

David Reilly, Chief Technology Officer, and Aditya Bhasin, Head of Consumer and Wealth Management Technology, Bank of America, an American multinational banking and financial services corporation headquartered in Charlotte, North Carolina.

PwC: With all the new software capabilities in mobility, analytics, etc., where do you focus: Cost, efficiency, customer service, all of the above or something else?

David Reilly: There are two aspects. Aditya is driving the software transformation for our consumer business and across the entire firm. The second aspect is that the software sits on top of an internal cloud we're building. That internal cloud is where most of the cost efficiency comes from.

This is part of what a broader programme has accomplished since 2012. It now costs us US\$1.1 billion a year less to run the infrastructure than it did then. Some of that money has gone to the bottom line, and some has funded the software transformation because, frankly, the infrastructure side is uninteresting.

The exciting capabilities are the work Aditya is doing in the way we're transforming how we interface with our consumers and the software transformation across all eight lines of our business. But we are now riding on an infrastructure that is much more nimble—and cheaper.

PwC: What do you mean by nimble?

Reilly: As originally built, our infrastructure was designed to do one thing: run an application. When that application was running, the finely tuned, somewhat rigid infrastructure did a great job. When that application wasn't running, those infrastructure resources would—for the most part—sit idle and we couldn't use them to do other things.

With the internal cloud, an application acquires and relinquishes resources as needed, and we can use them in more than one place. That makes us more nimble.

Our nimbleness comes from a ruthless standardisation but in a way that those resources can be made available rapidly when the developer needs them. With this model we can drive better time to market plus also lower expenses and reduce risk because the more standard the infrastructure is, the easier it is to secure.

This allows the development professional and the business professional to use some of the new technologies that Aditya is driving.

PwC: Aditya, talk about what those things are.

Aditya Bhasin: It's about the consumerisation of financial services. Historically, financial services was a big bank or financial institution or a big regulated type of business. Now consumers are interacting with mobile devices and digital experiences in ways they do in other aspects of their lives. We must fundamentally rethink banking because our customers are fundamentally changing.

If I am sitting on the bus and I want to pay a bill because my provider just sent an email saying, "Your telephone bill is due," then why can't I make that payment right then and there?

In financial services, consumers expect the types of digital experiences they have in other areas of their lives. We see this from basic things like moving money or taking a picture of a check, all the way to a wealth management client getting a portfolio review at the end of the year.

We start with the customer experience. And we believe digital opens the door to a more enjoyable and convenient banking experience.

But, when you are able to use a mobile app to take a picture of that check, not only do you deliver a better client experience, it's 1/100 the cost of depositing a check in a physical branch with staff. Better experience for the client is also more efficient and lower cost for us.

And it is safer for everyone because what I can immediately do when the digital image of the check is provided is run through our standard fraud checks, which historically only happened after the check had been digitised.

The experiences we love to deliver are ones that create great client experience, lower costs for us and provide more effective, risk-managed outcome for both.

When you're delivering software in this type of environment, the point David brought up around nimbleness becomes that much more important.

Old-line IT organisations would wait for the requirements document that would be thrown to a development team. That kind of 18-24 month lead time can't exist in 2017. You have to move to a more agile development model, and take steps to embed security and risk and compliance into the application development process.

PwC: How closely do you watch what FinTech startups are doing?

Bhasin: There are exciting ideas that come out of the fintech space, there is energy, there is enthusiasm and new business models. There is a lot we have to learn from them. What we provide is scale, reach, capability, and financial resources that they don't have. When we bring all of that together, that is when we can make magic happen for our clients.

In a tangible example, we host an annual Technology Innovation Summit every fall. Essentially it is a way of bringing our technologists, the venture capital community and startups together for a three-day session where we spend time talking about our company, our capabilities and our business problems.

We brief the startup community about the problems we're trying to solve and they talk to us about their solutions. Our technology teams are there and we've got a team that manages the follow-up for those connections. Around 15% to 20% of the startups we meet we'll end up doing business with in some form.

PwC: Are you having trouble with issues like finding programmers and other challenges in this new world?

Reilly: Talent acquisition is interesting. Ten or twelve years ago, the best technologists wanted to work in financial services. Now they have more choices. We have to work much harder to attract the very best talent.

There is a segment of world-class technologists for whom the challenges we provide become an attraction and a competitive differentiator. It surprises people to learn that our mobile banking app has more users per month than the Uber app. Our online capability has more monthly users than Pandora.

So if scale is something that attracts you—and it is the thing that gets a lot of people out of bed every day—then we're a place you want to work.

Similarly, on the cyber front, as you can imagine Bank of America is a target. If someone wants to do harm to a US institution we're near the top of their list. If you are a technologist who wants to deliver cyber protective services in the fiercest of environments, we're one of the places you want to come.

These unique differentiators are increasingly ones where a certain class of individual wants to ply their trade. The best of those people have choices. It's not enough to pay them; you've got to give them interesting and exciting work and motivating work that stimulates them.