

# CEO GINNI ROMETTY ENVISIONS A BRIGHT FUTURE FOR IBM IN SERVICE TO THE BUSINESS COMMUNITY AND THE WORLD

**Ginni Rometty**  
**Chairman, President, and CEO**  
**IBM**

**December 3, 2014**

## **Excerpts from Ms. Rometty's Remarks**

*Fortune* magazine's recent cover story on you asked, **can IBM ever be cool?** I got a lot of notes from folks inside who said, we are cool. And I think it depends on how you define "cool." So if you think running 90 percent of the banks in the world, 80 percent of the airlines, 60 percent of all the transactions in business is cool, then we're cool. And if you think changing the face of health care is cool, then we're cool. Reinventing education, we're cool.

And I saw a great statistic that I think most people wouldn't guess. We had a couple thousand internships this past summertime, and I saw that there were 1 million applicants for them. So to me, that says we're cool.

**Is IBM a hardware company, a software company, a services company, or what?** As the year closes and we go into next year, hardware will be less than 10 percent of the IBM company. It's symbolic of what is IBM's hallmark, which is about continuously reinventing itself to what is the next most higher-value thing.

And so if you just look at the number across the top, it isn't as if it's still \$100 billion of the same things anymore. And to me this was really important, and that's why I think hardware is a very important thing, very important. And what we've done is focused on the kind of hardware, which by the way runs all those banks and airlines and everything that is the most secure, the highest throughput, most reliable, et cetera. But it is now less than 10 percent.

And in fact, the company has morphed over this time, 30 percent software, services... IBM today...it's an enterprise solutions company. Because there are consumer companies out there, and I think it's important to know what you are. We are an enterprise company that sells to enterprises, and they serve the consumer.

**With 431,000 employees, a lot to be responsible for, would you consider spinning off part of the company because it's just so big?** It isn't about size; it's about the value you provide, right? Back to this thought, this one notion – which I think in many ways is underappreciated – this idea that you constantly move your portfolio to higher value....

I've worked for some great people in this company. And one of the things they taught me was you always steward for the long term. And if you steward for the long term, that means that you adjust the portfolio constantly.... Over the past decade we've added 150 companies.

So we constantly prune and change that portfolio on our own. And I think that that's our job as stewarding the company and returning high value to our shareholders.

**Do women to rise up have to be twice as smart and work twice as hard as men, or just 50 percent?** I think everybody works hard. I do. I think the biggest recommendation that I give – it's actually to many young women, but I think it applies to everyone. I was just giving it to my nephew this past weekend in college. I told him, growth and comfort never coexist. And you

have to get used to that thought, because whether you are a person, a company, or a country, if you're going to grow, you are going to have to do things that put you at risk. And so that's to me the biggest advice I would give anyone about moving forward. Man, woman, doesn't matter; it's that thought.

**What is IBM's strategy going forward?** IBM is a solution company. So as a solution company, right now there are a couple of big shifts in the industry that are transforming my industry and, I would challenge everybody in here, they're transforming yours. If you think they're not, you're missing something. They're going to reorder every industry, including my own. And the shifts are around – the words you hear, the buzz words you hear all the time around big data, around cloud, and around social and mobile....

The strategy for us is we believe when it comes to business that all that big data is going to end up being – I call it a natural resource. It'll be the basis of competition. I know we work with many of you – actually, I know the companies – that it will be what separates winners and losers, how do you do predictive analytics and how you use it.

We have big businesses – in fact, last year \$16 billion -- around that. Big transformation around data. Big transformation around the cloud, which is to help enterprises move into the era of cloud. We're rated the number one cloud provider by IDC<sup>1</sup>.

And then...social, mobile, and security – I want to add the word security – changes the way people engage. And the reason I want to tell you those strategies, it leads now to these partnerships. Because if you're a solution company, A, you don't do everything by yourself, and B, if you never define yourself as a product, you're always focused on what is the solution you create.

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DAVID RUBENSTEIN: Good morning, everyone, welcome members and guests of The Economic Club of Washington, welcome to this sixth event of our 28th season, a breakfast event at the Renaissance Washington in Washington, DC. I am David Rubenstein, president of The Economic Club of Washington.

We're very pleased today to have as our special guest Ginni Rometty, who is chairman, president, and CEO of IBM. It's a position she assumed initially as the president and CEO on January 1 of 2012, and became chairman of the Board of Directors on October 1 of 2012.

IBM is obviously a company that everybody's familiar with. It's a company whose roots go back to, let's say, 1911. Put the name IBM – or International Business Machines – in 1924. It's a company with a market capitalization of about \$160 billion and has a revenue of about \$100 billion, earns about \$16-and-a-half billion in net income, and has 431,000 employees, which is the fourth largest private employer in the United States.

