Cognitive Computing and the IBM Watson Ecosystem Program

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Watson

How Watson Changed IBM

by Brad Power | 12:00 PM August 22, 2014

"There are <u>three core business models</u> that we will run in parallel."

- Mike Rhodin

1. The first is around industries that we think will go through a big change in "cognitive" [natural language] computing, such as healthcare and financial services.

2. The second is where we see similar patterns across industries, such as how people discover and engage with organizations and how organizations make different kinds of decisions.

3. The third business model is creating an ecosystem of entrepreneurs.

Start by asking 3 simple questions:

1. What is the **business value** of the "Powered by Watson" application you intend to build?

2. Does the application draw upon the **unique characteristics and capabilities of a cognitive** offering?

3. Has the **content that will fuel the application** been identified and can it be secured/licensed for the intended use?

What makes a great use case

Have a question and answer requirement, with questions posed in natural language

Seek answers and insights from a defined data repository (i.e. corpus) comprised largely of unstructured data

Provide transparency and supporting evidence for confidence weighted responses to questions and queries

Take a cue from the success of others

1. IBM Watson Ecosystem
   - Launch partners
   - Those signing up in 2014
   - Ecosystem Forum

2. The Watson Mobile Developer Challenge

3. Case competitions
   - The Watson Academic Case Compeition (USC)
   - The Great Mind Challenge, Watson Edition (India)

IBM Watson

IBM

Three ways the Watson Ecosystem Program benefits partners

1 The Program represents a unique opportunity to demonstrate **thought leadership, innovation, and agility**.

2 Watson cognitive capabilities can be a game changer by **differentiating your offering** in the marketplace..

3 Watson cognitive capabilities can **drive incremental revenue** by attracting new users or growing current users..

The Watson Mobile Developer Challenge

Grand Prize Winners

In February, the IBM Watson Mobile Developer Challenge invited teams to design mobile apps using Watson's cognitive computing capabilities to analyze, discover insights and learn from Big Data.

Several hundred submissions across a wide range of industries have been narrowed down to **25 finalists** who will use Watson to build, train, and test their apps. After the finalists submit prototypes for judging, only five teams will present proposals to IBM. The three winners are awarded 90 days of access to the Watson APIs and consulting from IBM Interactive design services.

Five shortlisted teams traveled to Orlando, Florida, to pitch their proposals at the IBM Innovate conference.

At IBM Innovate, three Grand Prize winners—GenieMD, Inc., Majestyk Apps and Red Ant—were awarded access to the developer cloud and support from IBM Interactive design services, to commercialize their prototypes for the marketplace.

See how these **Grand Prize–winning teams** are using Watson to build the next generation of mobile technology.

100s
Submissions

25
Finalists

5
Presenting Teams

3
Grand Prize Winners

THE IDEAL TRAINER FOR SALES ASSISTANTS

Sell Smart is the ultimate companion for retail shop floor workers, solving the issues that customers often face with disappointing service from underinformed and undertrained sales staff. Combining IBM Watson's unique capabilities with Red Ant's RetailOS in-store mobility platform, the app enables sales staff to provide a retail experience which:

- Analyses customer demographics
- Shows purchase histories
- Provides product information
- Understands reviews, tech specs, product descriptions and social chatter

to provide customised selling points unique to each customer that get better each time they are used.

Bringing the power of cognitive computing to brick and mortar retail for the first time, it is the ideal sales trainer to increase both customer satisfaction and sales conversion. It also takes advantage of IBM Watson's ability to 'talk' to users in human speech, even using voice recognition on mobiles and tablets, and in the future via wearables including smart glasses and watches.

https://www.youtube.com/watch?v=PFG3rSYd1G0

https://www.redant.com/articles/ibm-watson-mobile-developer-challenge/

Fang (Friendly Anthropomorphic Networked Genome) is an artificially intelligent, cuddly plush companion for children capable of answering questions posed in natural language, learning from natural dialog, and interacting and reasoning with its human counterpart.

Fang, the toy of the next generation, will create a tailored experience for each user through a series of contextual, customized interactions that apply advanced natural language processing, information retrieval, knowledge representation, automated and machine learning technologies to produce a seamless exploratory dialog. Fang will tacitly and semi-tacitly adapt over time to grow with each individual child. The Majestyk team envisions pairing the lovable toy with a tablet for a multisensory educational experience integrated with custom, Fang-enabled mobile apps.

