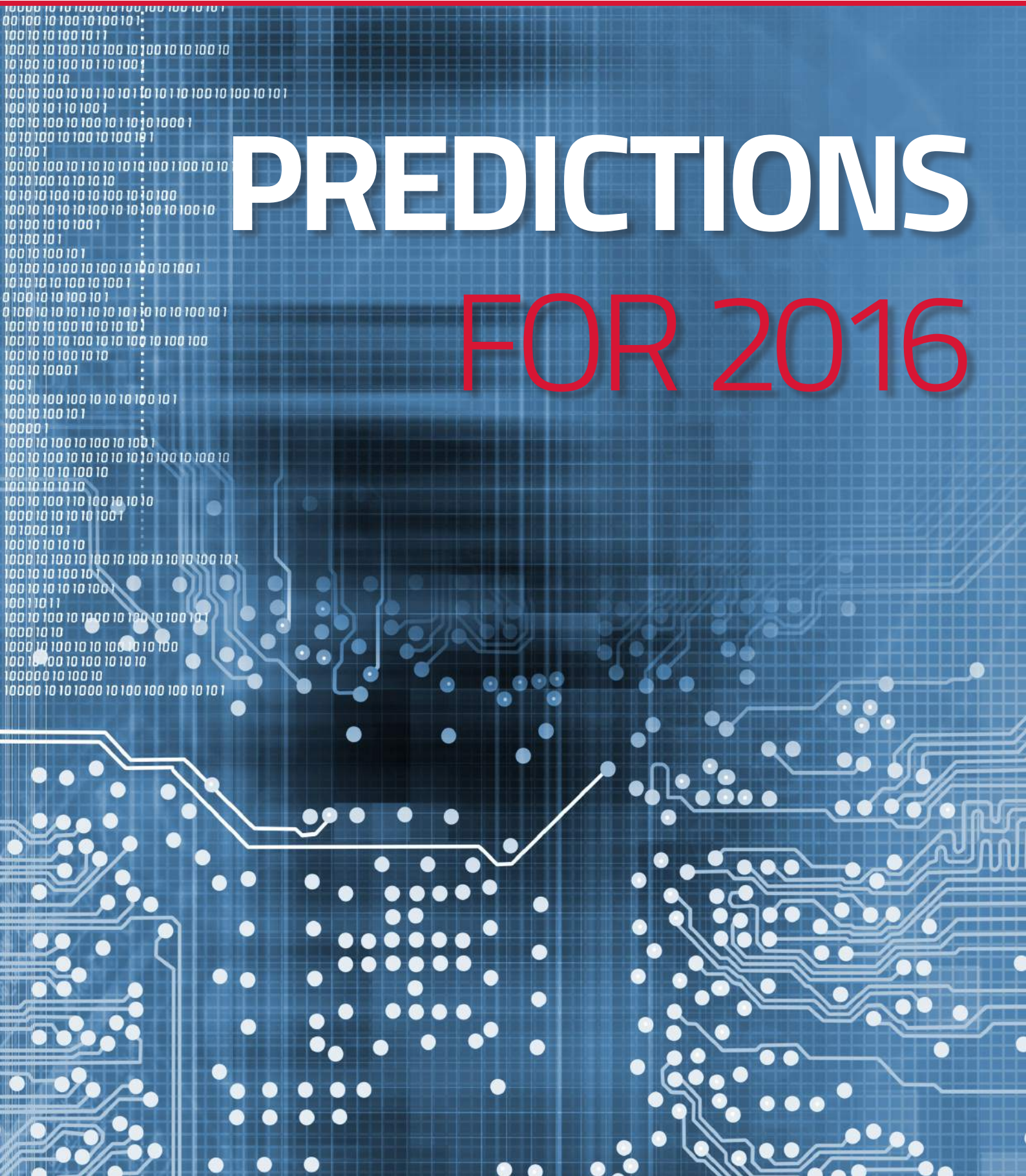




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# PREDICTIONS FOR 2016



# 2016 the year digital transformation scales up

## John Engates

John Engates is Chief Technology Officer for Rackspace and is also an internationally recognised cloud computing expert and a sought-after speaker at technology conferences. He joined the business in August 2000, just a year after the company was founded, as Vice President of Operations, managing the data centre operations and customer-service teams. Most recently, John has played an active role in the evolution and evangelism of Rackspace's cloud-computing strategy and cloud products.

Prior to joining Rackspace, John was a founder and General Manager at Internet Direct, one of the original Internet service providers in Texas.



**It's not jet packs and hover boards for 2016 but it is time for businesses to start to consider how they are going to achieve the digital transformation and to consider expanding their skills search wider**

As I look back, beyond just 2015 to the last few years of predictions I've made, the trend is clear: IT transformation is picking up speed and will continue to rely on expansion into the cloud, while a focus on cybersecurity and the search for talent will continue to impact the industry.