Ginni grew up in Chicago and went to Northwestern where she was a major in engineering and computer sciences. She initially joined General Motors and then two years later, 1981, she joined, in Detroit, IBM as a systems engineer. And then she joined later and really started in 1991 the consulting business of IBM and ultimately led its acquisition of the PwC Consulting business, which later became IBM Services. And later she became, in 2009, the

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<sup>1</sup> International Data Corporation.

senior vice president for sales, marketing, and strategy for IBM; and then of course in 2012 took the positions she currently has.

Obviously, running IBM is very much a full-time job, but Ginni does do some other things on the outside. She's a member of the board of trustees of her alma mater Northwestern, and also on the board of Sloan Kettering, among other things that she does.

Let me just start by asking you this. Today there are I think about 24 women who are CEOs of Fortune 500 companies. And there are three women who are members of Augusta. Which took more work – [laughter] – to get into? What was harder to get into, the CEO or Augusta?

MS. ROMETTY: I worked a lifetime to become the CEO of IBM.

MR. RUBENSTEIN: OK. And Augusta – [laughter]. So, recently you were on the cover of *Fortune* magazine. And the cover said, "Can IBM Ever Be Cool?" And is it your goal to make IBM cool? And is it cool?

MS. ROMETTY: I got a lot of notes from folks inside who said, we are cool. And I think it depends on how you define "cool." So if you think running 90 percent of the banks in the world, 80 percent of the airlines, 60 percent of all the transactions in business is cool, then we're cool. And if you think changing the face of health care is cool, then we're cool. Reinventing education, we're cool.

And I saw a great statistic that I think most people wouldn't guess. We had a couple thousand internships this past summertime and I saw that there were 1 million applicants for them. So to me, that says we're cool.

MR. RUBENSTEIN: And the best way to get one of those internships is to call you directly or – [laughter].

MS. ROMETTY: Are you applying? [Laughter.]

MR. RUBENSTEIN: Well, I – some children might be interested, but –

MS. ROMETTY: We do not discriminate.

MR. RUBENSTEIN: So in other words, what you're saying is – you often read that people, young kids coming out of very good schools, want to go to Google or Facebook or similar companies. IBM is competitive with them?

MS. ROMETTY: You know, not just internships, because I look at the stats every month. As an example, again, our consulting business, which is the largest in the world, every kid we hired turned down three other job offers to come to us. So I think that that says a lot.

MR. RUBENSTEIN: OK. So today, define for us what IBM really is, because you do hardware. People have an image of IBM that they make these large mainframe computers, but you do many other things. But do you consider yourselves a hardware company, a software company, a services company, or what?

MS. ROMETTY: So let me ask you a question first. I mean, let me ask you a few questions; so you might know the answer, though, David, because you're very well-schooled on us. But what percentage would you guess of our company is hardware?

MR. RUBENSTEIN: Well, I assume it's going to be a smaller percentage than the one that people – [laughter] –

MS. ROMETTY: There's a very important part of hardware that we do, but – in fact, actually it's been an interesting year. But as the year closes and we go into next year, hardware will be less than 10 percent of the IBM company. It's symbolic of what is IBM's hallmark, which is about continuously reinventing itself to what is the next most higher-value thing.

And so if you just look at the number across the top, it isn't as if it's still \$100 billion of the same things anymore. And to me this was really important, and that's why I think hardware is a very important thing, very important. And what we've done is focused on the kind of hardware, which by the way runs all those banks and airlines and everything that is the most secure, the highest throughput, most reliable, et cetera. But it is now less than 10 percent.

And in fact, the company has morphed over this time, 30 percent software, services. And if you asked me, you know, well, what is IBM today, I would tell you – and this is an important word – it's an enterprise solutions company. Because there are consumer companies out there, and I think it's important to know what you are. We are an enterprise company that sells to enterprises, and they serve the consumer.

MR. RUBENSTEIN: OK. So you do have 431,000 employees. That's a lot of employees to be responsible for. One of your competitors, HP, decided they were going to hive off one of their businesses. Would you consider spinning off part of the company because it's just so big or that isn't something you would consider?

MS. ROMETTY: You know what? It isn't about size; it's about the value you provide, right? And again, back to this thought, this one notion – which I think in many ways is underappreciated – this idea that you constantly move your portfolio to higher value.

So you and I were talking earlier. I've worked for some great people in this company. And one of the things they taught me was you always steward for the long term. And if you steward for the long term, that means that you adjust the portfolio constantly.

And so I would say we are ready – we take care of any portfolio. We do it on a continuous basis. And so we would – over the past decade we've added 150 companies. And over the last – my tenure, actually – even just this year I will have divested \$7 billion of revenue for IBM that lost half a billion dollars.

So we constantly prune and change that portfolio on our own. And I think that that's our job as stewarding the company and returning high value to our shareholders.

MR. RUBENSTEIN: So one of the leaders that you worked for is somebody that –

MS. ROMETTY: You know.

MR. RUBENSTEIN: – I know well, Lou Gerstner. So what was that like? He's an easy guy to work for, is that right? [Laughter.]

