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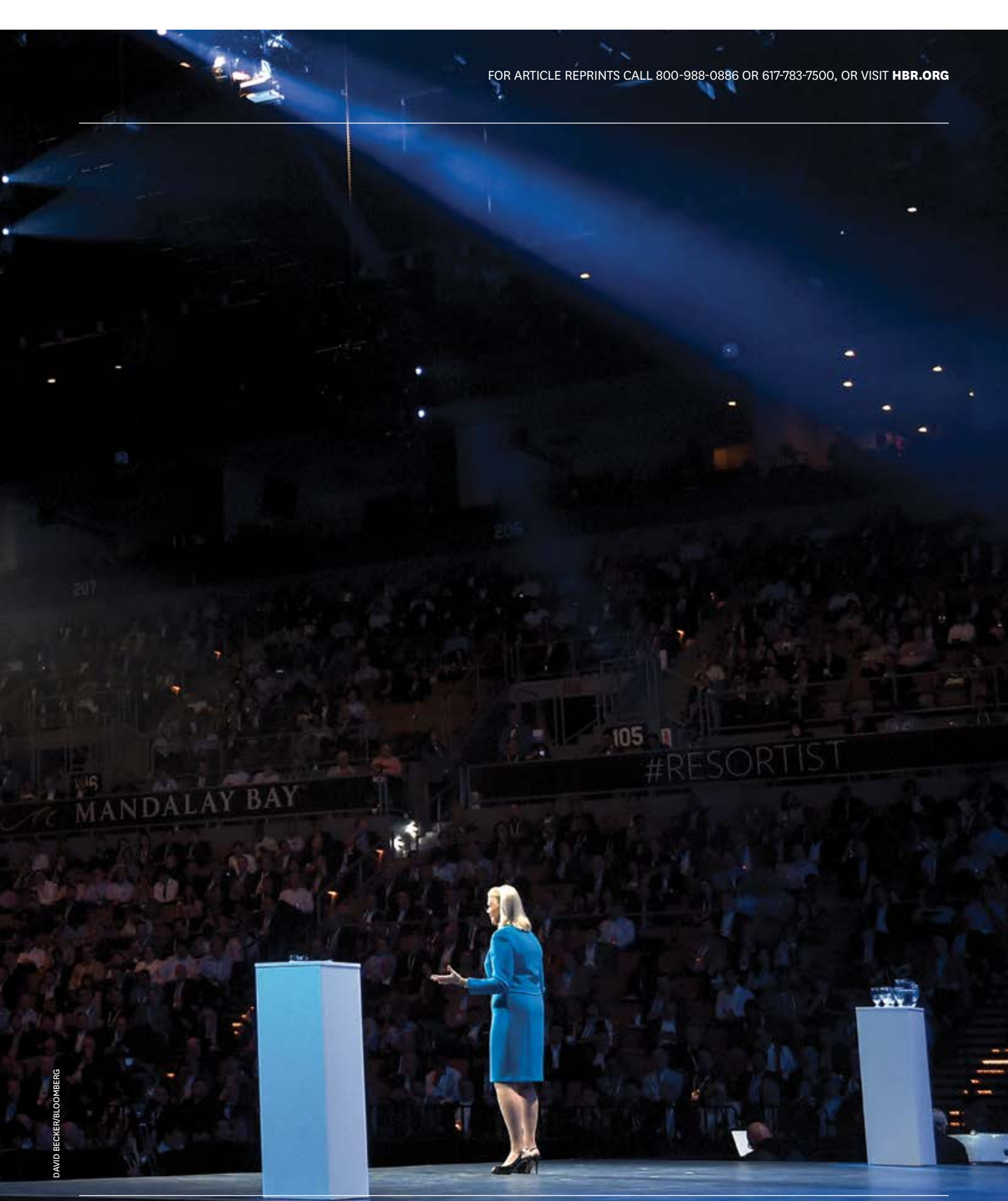
“Don’t Try to Protect the Past”

An Interview with Ginni Rometty by Adi Ignatius

“DON’T TRY TO PROTECT THE PAST”

