



# THE CIO MANDATE: TOOLING FOR THE APP ECONOMY

Information is quickly becoming the driving force for new revenue streams, but that requires technology built to deliver at the pace of customer demands.



### **EXECUTIVE SUMMARY**

It's time to retool the enterprise for the new economy—as truly digital organizations such as Uber, Airbnb, GE Digital, and Nike have demonstrated. In doing so, IT needs to take the lead. That puts CIOs in the driver's seat when it comes to generating new revenue streams and delivering a superior customer experience. Successful CIOs will do that by leveraging the latest digital technology, such as mobility, social media, the cloud, IoT, and big data analytics. Still, a true transformation must occur, and it's the hyperconverged integrated system built on a scale-out design that will revolutionize data center infrastructure—making it simple and agile, readily implemented, and scaled for whatever this Digital Age brings.



**37%** OF CIOS ARE

LINE-OF-BUSINESS-NOT FROM IT.

## \$675 MILLION

IN RENTAL REVENUE WAS SURPASSED BY AIRBNB IN 2015 WITHOUT OWNING ANY PROPERTIES.<sup>1</sup>

# **\$2 MILLION**

FARE-EARNING RIDES ARE HANDLED BY UBER PER DAY WITHOUT OWNING ANY VEHICLES.<sup>2</sup>NOT FROM IT.

# **\$5 MILLION**

IN DATA INFORMATION RELATED REVENUE WAS ACHIEVED BY GE DIGITAL IN 2015, WITH PROJECTIONS SWELLING TO MORE THAN \$15 BILLION BY 2020<sup>3</sup>



# MORE THAN 1/3

NIKE ASPIRES TO GENERATE MORE THAN 1/3 OF ITS TARGETED REVENUES FOR 2020 THROUGH FITNESS APPS, SOCIAL MEDIA MARKETING, AND ONLINE MARKETPLACE DIGITAL INITIATIVES.<sup>4</sup>

## 26%

OF DIGITALLY MATURE ORGANIZATIONS ARE MORE PROFITABLE THAN THEIR INDUSTRY COMPETITORS.<sup>5</sup>



## 9%

MORE REVENUE DOLLARS ARE GENERATED BY DIGITALLY ORIENTED ENTERPRISES THROUGH THEIR EMPLOYEES AND PHYSICAL ASSETS, COMPARED TO THEIR PEERS.<sup>6</sup>



#### THE GOOD NEWS:

These opportunities are not reserved for tech-centric startup firms. With the right approach, any mainstream firm can harness digital for new revenue initiatives.

Skrift, "Airbnb's Revenues Will Cross Half Billion Mark in 2015, Analysts Estimate," March 2015.
 Forbes, "The Numbers Behind Uber's Exploding Driver Force," May 2015.
 GE Digital, Jan 2016.

4 Forbes, "Is Nike Increasing Focus on Its Digital Initiatives?"

5 Capgemini Consulting, "The Digital Advantage: How Digital Leaders Outperform Their Peers in Every Industry." 6 Ibid.

### **DRIVING THE CIO MANDATE**



Today's CIOs are a new breed. They are no longer overseeing an organization that is just another drag in an ever-strained bottom line. In fact, CIOs have never been better suited to significantly impact, even reenergize, their business, with IT serving as a competitive differentiator and top-line contributor. In combination, the cloud, mobility, social, big data analytics, and IoT are ushering in a fundamental shift in how IT is delivered and consumed. And this is changing everything as opportunities abound.

For the CIO, this means retooling the IT infrastructure to enable new revenue streams and a superior customer experience—while leveraging innovation through digital apps.





5 Capgemini Consulting, "The Digital Advantage: How Digital Leaders Outperform Their Peers in Every Industry." 6 Ibid. 7 CIO, "State of the CIO 2016," January 2016. 8 Ibid. 9 CIO, "Role and Influence of Technology Decision Makers," 2015. 10 Ibid.