MS. ROMETTY: Absolutely. Absolutely. Look, in all seriousness, I've had the great pleasure – because I worked under Lou and under Sam both, right? And I always say, what I've learned in my tenure, my couple decades now at IBM – I say I've learned, don't protect your past, don't define yourself as a product, and you always steward this company for the long term.

And if you keep those three things in your mind, you will take great comfort in many of the decisions you make, regardless of what people think about them. And I learned many of those from them.

MR. RUBENSTEIN: So you went to Northwestern. At the time did you ever think you would want to join IBM? Or a large computer company, or enterprise services company? What did you think you were going to do when you graduated from college? You actually went to work for General Motors initially.

MS. ROMETTY: I did, actually. This is something I tell so many of our young people – you mentioned I'm an engineer. I am a big believer that in the next, I think decade in America, every student is going to have to have some kind of STEM background, right? Science, technology, engineering, math. Something like that for America to be competitive.

And when I went into it back then, there were many times I would have been the only woman in a class. You know, I'll often meet colleagues that'll say, don't you remember me? We sat next to each other. And I'm like, hmm, I don't. And they're like, well, there was one of you and many of us.

So in that timeframe there were not many women in engineering at all. And people say, well, why did you go into engineering? And my really strong advice for anyone – my nieces, my nephews – it's all about – I think what it taught me was how to solve problems.

And you don't have to be a practicing engineer, even. The idea is that engineering teaches you how to problem solve. Which I'll get to your question on how did I end up where this was. But this problem solving, to me, kind of prepares you to do anything.

And that's why, when I first went to General Motors, GM was a great company and they had had a program at that time – don't have it now – but it was – they had scholarships for folks

to get women into engineering and had gone to some of the top schools. And no strings attached. I mean, they did a great job helping me through Northwestern, and so I worked there a few years.

But the answer to that question is, what I really wanted to do was apply technology. And I could do it in many industries at IBM, and have many careers.

MR. RUBENSTEIN: But when you joined IBM, surely you didn't think in those days that you could rise up to be the CEO.

MS. ROMETTY: Oh, of course not. I mean – no. But you know what? My mom raised me and my brothers and sisters; we came from a single mom. I mean, she taught us all we could be whatever we wanted to be.

So I think, like many people who are successful in this room, it wasn't about one day I'm going to do this. It was everything you did, you just thought about how well you could do it. And then you did the next thing.

MR. RUBENSTEIN: But you think women to rise up have to be twice as smart and work twice as hard as men, or just 50 percent? [Laughter.]

MS. ROMETTY: I think everybody works hard. I do. I think the biggest recommendation that I give – it's actually to many young women, but I think it applies to everyone. I was just giving it to my nephew this past weekend in college. I told him, growth and comfort never coexist. And you have to get used to that thought, because whether you are a person, a company, or a country, if you're going to grow, you are going to have to do things that put you at risk.

And so that's to me the biggest advice I would give anyone about moving forward. Man, woman, doesn't matter; it's that thought.

MR. RUBENSTEIN: So by the way, people must ask you all the time, what devices do you use? I mean, you're head of a large technology company. What is your smartphone? What is your –

MS. ROMETTY: I have all of them. Yes.

MR. RUBENSTEIN: – computer? You have everything. [Laughter.]

MS. ROMETTY: Yes. Yes, I do. And this is why these guys are all growing. I do. And of course, I have my share of Apple devices. We have a great partnership with Apple as well – that we even talk about. So I think I find, like many of you, I use different devices for different things.

MR. RUBENSTEIN: So let's talk about Apple for a moment. IBM was a company that maybe did a lot of things on its own. And since you've come in, you had a lot of partnerships with a lot of companies. Let's talk about Apple. People were probably surprised that you are now selling iPads to your corporate customers. Is that more or less right?

MS. ROMETTY: Although that's a very tiny piece of it is the iPad. Can I back up just one second – to give it context? And then I think it's a really great symbolic and important partnership.

Back up to this idea that we're constantly changing. So as I said to you, IBM is a solution company. So as a solution company, right now there are a couple of big shifts in the industry that are transforming my industry and, I would challenge everybody in here, they're transforming yours. If you think they're not, you're missing something. They're going to reorder every industry, including my own. And the shifts are around – the words you hear, the buzz words you hear all the time around big data, around cloud, and around social and mobile.

For us, it's a strategy that I'll then lead to where Apple fits in this. But the strategy for us is we believe when it comes to business that all that big data is going to end up being – I call it a natural resource. It'll be the basis of competition. I know we work with many of you – actually, I know the companies – that it will be what separates winners and losers, how do you do predictive analytics and how you use it.

We have big businesses – in fact, last year \$16 billion, around that. Big transformation around data. Big transformation around the cloud, which is to help enterprises move into the era of cloud. We're rated the number one cloud provider by IDC; we can come back to that.

And then number three is social, mobile and security – I want to add the word security – changes the way people engage. And the reason I want to tell you those three strategies, it leads now to these partnerships. Because if you're a solution company, A, you don't do everything by yourself, and B, if you never define yourself as a product, you're always focused on what is the solution you create.