A CONVERSATION WITH
IBM CEO GINNI ROMETTY

BY ADI IGNATIUS



DAVID BECKER/BLOOMBERG

When Virginia “Ginni” Rometty became the CEO of IBM, in early 2012, she dutifully adopted her predecessor’s strategy. Sam Palmisano, who held the position for a decade, had vowed in 2010 that IBM would roughly double its per-share earnings within five years. Two-plus years into her tenure, Rometty concluded that trying to meet that goal would end up crippling IBM’s efforts to reinvent itself. She abandoned the plan in October 2014, thereby taking full ownership of the company’s future strategy and financial health. It’s been an interesting ride ever since. Rometty, 59, is on a protracted mission to make IBM a cloud-based “solutions” business. She has invested billions in advanced technologies while selling off legacy divisions that don’t fit the new model.

IBM is still hugely profitable, with net income in 2016 of \$13.0 billion on revenue of \$79.9 billion. But it’s also still a work in progress. Amid the transformation, the company has suffered 20 consecutive quarters of falling revenue. Rometty says the decline is due primarily to her selling off legacy businesses and to unavoidable currency hits. Moreover, she says, moving to new, higher-margin businesses

requires some short-term pain. “My job is to build an IBM that’s durable,” she says.

So far her board has been supportive. Despite the shrinking revenue, it recently raised Rometty’s pay package to \$33 million, making her the eighth-highest-paid CEO in the United States. The question is whether investors will remain as patient. In May, IBM’s biggest shareholder, Warren Buffett, said he had dumped about 30% of his holdings, noting that the company faces “some pretty tough competitors.” Rometty, who also serves as IBM’s chairman and president, seems undaunted. She says IBM’s ability to change is “in its DNA.” She should know. She has spent 36 years at the company and earned her stripes developing IBM’s business-services division and leading the successful purchase and integration of PwC Consulting.

Now she is betting the farm largely on Watson, IBM’s artificial intelligence platform. Watson debuted in 2011, when it took on two former champions of the TV quiz show *Jeopardy!* Watson won, demonstrating just how far machine learning had come. IBM commercialized Watson two years later, and its big brain now does everything from advising doctors on cancer treatment to predicting the weather.

Rometty met with HBR in her office at IBM’s leafy headquarters in Armonk, New York.



“WATSON, OUR ARTIFICIAL INTELLIGENCE PLATFORM, WILL TOUCH ONE BILLION PEOPLE BY THE END OF THIS YEAR.”

ANDREW HARRER/BLOOMBERG
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HBR: You've been running IBM for more than five years now, overseeing big changes. Do you view this process as a turnaround?

ROMETTY: I wouldn't use that term. This is a transformation. We're a 106-year-old technology company, and we're the only tech company that has moved from one era to the next. When you're in tech, you have to transform.

How much transformation can your employees and investors handle? When will you be able to declare that you've made it to the other side?

That's a good question. Let me answer in a couple of ways. First, you need to be clear about what you are transforming to. For us, it's all about data, and we have a very clear view of what our enterprise clients will need. When people talk about data, they often mean things that are searchable via public search engines. But that's only 20% of the data in the world. What we're trying to unlock is the 80% that's behind everyone's firewalls, because that's where the value is. Everybody has tons of data; they just can't make use of it. Our belief is that you'll make better decisions if you can unlock that data and that there's a \$2 trillion market around better decision making. That's the market we are going after.

How do you know you're on the right strategic path? And are you making changes as you go?

Oh, goodness, have I made changes! It's important to have deeply held beliefs about the vision. But then you have to look at the results. I'm confident about where we are at this point. Our new businesses around cloud, data, and security add up to almost \$34 billion in revenue. They're growing at 13% to 14% a year and make up 42% of the company. Watson, our artificial intelligence platform, will touch one billion people by the end of this year. I consider these numbers proof that we're on the right track.

Yet you've had 20 consecutive quarters of revenue decline.

Yes, but that includes divestitures and the strong U.S. dollar. Currency is responsible for \$14 billion of that decline. And I divested \$8 billion to \$9 billion worth of revenue sources. So that is the bulk of it.

