to ensure trust among consumers who are increasingly concerned about this issue.
- IBM will never use customer data for its own corporate gain —clients own their proprietary business models and all intellectual property.
- The IBM model for data and privacy with Watson allows businesses to train their own AI models versus contribute their data to a central knowledge graph. Users can keep their own critical information private and proprietary. Your data stays your data.



VP2

