

THE
ECONOMIC
CLUB OF
CHICAGO

The Club welcomed Ginni Rometty of IBM on May 1st for its 89th Annual Dinner Meeting, held at the Sheraton Grand Chicago Hotel. At the Dinner Meeting, the upcoming year's board of directors slate was announced and accepted by the membership, including incoming chair of the board, Mellody Hobson, president of Ariel Investments. That evening, all members were sent the complete board list via email.

After watching a short IBM video on the potential uses of Watson, Mrs. Rometty started the program by giving brief remarks on data, and the ways this competitive advantage is launching us into a new era: the cognitive era.

What kind of information is in data collected by various companies and organizations? Mrs. Rometty provided specific statistics to exemplify how far this data reaches.

"In the case of doctors, there have been 80 million MRIs taken, there have been half a million genes sequenced, and if you look at cancer articles, there are 100,000 written in a year. So what could a doctor know? For consumer or retail business, there are 3.5 million searches done per minute and 500 hours of video uploaded per minute," she said. "Ninety percent of you allow people to know everything about you by turning on geo-tracking on your cell phone. I'm in the [other] 10 percent because I know what they do with that data."

However, all that information is not searchable on the internet. Only 20 percent of the world's data is searchable, while the other 80 percent is in the possession of companies. That data is where the value lies, but as she explained, people need a tool to make sense of it.

"Until today, every last era of computing was never able to do anything with that data. It's a new era, and Watson is just an example of that," she said. "It's what we call cognitive. These are systems that you don't program, they understand, they reason and they learn from the data."

With tools like Watson, that have the potential to "augment" human capabilities, IBM believes every industry, company and profession will be transformed.

"What I believe we can do with this era, with data as a competitive advantage and these new systems, we will really finally be able to solve what are some of the world's unsolvable problems," she said.

Mrs. Rometty also spoke of “new collar” jobs, or the many jobs currently available, or that will be available, requiring technical skills. IBM has focused resources on retraining and education programs that will equip individuals with skills they will need to thrive in the cognitive era. One such partnership is with a CPS school, the Sarah Goode STEM Academy. Administrators and students from that school were in the audience that evening, and Mrs. Rometty recognized them at the end of her speech.

After the remarks, Chair Ilene Gordon joined Mrs. Rometty on stage to ask questions of the speaker, starting with the fear surrounding artificial intelligence and the caution urged by famous thinkers like Elon Musk and Bill Gates.

“What they talk about are systems that are self-aware. These movies that they conjure up. And we’ve been at this so long, the state of technology is not there,” countered Mrs. Rometty. “You really do have to teach these systems. They will not be sentient.”

Mrs. Rometty then added that they carefully chose “cognitive” as the word to describe this era of business because she sees “artificial intelligence” as a misnomer. The technology, she said, is not artificial intelligence but rather augmenting human intelligence through assistance, something Watson has already done in the healthcare space.

“My whole life I’ve grown up believing institutions exist to do things that matter. You must do things that make a difference to why you exist,” she said. “This is our moonshot, and it will be around healthcare. It’s a daunting profession. Medical information doubles every 75 days. It is impossible to know how to do that job.”

With Watson’s capabilities, doctors can gain an analysis of thousands of documents and then use that information to inform their decision making. However, the technology must be trained, rather than programmed, to understand a specific field.

“One time early on with Watson, we emptied its “brain” out and only taught it with Wikipedia. You can debate with it, so we said ‘can you make up a case for why you should stop social programs in Europe?’ No data in Wikipedia that would support that. So it’s an example of, it depends who teaches it and what they teach it, and that’s really an important point,” she said.

This is one reason why, while at the past World Economic Forum Annual Meeting in Davos, Mrs. Rometty issued a policy letter detailing the principles for the cognitive era. She emphasized transparency to maintain trust and reduce the fear surrounding artificial intelligence. People need to know when this kind of technology is used in relation to them, but perhaps more importantly, they also need to know who taught it the system and what data was used, she said.