11 Ibid.

### TRANSFORMATION AT THE SPEED OF BUSINESS

It's not hard to find examples of organizations built from the bottom up with digital technology at the core of business enablement. This includes companies—such as Airbnb and Uber—whose leadership has completely revitalized stagnant industries. Specifically, Airbnb revenue is soaring, all while accommodating travelers without taking on the responsibility of a single property. Uber has revolutionized the transportation industry without even owning a car. Instead, it brokers drivers and riders with a revenue structure that is fueled entirely by information technology.

Of course, traditional companies have the opportunity to thrive as well—with the CIO leading the charge. Just look at what Nike and GE Digital have done. As one of the largest global manufacturers of athletic wear, Nike has turned to digital technology in its quest to effectively mine mountains of customer data to bolster the Nike+ product line. As a result, the company has been able to have a positive impact on the consumer experience by catering to their unique preferences. Not only does GE generate revenue by selling jet engines and commercial HVAC units but it's now also providing additional value by capturing and analyzing data garnered from those jet engines and heating and cooling installations for airlines and commercial customers, respectively, to save on energy consumption, for example.

Especially for the traditional organization, capitalizing on digital opportunities requires access to and knowledge of today's tools—big data, mobile, social, IoT, the cloud, and so on. And that most naturally occurs under the purview of the IT department.

Of course, this means shifting the primary focus away from the historical back-office functions of automating manual processes to the more modern concept of capitalizing on digital technology and monetizing information as a means of meeting evolving customer demands. It's about being proactive, leveraging opportunities as they arise—not after competitors have already jumped into lucrative waters with both feet.





**91%** OF NONENGAGED CUSTOMERS LEAVE DISSATISFIED.<sup>12</sup>



CLOUD (48%), ANALYTICS (41%), AND MOBILE (36%) ARE AMONG THE TOP FIVE AREAS FOR IN-CREASED TECH SPENDING IN 2016.<sup>14</sup>

17% ONLY 17% BELIEVE CURRENT EFFORTS ARE ENOUGH.<sup>16</sup>

12 Huffington Post, "50 Important Customer Experience Stats for Business Leaders," October 2015.
13 Ibid.
14 IDGE, "Computerworld Forecast Study 2015."
15 SAP, "Digital Transformation Wins the Match Vs. Complexity," November 2015.
16 Ibid.
17 Workforce 2020, "The Looming Talent Crisis," July 2014.
18 CIO, op. cit.



**KNOW HOW** 

**TO EXTRACT** 

**MEANINGFUL** 

**INSIGHTS FROM** 

AVAILABLE DATA.<sup>17</sup>

**36%/33%** ENABLING BUSINESS PROCESS MOTIVATION (36%) AND MANAGING IT INFRASTRUCTURE MORE EFFICIENTLY (33%) ARE PRIMARY FOCUS AREAS FOR NEXT YEAR.<sup>18</sup>

74%

**OF COMPANIES** 

BELIEVE

**COMPLEXITY HURTS** 

THEIR ABILITY

**TO MEET GOALS.<sup>15</sup>** 

"The faster we perform, the faster our customers expect us to perform. We must continuously reduce our turnaround times."

- Fernando Wozniak Steler, CEO of Direct One, marketing automation and customer relationship management firm in São Paulo, Brazil



#### STEPPING UP FOR THE CUSTOMER

For this, the CEO is depending on IT to take control. That means that no ClOs can afford to cling tightly to the status quo—especially if they intend to build the next Uber or transform traditional operations as GE Digital has done. So recognizing the mandate to strategically leverage information translates into driving innovation that securely creates and delivers apps with zero-touch end user engagement.

"With our traditional architecture solution, we were always trying to figure out how many Fibre Channel switches we needed, how much storage our applications required, and how much processing power we had to purchase in advance. We spent far too much time and effort architecting and rearchitecting the solution, scaling it to meet current compute needs, and preparing for future projects."

- Jon Walton, CIO of San Mateo County, California

Digital transformation is assuredly more than mere hype. And a big part of the ongoing evolution is the innovative maelstrom—with mobile, social, big data analytics, the cloud, and IoT converging to form the technology environment that is rapidly becoming the new normal.