However you account for it, is this extended revenue slide part of the plan? Or is it a disappointment?

What's positive is that the plan is proceeding as we believe it should, with the growth of large new businesses that are adjacent to our core franchises. IBM will grow again. But we need to grow in the right ways. We're moving into areas that have value and shedding

ones that don't. We could have higher growth rates, but we made a bold decision to divest commoditizing businesses before they commoditize further. The new areas are higher margin, but we have to invest in them and then scale them up.

Warren Buffett just sold a big chunk of his IBM holdings. Does he not get it?

I never talk about our shareholders; they can speak for themselves. But our clients vote through their use of our offerings, and they are showing that we're on the right track. H&R Block, for example, took Watson for the tax season to assist its professionals in handling millions of customers. The company gained market share and had an unbelievable Net Promoter Score.

ONGOING TRANSFORMATION

IBM's former CEO Lou Gerstner came from the outside and pretty much wrote the playbook on how to transform a company. Is it harder to accomplish something like that when you've already been at the company for a few decades?

I don't think it's any harder. I really believe the company has in its DNA the ability to change. We've done it over and over again. And Lou would agree that this is a more extensive transformation because of the convergence of multiple trends that are accelerating the pace of change. It doesn't matter if you're an insider so long as you don't try to protect the past. Then you have the freedom to reinvent yourself for the long term.

What's the hardest thing about trying to take this transformation through to the other side?

You have to have passion. And you have to have clarity. But I think the most difficult thing is perseverance. This is a large, highly profitable company that continues to do mission-critical work serving clients around the world—and at the same time reinventing itself. As the familiar metaphor has it, that's like changing the wheels while you're driving. And we're doing it all in the public eye. Above all, we need to stay focused on our clients and keep moving forward. I think the team has done a super job at this.

Do you feel pressure to get this done quickly?

Sure we do. Every leader wants things to go faster. You have to set the bar high and keep moving faster. But my job is to build an IBM that's durable for a whole era. We take seriously our ongoing responsibility to the clients that run our systems today, to make their work more productive. Supporting those clients takes my revenue down, but I'm proud of it: We run the world's systems. Without IBM, banks couldn't operate. Railroads couldn't move. Airlines couldn't fly.

Don’t you worry that advances in cloud-based computing and data analytics could commoditize some of your new areas of growth?

I don’t. Our analytics business is worth more than \$19 billion. So there’s no problem there. The cloud is accretive to our services business, which makes up 60% of IBM. And the cloud works in a standardized way, which means the margins can be higher. Most important, we believe that the basis of competitive advantage in the future will be data. As I’ve said before, data is the next natural resource. Think of oil. Where it sits is not necessarily where the wealth is. The wealth goes to whoever can refine it, process it, and turn it into something else.

How is transformation affecting your processes and your people?

For starters, we’ve adopted “design thinking” in our offices around the world. The goal is to make our B2B products as consumerish as possible in terms of ease, feel, simplicity. Then, to increase our speed, we’ve adopted agile work flows in every part of the company. And we’ve changed the tools we use, forming partnerships with Box, Apple, Slack, and others. We now have probably one of the most modern work environments in the world. And we’re doing this with a workforce of 380,000 people.

What’s the plan for your core businesses?

Our new businesses have been built off our core franchises and couldn’t have grown to the size they are without them. That said, the core businesses are not necessarily in growth markets. So we need to continually reinvent them. One example is our Global Business Services. We’ve been transitioning to digital, but it takes time, because it’s a people business. Although