So with the partnership with Apple is one of now four that I consider sort of very strategic partnerships that are all around IBM as an enterprise platform for that future I just described. So with Apple, really if I can kind of boil it down, the view was together we could reimagine how work was done.

Most people who, if you have your devices, when it comes to doing serious business in your company, statistics are 60 percent use it for email and calendaring; 70 percent are afraid to do things way more sophisticated in real work process because of security. So we knew there was an itch – and I'll talk about some of the apps coming out. So the partnership with Apple was to reimagine work.

Then we announced a partnership with Twitter, which was really kind of the view that every decision you make – every business decision could be improved with the voice of the consumer. And so we'll be taking all that into business decision making, which is very hard to do just with all that data sitting out there as it is.

And then in cloud, two partnerships, both SAP and Tencent in China, which as you know Tencent is huge in China and we are the cloud-selected partner to take it to small and medium business.

So these are all about providing a certain solution, of which Apple is one.

MR. RUBENSTEIN: So do you call up Tim Cook and say, we want to do a partnership? Or does he call you? When the CEO of IBM calls, people usually listen, I assume.

MS. ROMETTY: Yes. Tim and I have gotten to know each other – I was telling David, Tim worked for IBM for 12 years early in his career. And we've gotten to know each other through some other things. And the more we talked, the two companies are extremely complimentary. I think to both of our pleasure has been to watch the sets of engineers with great respect for each other, both realizing they know something different.

And Apple certainly – I think many people would say a gold standard for consumability, usability, ease; and we on the other side, all around. OK. Now we're not only going to make that secure, that application has to do real work and therefore it's got to connect into all these systems of the world.

So my perfect kind of example – I just saw there'll be a dozen coming out in about a week here of the first apps with partners. And one of my favorite ones that I think is so illustrative of this partnership is there's the one for the flight attendant that – so if you're on a plane and you're going to have a connection and your connection – you know you're going to be late, it's delayed, what happens to most people? What do you do? You're up in the air and you know you're going to miss your connection. What do you do?

MR. RUBENSTEIN: Scream.

MS. ROMETTY: Scream? OK. That would be – [laughter] – that would be you. OK. What else? Others? The kinder, gentler?

AUDIENCE: Ask the flight attendant.

MS. ROMETTY: You ask the – yes. They tell you you're late and then what do you do? OK. And then when you get off the plane, what do you do? You run to the – yeah. And then someone does this for about 15 minutes. And then while you're waiting in line, you're calling and booking duplicate reservations and all sorts of things.

And so, why can't someone come up to you on the plane and say, really, Mr. David, look, you're one of our top fliers. Here's your two choices. Pick it; hit the button. And I've sent your boarding pass to your phone and you're all set for when we land. Right? That would be nice.

MR. RUBENSTEIN: Is that going to happen?

MS. ROMETTY: Well, that's going to – [laughter]. And so – for you. But technically, to think about what's required you might think, that's easy. But the technicality of what's required, the certain kind of satellite you can use up in the air to be sure that that can be done, and all the



connections into those systems; yet you can't have a flight attendant doing this for – it's got to be two buttons to get this done. So to me it's one of the great examples.

I was just with one of the big telcos and it's a field utility app for their folks out in the field. There's a whole set of them coming. And that's, to me, reimagining work with the combination of the two companies.

MR. RUBENSTEIN: Talk about cloud computing. IBM famously used to build these big machines and then people –

MS. ROMETTY: And still do.

MR. RUBENSTEIN: And still do. But you also have people who help you figure out how to use the machines.

MS. ROMETTY: Yes.

MR. RUBENSTEIN: Now cloud computing is something that maybe will obsolete some of that or not?

MS. ROMETTY: Look, no. Clouds still do run on hardware.

MR. RUBENSTEIN: Right. Right.

MS. ROMETTY: They actually have to run somewhere. [Laughter.]

MR. RUBENSTEIN: People have to buy the hardware necessarily.

MS. ROMETTY: You have to buy. That's right. And so it's whether you share it, whether you use it. So, for everybody who thinks about it, my simple definition of cloud, I think which is helpful, is that it's any IT or process that runs as a service. That's what it is. And if you're a company, again, what's happening right now – actually, new applications are being built, 90 percent are being built in the cloud and 70 percent of companies are doing something hybrid, which I'll come back and describe.

Now, why? So you said why will people go? The biggest thing – all these things have a business reason to me. And the business reason is, it does offer you agility and speed. And for many things you do, that is what you need. And so what you will find most people – when we say 90 percent is – if you're building something net new, you're building it out in a cloud technology; it's because, yes, fast and you'll find customer facing. Typically a lot of customer-facing things people are building, building there.

And then you'll find there's a great similarity to the way the Internet evolved. Because when the Internet, some people would remember, came to be, you might remember words like browser wars and counting eyeballs and how many things people looked at. And then someone

said, you know, people are going to want to do very serious business things. And that was the birth of e-business.

