

## Rewiring Citi for the digital age

Citigroup's Head of Operations and Technology describes the bank's efforts to accelerate its digital transition, as well as the importance of having the right talent and agility to pull it off.

Citi's legendary chairman Walter Wriston noted years ago that information about money has become almost as important as money itself. The bank's Head of Operations and Technology, Don Callahan, believes that today, in the digital age, Wriston would surely drop the qualifier to his famous observation, noting: "Information simply *is* as important as money."

This is apparent as Callahan surveys the 21st-century banking terrain: digital competitors are massing on every front—from fintech start-ups to new divisions of global institutions—while the speed of every banking process and customer interaction accelerates daily. All this change requires a focus on agility, Callahan says, which in turn demands a cultural rewiring.

At the helm of Citi's digital transformation, Callahan is helping drive new thinking across the bank. He points to Citi's digital lab for start-up innovations, powerful new apps for customer smartphones, and, internally, a push to expand capabilities across cloud computing and big data and analytics that enable automation and machine learning. In an interview with McKinsey's James Kaplan and Asheet Mehta, Callahan describes what it takes to mobilize digital change at one of the world's leading financial institutions.

## **DON CALLAHAN**



Don Callahan is Head of Operations and Technology at Citigroup.

**The Quarterly:** What are the top-of-mind risks for you as you continue Citi's transition to a digital bank?

Don Callahan: I think the biggest risk for the industry is whether it will be able to move fast enough. Are we going be able to think and execute swiftly? A lot of people talk about being agile. Agility is a lot more than how our developers approach an issue. "Agile" now is a group of subject-matter experts coming together from each walk of life—someone who is a true developer collaborating with someone who is a product manager who knows how to listen to the customer or the client. And then the real test is whether they take that, put it together as an idea, and bring that story to life. In addition, if it is not right, can they move on and come up with the next version fast enough?

The Quarterly: So, give us an example of agility at work.

Don Callahan: An example right now is work that Stephen Bird, CEO of Global Consumer Banking, is leading. We know we have to be mobile first, and we are doing a lot there. In order to be all-in on mobile, we have set up a "lean team" in our Long Island City office, with about 100 people who are operating in a very agile way.

It doesn't operate like a traditional bank; it is much more like a creative team. They are incorporating feedback, putting up designs on a wall, and testing directly with customers. They are experimenting and coding. I'm seeing the speed, the curiosity, and the execution at levels I've never seen before.

The Quarterly: And this is helping you step up the pace?

**Don Callahan:** Yes. On the consumer-banking side, one of the most exciting projects for us was how fast we were able to come up with a product offering for the Apple Watch. I received a phone call on the day IBM and Apple made

the announcement that they were going to work together. And someone from our consumer business asked me if we could be the first financial-services app on the Apple Watch. We worked with a senior team at Apple, with IBM, and at Citi to develop the first banking app for the watch. We did it all in 120 days.

The Quarterly: If you think about the opportunity to create digital financial services—you are a 204-year-old bank with all the resources and capabilities that implies. In some cases, you may be competing against much newer, smaller, nimbler start-ups. What does that imply?

Don Callahan: The competition has changed. It's not just the peer bank down the road or across the ocean. Today, it can be a start-up in Silicon Valley or Silicon Alley. We welcome that kind of competition. It makes us stronger and that much faster. I also think there is plenty we can learn from them, and there are opportunities for us to all work together.

The common denominator most start-ups have, including ones I have had the chance to visit, is they truly have a blank slate. Because of that, they are able to take the art of the possible and bring it swiftly to market. For some companies, that is going to require fresh thinking, including welcoming change and embracing new ideas.

The Quarterly: In terms of digital transformation, how do you think the culture and the skills of the IT organization at Citi will evolve over the course of the next five years?

Don Callahan: As technology changes, we are going to have to adapt accordingly. Over the last five years, we have continued to enhance our capabilities at Citi. We have changed all of our significant platforms globally, as well as our core hardware and architecture. In the process, we have also been able to achieve dramatic savings. As a result, we have state-of-the-art technology across Citi and are running at an optimum cost structure.