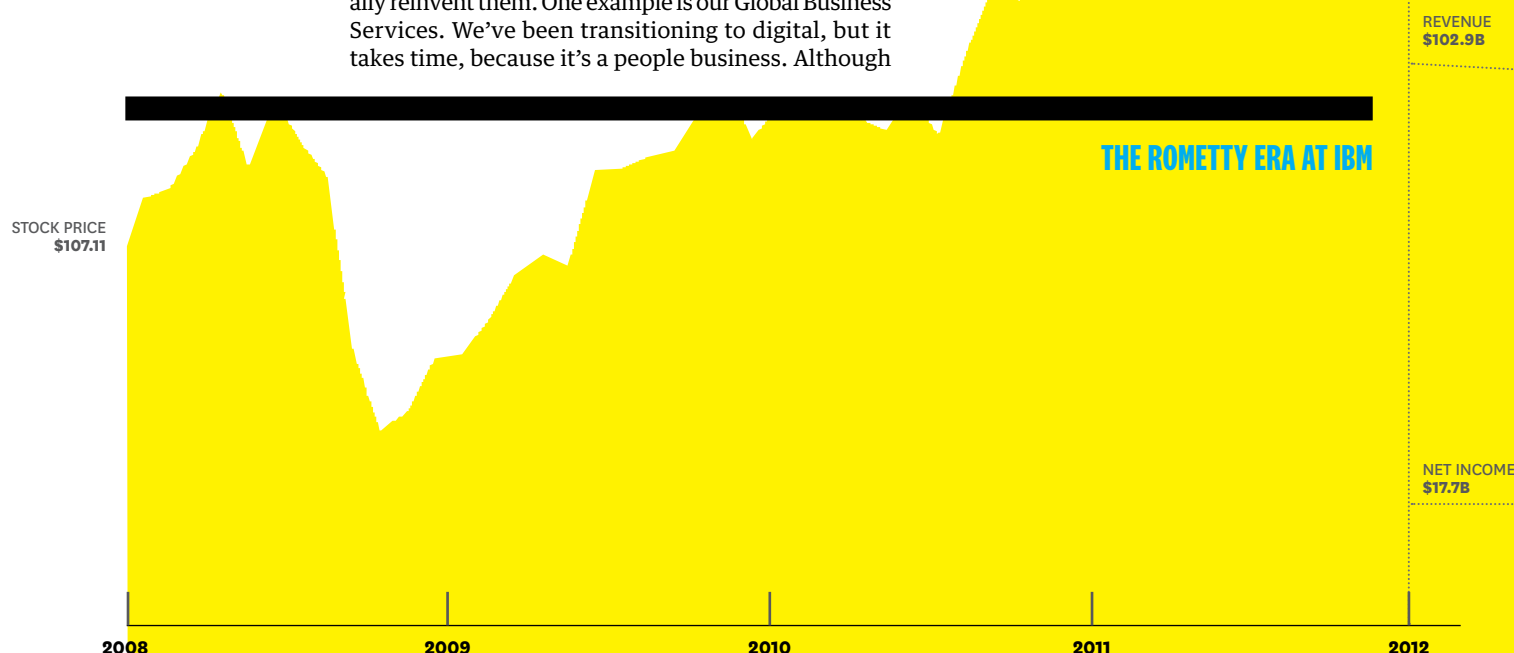
areas like that aren’t big growth markets, they are big cash producers, and they do mission-critical work for our clients.

BUILDING THE RIGHT TEAM

In a fast-paced environment like this, how do you construct the right management team?

I’ve brought in five direct reports from the outside, because you need people who really understand how the new systems work. About 15% of IBM’s managers up and down the company came from the outside. That adds up to a lot of people when you consider our size. We’ve spent \$2 billion in the past three years on training in new methods and approaches and on the new areas we’ve gone into, such as Watson Health, where we now have hundreds of doctors and nurses. With Watson we are also exploring creativity and music, and we’ve been hiring musicians. A new spectrum of career types are part of IBM now.

JANUARY 2012
Ginni Rometty becomes CEO



Aside from such specialties, what are the attributes you look for in new hires?

The attributes we care most about are intelligence and adaptability. Our own Watson is helping us predict people's propensity to learn.

WATSON'S ROLE

What makes Watson different from other AI platforms?