And that was certainly one of Lou Gerstner's greatest contributions to IBM was around e-business. And the idea was, instead of just looking, I'm going to want to connect that back to the things I already have so I can buy good manufacturing, supply chain, pricing, demand fulfillment. And that gave birth to a whole industry for IBM, by the way, called middleware.

Now you come to cloud. If you're a company, most companies when they look at cloud they're doing three things. They're saying, some things I'm going to do on my premise – and that's in a private cloud – some I'm going to do what you said, externally, a public cloud; and then I'm going to connect the two together, that's hybrid. So the world of cloud is those three things. People will do it to become more agile, and it is a good thing. So in some ways you'll do new things, some things will get replaced, and in the end the picture is going to be that whole picture.

MR. RUBENSTEIN: To get into cloud and to get more aggressively involved in it, you bought SoftLayer. And do you feel that you had to buy something because you weren't yet ready to be a player in cloud?

MS. ROMETTY: That is a good question. Because actually, in cloud we've done 17 acquisitions in total. In big data analytics we've done maybe almost 35 right now. And when you hear a lot of discussion about cloud, IBM had done a lot of work in private cloud, hybrid – how to connect – and what SoftLayer was, was a public cloud, of the three pieces, it was a missing piece. And that's what we chose to go buy.

And they were the largest, in your world, privately held cloud. Highly successful. They run many – I can't remember now. I don't know, 20 thousand, 30 thousand, 40,000 startups. Many of the companies who you would know, we run. I can't remember what percentage of apps on your phone are actually running on that.

MR. RUBENSTEIN: So how do you instill an entrepreneurial culture in a company as big as yours? Because a lot of these new technology developments come from small companies, but you're a big one. So how do you get entrepreneurs to thrive in your atmosphere?

MS. ROMETTY: I think, for everybody in the room, this topic about agility and speed in a company. If there's a silver bullet, if you ever want to have one, that's what it is. And how you do it is you provide – many people call it an agile work – I was just at a big bank, let's say, a week ago talking about all their agile teams around the world, right? And what they were doing to increase that sort of way things are done. Because we're all in this world where you want to build things, test them, modify, this agile – technology calls it dev ops world. And that's how you set the teams up.

And it's in fact part why in some cases, David, I went ahead and, with Watson, we set up a brand-new division, right? We haven't done a brand-new division in probably 20 years. Set up

a brand-new division. And entrepreneurial, that's one way to do it, is give something all of its own pieces, let it go. So I've integrated some units to do that.

The other is practices, this idea of agile in dev ops in how you let people operate.

MR. RUBENSTEIN: Let's talk about Watson. Why did you name it Watson, not Gerstner?  
[Laughter.]

MS. ROMETTY: It is built on decades of technology.

MR. RUBENSTEIN: So for those who may not know, Watson was a computer that went on Jeopardy and beat whoever the best Jeopardy person was. But how did you take that computer that beat somebody on Jeopardy and make it into a whole business? And what does Watson actually do?

MS. ROMETTY: This is to me one of the most important things maybe of the morning I'll talk about. I want to back up a second.

What we did with Watson in 2011 – it's, by the way, a cloud service, by the way, now – that was just very symbolic. What it actually is, it's the very first really instantiation of something the world calls cognitive computing. So if you go back in time, the very first – in the whole era of computing – were machines that just counted things, tabulating. Abacuses and they moved up from there; they counted.

Next, everything you know today is programmable. You must tell it what to do. Somebody's told it what to do. It's programmable. Everything. Big, little, doesn't matter.

Watson is the first genre of machines that can learn. Watson, people say, oh, is it a big super-search engine? Is it a Q-and-A? Does it look things up? No, it learns. And so it actually has a learning curve.

So what does it mean by it learns? It operates like our brain does. It ingests lots of information – which we'll come back and talk about what it's done in health care and in cancer – ingests a lot. And then it learns over time what's right and wrong and makes correlations, so like you and I make decisions.

It forms, though, hundreds of thousands of hypotheses at one time and then it goes and looks for all the data to prove them right or wrong. And statistically, over time that reasoning gets better and worse with the data. And it comes up with answers, with percentage of confidence in the evidence of what it believes.

So it's not about just an answer. And this is really important in things like health care. And that's what a learning machine does. So just kind of picture that happening, though, at lightning speed all at one time. And what we chose to do was show it first doing something pretty simple like Jeopardy.

I shouldn't say simple. Not really. Those two guys that were the winners, they're like super-human. And their ability to answer questions and ring the little buzzer, get in, it's – your brain is a fantastically – as many of you know what it can operate on in low power, it's able to operate on. And so – but what Watson had to do was open domain. I mean, he didn't get the questions ahead of time, right? So he had to be able to. And what you watched on TV said he would show his percent confidence and he'd only buzz in when he was at certain confidence.