Looking forward to the next five years, we are going to have to continue to build upon those efforts. For example, we are going to have to become very comfortable embracing the cloud, our private cloud, our multitenant cloud, and our public cloud. We must get comfortable with the idea of true automation—robotics, machine to machine, cognitive, and so much more.

The question becomes how do you actually apply that within Citi? So, the culture and the curiosity of our tech team and our operations team will need to look at opportunities for change.

I will give you an example that I find particularly important. As we looked at accounts payable, we realized it is repeatable work and fairly predictable. That is a perfect situation to place a "bot" on it. This enables people who are doing those jobs, whether it is in Budapest, Tampa, or Costa Rica, to perform functions that are even more valuable, deliver more results, and provide better career-growth opportunities.

The last part of the culture I think we need to change is embracing data throughout the industry. Data is truly the lifeblood of an organization, in my mind. We are seeing the value being created for our clients and our customers by being able to help them at all stages. I believe big data is absolutely going to be an area in which there will be more focus and opportunity to drive value for clients. Of course, we will be careful to do all of this in a way that is secure and privacy protective.

## The Quarterly: Is that starting to happen?

Don Callahan: Yes. For example, we are able to look at the supply chain for a very large manufacturer. Because we have the data and the permission to look at it, we could examine every aspect of the supply chain down to country by country, almost by subsupplier and then sub-subsupplier. And what you could see are opportunities for synergies, as well as for cost savings and rationalization. You could also look at opportunities for M&A and then take those insights to develop strategic ideas for our clients. It allows a different dialogue with the CEO and the CFO. It was one of the first great examples where I could see such great complexity presented in an easy interface. You could identify the graphical insights that were present and then turn those into business ideas. For me, it is a foreshadowing of what is to come.

The Quarterly: Digital multiplies the security risks. What's your strategy in this area?

**Don Callahan:** The challenge we face today, regardless of which industry you are in, is that the goal posts are moving every day. And it is extraordinarily sophisticated. At the same time, the access point to be able to do harm to an organization is actually lowering. The cost of entry, to provide real disruptive capabilities, is dropping. The capabilities of the individual attacker are increasing.

At Citi, we have transformed our overall strategy around information security, and we now have what we call an intelligence-lead model. So it is no longer just looking at trying to secure the gate, or to wrap it with firewalls. We are now trying to make sure that we can look at what threat factors are

coming in and that we have critical understanding of where those threats will manifest themselves around different client subsegments. We take privacy of client information very seriously and make sure that our data collection, use, and sharing is done in a manner that meets client and customer expectations and complies with law and regulation.

**The Quarterly:** You have talked about a very different model inside IT—a very different model for the business, too, as you become digital. What is it going to take for Citi to get the required talent?

Don Callahan: Talent is such a critical area of focus for us, and, in particular, for me in the technology space. I probably spent over four hours today on talent alone—on interviewing talent, trying to attract talent, and working with my team on the overall talent agenda. Right below us is the Borough of Manhattan Community College. It has about 26,000 students, and what we are finding within those halls are people who love computer science. They are from diverse backgrounds and from all parts of the globe. It is a wealth of opportunity.

Another thing that we are doing is working closely with universities all across the world, from Oxford to Cornell. We are working with Cornell right now as they are building out the new tech campus here in New York to help build a discipline around information security. And then, we are bringing in teams for special projects on information security and looking to see if they are the right fit for someone at Citi.

The Quarterly: What's needed on the talent front to compete with start-ups and with fintech companies?

**Don Callahan:** I think to compete with start-ups, we have to make it exciting and we have to be purpose driven. I haven't run into one person at a start-up who is there simply to do a job. It is the passion about building a business that we need to tap into.

The insights we are getting from the teams we are hiring now is so impressive. We need to continue to be aggressive about the talent we are hiring—people with the necessary digital awareness and the ability to think and act in an agile way. (Q)

**Don Callahan** is Head of Operations and Technology at Citigroup. This interview was conducted by **James Kaplan**, a partner in McKinsey's New York office, and **Asheet Mehta**, a senior partner in the New York office.

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