First of all, Watson is able to deal in vertical domains. It understands the languages of medicine, financial services, underwriting, and so on. That is extremely difficult to achieve, and it's a differentiation. Second is our

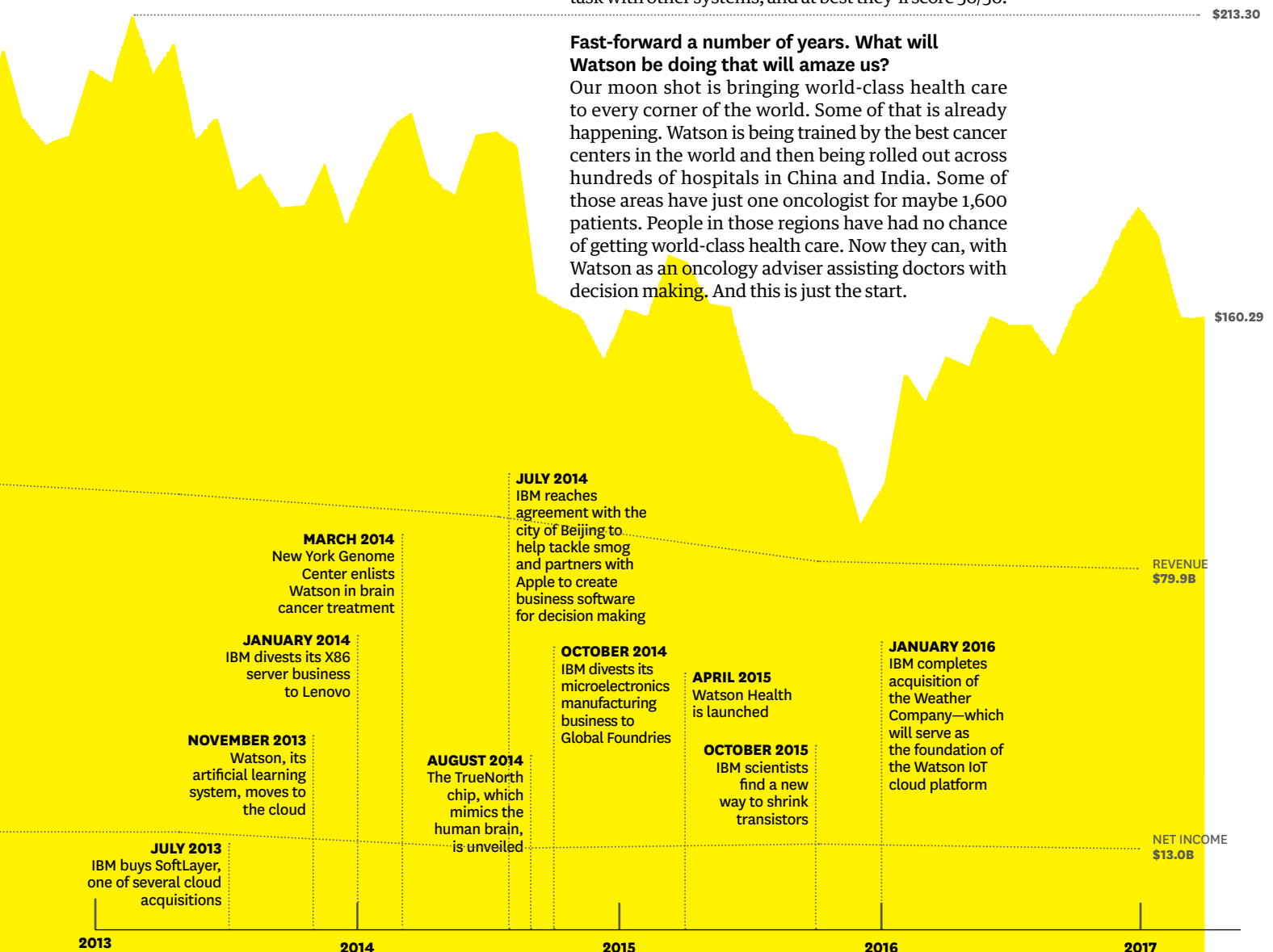
business model: We ensure that Watson protects clients' insights. When a client brings its data, the insights go only to that client. Third is the range of data that Watson can deal with, including sight, sound, speech.

What does all this look like in practice?

Think about a conversation. Generally, people miss about 5% of the words. Watson is at 5.5%. That makes it number one in the field. It can also sense motion; the Watson Internet of Things group has developed for customers applications such as cognitive ball bearings, which use sensors to record work-process data. And Watson can "see." In analyzing melanoma, for example, Watson achieves 95% accuracy. Try to do this task with other systems, and at best they'll score 50/50.