So that was years ago, 2011. We have fast-forwarded to now, a whole lot different – I mean, we've set off in the commercialization. And now this is actually quite serious of what we've done. And we took an approach that said, first off, could you transform an industry?

And I will always remember the first work we did in health care because I will always remember having met the first client we did the work with after we'd gotten some of the first work achieved. And I said to myself, you know, we are going to really – we are going to transform health care with this. This is going to transform health care as you and I know it. And I will explain in one second.

MR. RUBENSTEIN: You mean at Sloan Kettering?

MS. ROMETTY: Right now. Not only at Sloan Kettering. And we just rolled out to the largest private health facility in Southeast Asia, where 1 million patients will be treated with the kind of protocols MSK has.

And so this idea that this machine – we could transform health care. So as an example, it's been fed in areas of – well, let me just back up one second, if you don't mind.

In health care, Memorial Sloan Kettering Cancer Center has worked on the hard, hard cancers, like hard tumor cancers, like lung and the like. MD Anderson started with leukemia. Mayo Clinic, helping use Watson to do clinical trial matching. Cleveland Clinic to teach doctors and then to see if it could go broader.

So, when I just rattled off, those of you in medicine, the idea that five institutions like that would cooperate for long periods of time on this I think speaks everything you need to know about what the promise is.

So what they have now gotten to the point is it's called the oncology advisor, done with the best doctors in the world at MSK – and there are other great cancer centers, of course. But it is now to the point where it understands and can read medical records, pulls all the pertinent data, has been fed all of the information from every journal of medicine, hundreds of textbooks, every journal, every edition, 12 million pages of evidence and has then been trained by the world's best doctors now. And as I said, that's about to roll out for 1 million patients. It's underway right now in Asia.

MR. RUBENSTEIN: So now you're taking the Watson group and putting them in a different kind of office setting and a different kind of office environment?

MS. ROMETTY: We did. Very symbolically we did.

MR. RUBENSTEIN: So it's going to be like people in Silicon Valley, is that right?

MS. ROMETTY: We very symbolically chose the headquarters for Watson to be in Silicon Alley, which is in New York, at 51 Astor. Because not all good ideas come from one place in the world. We're very clear about it -- this kind of big building pops up in the middle, lots of other startups around it. And that's where it's located.

And so in addition to health care, I should say, we have now gone on in Watson's ability to do advising. And in fact, Walter Isaacson writes about this – and those of you who have read his new book on the innovators, there's a chapter on this, that he too uses Watson as the example. It will redefine interaction between man and machine. It will augment your and my decision making; it's not about replacement.

And so we've gone on with it as an advisor, doing work in financial services, and particularly doing work in some of the help centers, that kind of area. Then as well, something called the discovery engine, particularly in areas like pharma; so it's Sanofi, Johnson & Johnson. And its ability to discover relationships between things may end being its killer app as well. So it's commercializing across all of this.

MR. RUBENSTEIN: So when Watson won on Jeopardy, who got the proceeds the victor won?

MS. ROMETTY: We did, but we donated them to charity.

MR. RUBENSTEIN: So today, do you think women are coming into IBM at a higher percentage, much higher than when you joined? And what are you doing to get women and other people from diverse backgrounds into IBM?

MS. ROMETTY: This is a very good question because, yes, they are coming in at great percentages. But I think there's a very important difference of how to look at diversity in these days.

If I go back years, people would look at diversity and you would look at it by just different constituency groups, right? Having different groups and you would call them out. And then we kind of move forward in time and I think you think of diversity as inclusion.

I think of diversity differently now. I think of it as about how do you engage a population, no matter where they come from? And this to me is a really important point, that – so whether it's women – it doesn't matter, really, David, whether it's women or whether it's people from different countries in Asia, whoever it is, our jobs are to get them to contribute to what they do at work.

And this is a really interesting role I believe social and mobile – particularly social technologies – will play in a business setting, this idea to get people to engage. Not just be a seat at a table; they have to engage. And what you see – and the reason I launch off when you say is

it about just women, no, it's about getting everyone to engage. Diverse population, get them engaged.

And I look at the statistics and watch people's behavior. When you get a group of people – let's say my table here, and we were all going to just talk across the table at each other. Certain people will engage and certain people won't. I guarantee you, if I put this same group of people then in a social setting, different set of people will engage with social technologies than they will face-to-face. And I do think this idea that social and mobile in a company can be a great production engine of the future that will both add speed and it will really drive this idea of engagement, which is really a new definition of diversity.

MR. RUBENSTEIN: So looking five years or 10 years down the road, what do you think computers will be doing or companies like yours will be doing? What are the new devices we'll have or the new abilities we'll have to make ourselves live better?

MS. ROMETTY: Oh, look, I – this idea about big data, analytics, I think it will be with us in Watson. This is not a one-year, two-year; this is decades here about what's going to happen. So what will it be exactly? I don't know. But I do know – I am absolutely convinced – that this idea about augmenting our decision making and really information being what separates winners and losers, is going to continue to just grow and grow and grow.

