The graph shows on the horizontal axis the percentage of questions answered, and on the vertical axis, the percentage of answers that were correct.

When Watson started, the graph that shows its performance is shown here.

In 2007, we observed that the performance of Watson improved, and it is shown there.

And then successively from 2008 May to 2010, we see the successive improvement of Watson in this graph that shows a trade-off between questions answered and precision.

This is the area of the best human players.

Observe that they answer a high number of questions and they answer a very high number of questions correctly.

So it was at that time-- 2010-- that the people that controlled the decision decided that Watson is ready to enter the competition.

So the games were scheduled for February 2011.

Two games were played, and the winner would be the contestant with the highest winnings over the two games.

Once we got into the game, it was nerve-wracking, frankly.

Brad, if you're ready, make your first choice.

Let's take "Alternate Meanings" for $200, Alex.

"4-letter word for a vantage point or a belief." Brad.

What is a view?

Yes.

After the first clue of the game, which Brad won, I had just this horrible feeling at that moment that he was as good as everyone said he was, and he was just going to run the whole board on us.

"Alternate Meanings," $400.

"4-letter word for the iron fitting on the hoof of a horse or a card-dealing box in a casino." Watson.

What is shoe?

You are right.

We actually took the lead.

We were ahead of them.

But then we started getting some questions wrong.

Watson.

What is leg?

No, I'm sorry, I can't accept that.

What is 1920s?

No.

What is chic?

No, sorry.

Brad?

What is class?

Class, you got it.

Watson.

What is Sauron?

Sauron is right, and that puts you into a tie for the lead with Brad.

A lot of people were feeling good because Watson held his own and was doing pretty well.

But I wanted to be winning.

Too close for comfort.

Ken, you're in third place.

That means you go first in "Double Jeopardy." The "Double Jeopardy" round of the first game I thought was

phenomenal.

Watson went on a terror.

Watson.

Who is Franz Liszt?

You are right.

What is violin?

Good.

Who is The Church Lady?

Yes.

Watson.

What is narcolepsy?

You are right.

And with that, you move to $36,681.

After the first game, we have a pretty good commanding lead, but we've seen enough Jeopardy to know that this is not a lockout.

Welcome to the deciding game in the IBM Challenge here on Jeopardy!.

The second game was a whole other story.

We struggled some at the beginning.

"Actors Who Direct" for $1,000.

"A Bronx Tale." Brad.

Who is Robert De Niro?

Correct.

That was an awful category because Watson got every single one right, but was just a little too slow.

Ken.

Who is Denzel Washington?

You got him.

Ken and Brad were getting the answer in a second.

"Rocky II", "III", & "IV." Brad.

Who is Sylvester Stallone?

Correct.

Even with 2,800 cores, it took us 2 1/2 seconds or 3 seconds, and that just gives you a sense of how incredible the human brain is-- how quickly it could understand the category, what's being asked.

Boom!

And get the answer.

Who is Sean Penn?

Right.

Ken was doing very well.

And the risk was if Ken gets a "Daily Double," that's big.

Gets it right, he's going to be well ahead.

And then with that kind of lead going into "Final Jeaoprady"-- if he bets enough, he could end up winning the match.

"A camel is a horse designed by this." Ken.

What's a committee?

Good.

"Familiar Sayings" for $2,000.

We've gotta find that last "Daily Double." I was nail-biting.

It was just intense.

Because these guys were good.

Ken.

Who is the brain?

Brain, yes.

There was a crucial moment in the game.

There was still a "Daily Double" on the board and it was starting to become pretty clear that it was in the "Legal E's" category.

Let's go to "Legal E's" for $1,200.

"This person is appointed by a testator to carry out the directions and requests in his will." Watson.

What is executor?

Right.

Same category, $1,600.

Answer-- "Daily Double." That was the moment when I knew it's over.

Let us look at the results of the game.

Looking at these numbers, it is fair to say that Watson's victory over the two best human players has been a decisive one.

In the first day, Watson's winnings were more than double the sum of the winnings of both players.

And in the second day, it was more than their sum.

Overall, the winnings for Watson were almost double the sum of the winnings of both players-- a rather decisive victory.

So what's next for Watson?

So Watson is ideally suited to answer questions which cover a wide range of material and often have to deal with inconsistent or incomplete information.

This makes it particularly appropriate for applications like medicine.

Note that the amount of medical information available is doubling every five years, and a lot of the data is unstructured.

As a result, Watson has been utilized for cancer diagnosis and selecting the best course of treatment.

And Watson has been in discussions with MD Anderson and Memorial Sloan-Kettering Cancer Centers to apply the Watson technology for cancer diagnosis and selecting the best course of treatment.

So what is the analytics edge of Watson?

First, we have observed that the major technology of Watson is to combine many algorithms that increase the accuracy and the confidence of the overall outcome.

Any one of these algorithms would not have worked, but their combination gives Watson a considerable edge.

The second important observation that gives Watson an edge is that it approaches the problem in a very different way than how a human approaches a problem.

A key aspect of the technology is hypothesis generation, and then using different and distinct algorithms to explore this hypothesis and combining them, it leads to answers that provide an edge.

Finally, and quite importantly, Watson has a considerable ability to deal with massive amounts of data, often in unstructured form.

And the vast majority of the data-- 90% of it-- is, in fact, unstructured.

So the combination of these ideas give Watson a significant edge.

It is no accident that IBM has invested so far more than $24 billion to invest in Watson technologies, and it has created a company within IBM called Watson Solutions, whose key objective is to apply the Watson technology and the edge that it creates to a variety of verticals, one of which is medicine.