Says Damion Hänkejh, CTO at Majestyk Apps, "The reality is that Watson-enabled apps have the potential to radically change just about everything we take for granted about education. With Watson at its heart, Fang will help teachers rethink the entire learning equation and transform the way they pursue a variety of learning objectives."

https://www.youtube.com/watch?v=pTj2xR8DO94

http://majestykapps.com/press/ibm-watson/

genieMD

GenieMD's app empowers individuals to take a more active role in managing their own health and the health of their loved ones by delivering a holistic view of the individual's health, thus:

• making health data actionable and shareable,

• providing highly relevant and personalized recommendations,

• enabling family caregivers to have access to relevant patient data and enabling them to be more effective and efficient, and

• facilitating better communication between the individuals and their healthcare providers.

https://www.youtube.com/watch?v=ClQFRh8Nr4Y

http://geniemd.com/?page_id=306

Maya is a cross-category Personal Choice Assistant, designed to help users simplify choices for a range of activities across banking, retail, hospitality and telecom. Maya makes choices easier on the go, whether it's what to eat, what to wear, or where to go on vacation. Maya suggests the most relevant and personalized choices.

Maya taps Crayon's proprietary choice engine algorithms that crunch data on people's tastes, influences, behavior and context to deliver the most relevant four to six choices on a consumer's smartphone.

Maya:

• Makes suggestions based on self, friends and curated sets

• Bases items of Interest on user taste, profile & context

• Rates products to dynamically update preferences Intelligently

• Rates how relevant the choice is for the consumer

• Offers best 4-6 options based on customer's taste

https://www.youtube.com/watch?v=qIOCFOCG9-Y&index=3&list=PLRrOvPN-xqYOmr53g00GrOxQ0QgJHm0Eu

Almost by definition, Fitness is a mobile experience. Watson can be your perfect fitness trainer, and to achieve that it needs to be with users during all aspects of their fitness journey: when they are at the gym, at the track or at the supplements shop.

We want to use Watson's cognitive abilities to learn from users' daily data (gathered from manual entry and/or wearable sensor technology), latest medical research and available online fitness expertise to determine what works for a user's metabolism, physical structure, fat distribution, and hormonal profile.

We envision a Watson-powered app that changes its recommendation as a training progresses and/or the goal (e.g., bodybuilding competition) is approached, to maximize results. It recommends the best supplement products (e.g., whey protein) based on reviews, composition, pharmaceutical reports, compatibility with user requirements (e.g., avoid milk) and recalled-products information.

As more users enter daily data, Watson can find statistical similarities and improve its hypotheses and recommendations.

https://www.youtube.com/watch?v=N5p4buoA9Eo&index=2&list=PLRrOvPN-xqYOmr53g00GrOxQ0QgJHm0Eu

www.youtube.com/watch?v=IFWFW2BdO8I

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IBM's Watson Academic Case Competition

02:55   HD

At the University of Southern California, 25 interdisciplinary teams of business and engineering students created new ways for using Watson supercomputer technology to solve real-world problems in a first-ever business-case competition sponsored by IBM.

Students were judged on how well their concepts and business plans were crafted and how the plans supported the team's vision; the feasibility of getting the product or service to market and the supporting elements needed to do that; and how the solution leveraged Watson's key capabilities.

✓ Third place was awarded to a team exploring how to use Watson for treating post-traumatic stress disorder.
✓ The second-place team developed an employee-training program for human resource professionals.
✓ First place was presented to Team Sparkle, which used Watson's capabilities to develop a legal research product.

The team's biggest focus was on revenue and using Watson's capabilities. As the team did its research on the legal industry. "We discovered there were some financial aspects that IBM didn't see," she adds.

Team Sparkle found that the legal industry's revenues were being affected by changes in the way fees are assessed. "A large proportion of big companies have begun to pay flat fees to lawyers," Lin explains. When lawyers charged by the hour, lengthy legal researches were profitable, but with more flat fees being paid, the situation is different and legal research must be done at a faster clip. "The time they spend on legal research is no longer valued," Lin says.

http://www.ibmsystemsmag.com/linuxonpower/Watson/watson_usc/?page=1