Fast-forward a number of years. What will Watson be doing that will amaze us?

Our moon shot is bringing world-class health care to every corner of the world. Some of that is already happening. Watson is being trained by the best cancer centers in the world and then being rolled out across hundreds of hospitals in China and India. Some of those areas have just one oncologist for maybe 1,600 patients. People in those regions have had no chance of getting world-class health care. Now they can, with Watson as an oncology adviser assisting doctors with decision making. And this is just the start.



Do you worry that Watson and other AI programs will wipe out entire categories of jobs?

There will be an impact, of course. But in many cases AI will automate only parts of jobs, meaning people can do the rest of their jobs better. Over the years, I’ve watched professionals—chemists, researchers, doctors, financial analysts—say, “Uh-oh, I’m going to be replaced.” And eventually they end up saying, “I can’t do my job without this technology.” That’s what always happens when there’s a dislocation in technology: We learn what it is that man innately does better.

To what extent is IBM trying to write the rules of human-AI interaction?

We’re leaders in the field, and we will have influence over these technologies. In January we published our “Principles for the Cognitive Era.” There are three tenets. The first is *purpose*: We believe that “cognitive” will augment humans and extend what they do, not replace them. The second is *transparency*: We need to be able to tell people not just how and when our technologies are being used, but also how they were trained and by whom. If you’re sick and Watson is assisting your doctor, you want to know that it was trained by the 20 best cancer centers in the world. The third is about *skills*: We need to help prepare a whole new cadre to live in this world. We’re working with 50,000 kids in 100 high schools to help build these skills.

“OUR MOON SHOT IS BRINGING WORLD-CLASS HEALTH CARE TO EVERY CORNER OF THE WORLD.”

ENGAGING ON THE ISSUES

You’ve decided to engage with the Trump administration, even though some of your employees oppose that. What have you learned from trying to navigate the new political era?

I wrote a letter to employees noting that IBM CEOs have interacted with every president since Woodrow Wilson. My view is that you have to be engaged on the issues that matter so that you can have influence. You

need a seat at the table to advocate for what’s really important to your company—and to the world. But we stand up for policies and positions, not for politics. In fact, we’re one of the few companies in our industry that don’t make political contributions.

Let’s talk about gender. Some female executives like talking about gender issues, and some don’t, preferring to be judged solely on their records. Where do you come down?

In the past I would have said I wasn’t interested in the topic. I would rather have people just look at me for what I’m capable of doing. But some years ago I realized that wasn’t a sufficient answer. I was in Australia making a presentation, and a man came up to me at the end and said, “I really wish my daughter could have been here.” I realized that whether I like it or not, I have to be a role model. Women and girls need role models. There aren’t enough out there.

Have you faced gender-related challenges in your career?

My biggest obstacles were self-imposed, which I think is true for many women. I often tell the story of how, years ago, my boss offered me a big promotion. I told him I wasn’t sure I was ready—that I needed two more years to prepare and become more confident. Later I spoke to my husband, who asked, “Do you think a man would have responded that way?” And I said, “No, he wouldn’t have.” The next day I accepted the job.

So what’s your advice to women who are facing such a challenge?

You have to learn to be comfortable with being uncomfortable, or you won’t grow. I often ask people, “When do you feel you grew the most during your career?” They typically mention a time when they took a risk. Growth and comfort never coexist. If you’re not nervous about something, it means you’re not learning.

Is that why there are so few female CEOs? Women are holding themselves back? Or do you think something else is going on?

There are many reasons. One thing we’ve worked on at IBM is keeping women in the workforce. Many women deal with realities such as having children, taking care of elderly parents, or coming in and out of the workforce, and we focus on flexible programs that help keep women in the leadership pipeline. We also have to deal with the issue of bias. For every open position, you have to demand a diverse slate of candidates. And I’m talking not only about racial and gender diversity but also about diversity of thought. You need to be sure that your people are comfortable speaking up. As we say at IBM, “Treasure wild ducks.” ☺

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