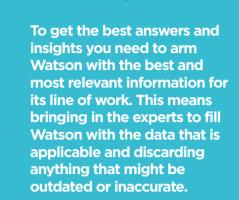
THE METHODOLOGY BEHIND WATSON'S GENIUS: DeepQA

When Watson blew away the competition on 'Jeopardy'! it wasn't a case of simply bringing in this machine and just seeing what would happen. Like its human counterparts, Watson came prepared with 200 million pages of information loaded into its memory. To get the best out of Watson today, the same approach applies to those utilising its cognitive power.



Once that's done, Watson is ready to get to work.

1. Question The user specifies the guestion or query for Watson.



Primary search

In primary search the goal is to find as much potentially answer-bearing content as possible based on the results of question analysis.



Candidate answer generation

These snippets of content are then presented as possible answers.

Supporting **Evidence Retrieval**

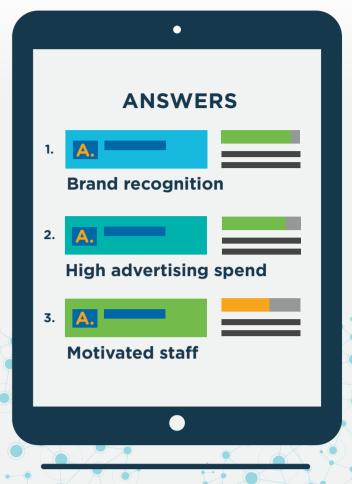
Watson generates additional supporting potential answer



HOW DOES IT WORK?

Deep Evidence Scoring

Scoring algorithms determine the degree of evidence supports the candidate answers.



9. Choose your Answer

Watson presents the user with ranked answers and their respective confidence levels.



2. Question Analysis

context of the question,

smaller parts to extract

each word or phrase.

often breaking it up into

the correct meaning from

Watson analyses the



3. Question Decomposition

Subsections of the question are then used to find potential answers. Decomposition streamlines the search process and can help to improve the system's overall answer confidence.



Watson generates a wide array of answers to the query, based on the primary search and candidate search.

HOW DOES IT WORK?

5. Soft Filtering

The answers are flitered out based on what Watson learned from previous queries (machine learning), saving memory for computing the most relevant answers.

6. Answer and **Evidence Scoring**

Candidate answers that pass the soft filtering process undergo a rigorous evaluation process using additional supporting evidence and deep scoring analytics.

7. Synthesis

Watson groups same or related answers to avoid duplications (eg. 'large advertising budget', and 'high advertising spend').

8. Ranking and **Confidence Estimation**

The system ranks the answers and estimates their confidence based on their scores.

How Watson can help you:



Increase Performance

Watson isn't programmed. It is a system that learns and improves itself by ingesting all the data it can and by being trained by humans. The more you use Watson the better it'll get at giving you the answers you need.



Gain Accuracy

You specify the content of what's being searched and you're in control of Watson's 'mode of thought'. Each answer outlines the reasoning behind its selection, so you can be sure the answer is correct.



Improve Efficiency

Watson takes less than 3 seconds to compute the answers to your queries. Imagine the time you can save on reports, analytics or research.

GET TO KNOW WATSON

Interested in learning more about how IBM Watson and cognitive business can rapidly help transform your processes? Get in touch.