MR. RUBENSTEIN: Let's talk about cyber terrorism for a moment. Obviously, to do cyber terrorism you need to have good computer skills and so forth. Are you confident that our skills in computers and things related to that in the United States are better than other countries? And do you think we are capable of defending ourselves against cyber terrorism?

MS. ROMETTY: You know, I was just with a group of my own colleagues – 50, 60 of them – and I gave a little 10-minute speech on security in cyber. And this area is moving so fast. I say to my own colleagues, whatever you do, you've got to keep doing more. It's not enough because it so sophisticated, right?

I mean, on one low end, last year half a billion personal records were stolen. You know there's a complete underground that operates around this whole topic. And then at the worst end, nations, states, and others that have other different motives in place.

So in this topic there are basics. I kind of have kind of five basic things every company needs to do. But in addition, I think the most important thought about how to think about cyber security, any form of cyber, is that I actually think of it as a big data and analytics problem. Because you in your mind have to get over and have a different paradigm about cyber security.

I think today people think about, how do I protect things? The analogy would be if you had a castle, you put a moat around it. Or your own home, you have an alarm system on every door and every window. In fact, if I look at most companies they even have a different alarm system on every door and window. I mean, this is not the best way to do it, because in real life the issue is already inside.

And so if you think about it, most intrusions in a company, they've been there eight months before they're discovered. That is on average, eight months before they're discovered.

So you almost have to switch your analogy and think of cyber and think of security as an analogy of your immune system in your body. You have germs. We all have germs in our body. And what your immune system does is it just watches, they don't become too dangerous. And when they become dangerous, your immune system goes to them and stops them and cuts it off. That is the world of security we're going to live in. It's going to all be about watching for tiny footprints in the sand long before.

And that's why it's a big data analytics. That's why I think there's way more to be done in that area and that's the kind of thing that you have to do.

But one whole breath, people still don't do the basics, David. As sophisticated as the answer is on one end, on the other end there are really basics for companies, in your home, that people still don't do that really they need to do.

And I know for us and our employees, things like do you continuously – I say raise the security IQ of your family and of your employees. So we constantly – we train them, we test them, and then we try to trick them over and over again. Train them, test them, try to trick them.

And I guarantee you, people are going to – inadvertently – because the number one cause of most issues in a company is internal. And often by accident. It's often by accident. And so – the way things get in. And so there are basics to do there.

All the mobility. Mobility is a great thing; this is one of the biggest things as part of the Apple partnership is all the end-to-end security, because mobility also opens doors otherwise.

MR. RUBENSTEIN: When you do emails – I assume you do emails from time to time. Are they encrypted?

MS. ROMETTY: In some cases they are – for work – this is a really important point. IBMers, all of our mail is all handled in a way that is completely monitored and protected.

So everybody who's got a device, that many people – this idea called BYOD – bring your own device to work – many companies do it. My advice to everyone is you've got to – and what we do with our folks is every device you kind of think of it – just kind of literally think of it this way – that it's got a left brain and a right brain.

Left brain, person's personal stuff; the right brain is your work stuff. I'm going to monitor and put a box around that and I'm going to make sure what happens to it. And if something starts to happen, I clean it, I shoot it, I kill it; I've got to stop it.

So it's this idea that you have to think that way about what these devices do and protect them. So we do it that way at work; we actually secure that stuff.

MR. RUBENSTEIN: Now, the U.S. government has been worried from time to time that Chinese computer companies are going to encrypt little devices in things they might send over here. But are you worried that the U.S. government might take IBM products and do things to them before they're shipped overseas? Because there were reports of that happening to some other companies than IBM.

MS. ROMETTY: Yes. Look, not at all – and this is what I attribute to being a hundred years old, made very wise decisions along the way, recognize who you are and know why clients do business with us, is because they know and they can trust that we will handle their data.

So we have had policy positions for a very long time that we would never share data with a government, we would never give encryption keys to a government, we would never put backdoors on our software. And so I can emphatically – no matter what government that would be – can say that.

MR. RUBENSTEIN: So with all the employees you have and you're in 170 countries around the world, on your typical day I assume you start around 10:00 in the morning and – [laughter] – go to about 5:00, something like that, right?

MS. ROMETTY: Is that your day?

MR. RUBENSTEIN: Right? 10:00 to 5:00, yes? So you must – I mean, what percentage of your time do you have to be traveling to keep this empire that IBM is kind of intact and show yourself to the troops and so forth? How much of your time do you spend traveling? How much do you spend with clients? How much do you spend with government?

MS. ROMETTY: Look, I probably do a third, a third, a third in that. To me – and again, this is going to sound – you have to really believe it, though, and your actions support it – I mean, the reason we exist is clients. And so I do spend a fair amount of time with our clients, because it is about what we do for them, right? And I never, never lose sight of that.

And so clients. In this day and age, you've got government and issues around the world; you have investors and your people, right? But clearly, your people and clients are up at the front end of that.