Analyst firm IDC has called 2016 the year 'digital transformation scales up,' and I couldn't agree more. In 2015 I described a multi-cloud world where value in cloud meant more than lowest cost; where companies would begin creating the exact mix of cloud infrastructure they need for their workload, such as what we've seen with the rapid adoption of hybrid cloud strategies and an era where IT leaders would come to understand that certain things are worth paying for, like the

expertise that's often difficult to hire in house.

### A talent shortage

The talent shortage (and poaching!) for highly skilled IT professionals we've seen in past years shows no signs of abating, yet according to the Spiceworks '2016 State of IT' report, IT budgets will remain flat in 2016. That means we'll see more companies keep their own IT departments lean and mean, and rely on trusted partners who do have the ability to attract and maintain the right talent.

On a related note, I think we'll see more technology and cloud service companies find that talent not by beating the bushes harder or poaching talent, but by creating it themselves, through partnerships with colleges and universities, and even each other, as Rackspace has done with the OpenStack Innovation Center we launched with Intel. The goal of which includes developer training and accelerated on-boarding of new developers to the community and longer term the focus on better

collaboration to build needed enterprise features in OpenStack.

The talent shortage is another reason we'll see security as a service continue to take hold. Security is simply not a core competency for most companies, and ensuring the right expertise against an always-evolving threat will become increasingly more difficult — and expensive. In addition to economies of scale, cloud companies offering security as a service also offer economies of expertise. For example, Rackspace deals with attacks literally every single day and is not simply building defences and waiting to be attacked — with the creation of our security practice, our experts have become much more proactive in helping companies deal with would be hackers lying in wait to wreak havoc.

### Security still a concern

Even with those advantages, though, it's clear that companies are still wary of cloud security in general. In fact, according to a recent survey from



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Sungard Availability Services, security remains the number one concern among CIOs considering migration to the cloud. And while it's wise to make security a top priority, the reality is, on premises IT infrastructure is often far less secure than the cloud.

In fact, a search of the 155 data breaches in 2014 tied to hacking or malware compiled by the Privacy Rights Clearinghouse finds the vast majority took place on-premises and in other proprietary systems, while only around 10 percent took place in the cloud.

## Data spurs the move to the cloud

Data is another reason we'll see continued migration to the cloud. Last year I noted that it's growing exponentially and companies needed secure but accessible ways to store and analyse it. Next year, we'll see more companies pressured, both internally and by the market, to use and monetize all that data. Think of Uber versus the cab industry. Uber uses data to understand who their customers are, where and when they need rides, and to continually optimize their business model.

Cab companies had this data but didn't understand how to put it to use; Uber, born in the cloud, is a data company first, transportation company second. For traditional and enterprise companies to compete, they must back their way into becoming data companies. I recently attended the FutureStack conference, hosted by New Relic, which helps companies see and unlock the potential in their data, and I saw numerous

examples of companies surfacing insights from the data already flowing through their company in the form of web and mobile transaction logs and ecommerce data. New Relic themselves have begun to literally transform their own business from a monitoring service to a data and analytics company.

And that's also why the Internet of Things is becoming so powerful. It gives companies access to an ongoing stream of data. Last year I talked about how more items would have sensors on them, collecting gold mines of data that now need to be tapped. In the coming year, we'll see more pressure for interoperable standards among IoT device makers. Will Apple, with its HomeKit and HealthKit standards muscle past Google's attempt with Brillo, Weave, and Thread? Will we see a split ecosystem, a la iPhone and Android? Or will we see an emergence of a viable open source solution?

But security and privacy remain issues with IoT (as they do everywhere). I see consumers lagging while companies and governments climb onboard the IoT train, but I also see those issues as livable speed bumps in the continued growth of our wired and connected world.

## Avoiding vendor lock-in

What many companies don't want, however, is vendor lock-in. Choosing the wrong technology or provider ranks up there with security as one of the biggest worries keeping CIOs up at night. And that's why I predict open source will continue to play a critical role in cloud growth. Last year I described OpenStack,

at age 5, as boring, and explained why that was good. Boring means stable and that stable foundation will allow enterprise in 2016 to more fully embrace open source cloud solutions and making them part of their companies' overall cloud strategies.

And my most fun prediction for 2016 — virtual reality heats up and heads to your mobile device. No pun intended! Evidence of this breakthrough includes the NYT sending its subscribers a free Google cardboard so they could watch immersive stories in 360 degree virtual reality, and companies like Samsung and MergeVR bringing virtual reality goggles to the mainstream this holiday season. It's not going to be about new, expensive devices offering a VR experience, it's going to be about using the devices we already have in new, innovative ways.

And how will mass adoption of VR and augmented reality technology affect the adoption of cloud? It will certainly accelerate it. Companies will need additional storage, strong and fast connectivity and more tools from Software as a Service vendors — and it will all be in the cloud.

I know, I know — no predictions for personal jet packs this year. But I can say with relative certainty (check back next December!) that companies will continue to grapple with IT transformation and the incredible possibilities it opens up, from data to augmented reality. But the reality of flat IT budgets and continues talent wars, companies will also have to accept that, for the most part, they can no longer go it alone.