With IT at the epicenter of the information monetization movement, CIOs must look long and hard at their tools and enabling infrastructure. And that has most searching for answers to questions such as these:

- How can IT power the business?
- Do they have the right technology in place?
- If not, how do they ready their environment for transformation?
- How do they bring simplicity and agility to the business?
- How can they turn the technology and the strategy into actionable results?

Everything starts with the business applications, delivering superior and simple end user experiences with high engagement levels, minimal downtime, and fast deployment. And this happens only when organizations have access to a cloudlike data center environment. No organization can outpace its competition—let alone become the next Uber—by simply modifying aging infrastructure.

"Companies need to refocus on the applications that drive their business, not the intricacies of the underlying infrastructure that powers those applications," says Dheeraj Pandey, cofounder and CEO of Nutanix. "We consider our unique vision for how the data center will evolve over the next several years, bringing cloudlike scalability, resilience, and agility; making the infrastructure invisible to the business; and enabling IT leaders to deliver real innovation to the organization."



#### **EMBRACING THE RIGHT TECHNOLOGY**

Traditional or legacy infrastructure simply doesn't fill the bill in today's digital economy. And when it comes to that outdated infrastructure, most business applications comprise individual silos of server, storage, and virtualization resources that are managed separately and scaled independently. These nonintegrated architectures have increased data center complexity and slowed the overall pace of IT innovation. What's more, they don't allow new applications and services to be deployed quickly.

Today, it's all about strategically leveraging technology to better serve clients or create new markets. This could mean creatively integrating the cloud or social media into the mix or finding meaningful ways to move the organization beyond a traditional hardwired environment. That kind of reengineering can happen only when dynamic IT leaders tool up with software-defined everything—from servers and networking to storage. Such environments make it possible to seamlessly reconfigure and allocate resources according to what's needed at that moment.

#### **REENGAGING WITH A NEW APPROACH**

When it comes to meeting ever-changing business needs, going state-of-the-art for the sake of going state-of-the-art isn't enough. CIOs need the type of simplicity that can be achieved only with a preengineered system. This is where a hyperconverged integrated system excels.

As defined by Gartner, a hyperconverged integrated system is tightly coupled compute, storage networking, and storage hardware that dispenses with the need for a regular storage area network (SAN). It's this configuration that enables the effective delivery of storage and virtualization management functions—plus optional capabilities such as backup, recovery, replication, deduplication, and compression—via the software layer.

This makes a significant difference, because rolling out traditional technology takes time—not just in blending often disparate components but also in bringing together the talents needed to build, configure, and test the end product. And the last thing any business needs is to lose steam while waiting months to build out traditional infrastructure.



Suffering through the process of building traditional infrastructure isn't just frustrating but also has potential repercussions. After all, there's often a time element associated with getting the most out of a digital opportunity. Quickly monetizing information can prove to be the single most important element in gaining competitive advantage today. On the other hand, being unprepared to act can put the business tragically behind the competition.

That said, digital businesses need infrastructure that has predictable costs and can be deployed and utilized quickly. One that can seamlessly tap into the types of resources required by modern applications. An infrastructure that enables organizations to start small and, more important, grow as needed.

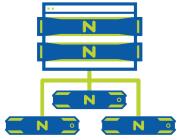
The hyperconverged integrated system makes all this a reality with a modular appliance-based scale-out infrastructure designed to effortlessly connect disparate pieces—much like Lego blocks—with the ability to autorecognize and instantly provide added capacity. The result: Organizations buy only what's needed up front, and CIOs have the ability to strategically steer the enterprise into the new reality.

#### **BOTTOM LINE**

CIOs and their organizations do not have to become casualties of the ongoing digital transformation. However, to be the next Uber or GE Digital, IT leaders need to fully embrace the opportunity to monetize information by leveraging today's seamless flexible technology—specifically a hyperconverged integrated system.

Yet effectively leading the business to its potential goes beyond simply deploying the right technology. The CIO must embrace a new and demanding role to identify opportunities and inspire and evolve the business. Only then can the business truly capitalize on its digital transformation and foray into a brave new world.

## Storage Compute Virtualization



For more information please visit the Nutanix CXO Resource Page.