And I know when you talk about the scale, David – but you know, I have been in the company for – the time. I am quite used to that scale. And so to me, other things are daunting to other people. I think to many IBMers it's not daunting.

And because of the ability to have technology to connect – and we've run as a globally integrated enterprise; Sam did a great job globally integrating the enterprise – that people are quite used to how to work that way. And if anything, the technologies that are there today, they allow me to interact with everybody so fast and so flat.



You know, I say sometimes my job is the chief engagement officer, right? Not just the chief executive officer. And you're able to put questions out, get answers, get the dialogue, and that is a really positive product of the social and mobile technologies.

MR. RUBENSTEIN: So when it was announced that you were going to be the CEO of IBM, did you find all of a sudden you had a lot of friends that you didn't know you had before? [Laughter.] Did that happen a lot, people calling you?

MS. ROMETTY: I warned you about that, right? I had a lot of friends before too, though.

MR. RUBENSTEIN: So what is the greatest pleasure of being the CEO of IBM? What's, let's say, the least pleasurable part of the job?

MS. ROMETTY: This is easy to me. The greatest pleasure for me is the impact that we are able to have doing work that matters for the world.

I mean, I can't be prouder of the IBMers, whether it is the work they do with our clients or, you know, last night we just made an announcement working with Scripps Institute, the work that we're doing on Ebola. And it is about taking and allowing and enabling anybody who wants to dedicate time on their own personal devices into the worldwide community grid so researchers can do work. You can do it in three minutes; you can sign up. And when you're not using your device, researchers harness them together and they use it for all of their research work on Ebola.

Or whether it is the work that we have done – we did some great work recently in China on Green Horizons, on prediction on weather and in a way to help with the pollution and predict four days ahead what it's going to be. You can actually take and make changes in the environment to stop it and improve it.

So it is work that matters for the world. And that's where I said, you know, health care. We will change the face of health care.

MR. RUBENSTEIN: So you are relatively new in your position. And IBM CEOs often leave at a relatively young age. Lou Gerstner left at a relatively young age. It looks younger and younger even as I think about that age. [Laughter.] But would you ever consider leaving young – at a young age and going to government service or something like that? Would you have any ambition to have another career outside of IBM or government service?

MS. ROMETTY: So I take it, from your question, you think I am young?

MR. RUBENSTEIN: Very young. [Laughter.]

MS. ROMETTY: Yes. OK. Thank you. I was just checking. Look, I –

MR. RUBENSTEIN: Teenager, by my standard. [Laughter.]

MS. ROMETTY: Look, I am young in my tenure here and I've got a long runway ahead. So I don't even think about it – which I don't think is unusual, right?

MR. RUBENSTEIN: So a higher calling like private equity wouldn't appeal to you. [Laughter.] So I notice – IBM is often called Big Blue. And do you wear blue often because that's –

MS. ROMETTY: No. [Laughter.] David asked me this earlier. He said, did you wear blue because of Big Blue? I'm like, no, I wore it because it was next in my closet. [laughter].

MR. RUBENSTEIN: All right. Well, I want to thank you very much for giving us a very enlightening conversation about IBM.

MS. ROMETTY: You're very nice. [Applause.]

MR. RUBENSTEIN: OK. [Applause.] Let me give you a gift on behalf of the Club. This is a copy of the original map of the District of Columbia.

MS. ROMETTY: Oh, very nice. Very nice.

MR. RUBENSTEIN: Thank you. It was great. You did great. [Applause.]

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**Virginia M. Rometty**  
**Chairman, President, and Chief Executive Officer**



Ginni Rometty is Chairman, President, and Chief Executive Officer of IBM. Mrs. Rometty was appointed President and CEO effective January 1, 2012. She became Chairman of the Board of Directors on October 1, 2012.

Mrs. Rometty began her career with IBM in 1981 in Detroit, Michigan. Since then she has held a series of leadership positions in IBM, most recently as Senior Vice President and Group Executive, IBM Sales, Marketing and Strategy. In this role, she was responsible for business results in the 170 global markets in which IBM operates and pioneered IBM's rapid expansion in the emerging economies of the world.

Prior to this, Mrs. Rometty served as Senior Vice President of IBM Global Business Services, where she led the successful integration of PricewaterhouseCooper Consulting. This acquisition was the largest in professional services history, creating a global team of more than 100,000 business consultants and services experts. In recognition of her leadership in the professional services industry, Mrs. Rometty was honored with the Carl Sloane Award 2006, given by the Association of Management Consulting Firms. In prior leadership roles she served

as general manager of IBM Global Services, Americas, as well as general manager of IBM's Global Insurance and Financial Services Sector.

Mrs. Rometty presently serves on the Council on Foreign Relations; the Board of Trustees of Northwestern University; and the Board of Overseers and Board of Managers of Memorial Sloan-Kettering Cancer Center. She holds a Bachelor of Science degree with high honors in computer science and electrical engineering from Northwestern University.