IDC
Analyze the Future

Quantifying the Business Value of Dell XC Powered by Nutanix Software

Business Value Highlights

Average five-year ROI:
510%

Five-year discounted benefits per organization:
$7.85M

Five-year TCO savings:
58%

Payback period:
7.5 Months

Storage deployment (faster):
85%

Management of Nutanix environment (less time):
71%

Reduction in unplanned downtime:
99.7%

EXECUTIVE SUMMARY

Years of IT infrastructure advancements have helped to drive out vast amounts of costs within the datacenter. Technologies like server and storage virtualization, data deduplication, and flash-based storage systems (to name just a few) have contributed to improvements of utilization rates, performance, and resiliency for most organizations. Unfortunately, organizations still struggle with deeply rooted operational inefficiencies related to IT departments with silos of technology and expertise that lead to higher complexity, limited scalability, and suboptimal levels of agility. The recent tectonic shifts caused by the rise of 3rd Platform applications that focus on social, mobile, cloud, and big data environments have amplified the pains associated with these structural inefficiencies. These environments require new levels of scale, automation, and agility that do not align well with the current practice of independently buying and managing discrete datacenter resources. Thus we see an increasing number of companies deploying integrated systems as a way to gain additional operational benefits provided by standardized systems, centralized management, and increased levels of automation. Companies have several architectural choices when deploying integrated systems, but the fastest growing is known as hyperconverged infrastructure. Hyperconverged solutions provide a new level of convergence through a cluster of shared nothing, industry-standard systems that utilize software-defined storage constructs to abstract and pool all resources, which are then dynamically provisioned for all storage and compute services.

IDC's interviews with organizations using Nutanix hyperconverged infrastructure solutions and Dell XC hyperconverged appliances powered by Nutanix software (Dell XC) to run key business applications highlighted the value they are achieving with these hyperconverged solutions. IDC projects that, on average, these organizations' use of IT solutions powered by Nutanix software will yield total five-year discounted benefits worth $7.85 million and a return on investment (ROI) of 510% by:

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» Serving as a cost-effective and incrementally scalable infrastructure

» Offering an efficient IT infrastructure platform that simplifies infrastructure deployment, management, and troubleshooting

» Providing a highly resilient infrastructure that supports the business with minimal downtime

» Enabling the business and users with greater IT agility and scalability, faster time to value, and improved performance of key business applications

Situation Overview

An organization's ability to be competitive locally and globally has become inseparable from decisions made within its datacenter. Today's IT departments are expected to move quickly with the businesses they support and ultimately be a key contributor to initiatives designed to improve a business' bottom line, expand its revenue streams, or strengthen its relationships with customers. In short, decisions made within IT departments have never been more important to the broader business than they are today. Unfortunately, decades-old datacenter practices that have helped drive down capital costs have also created rigid islands of infrastructure managed by administrators with narrow areas of expertise. To better align with the rapidly changing needs of their business, datacenters must adjust from a world with silos of infrastructure-centric decisions to an environment that enables workload-centric decisions.

Many IT departments are now replacing silos of datacenter infrastructure with fully integrated systems to better align with the challenges discussed previously. While there are many architectural choices one can make when moving to integrated systems, hyperconverged infrastructure deployments are growing faster than any other. This strong market adoption growth can be traced back to the ability of hyperconverged infrastructure to truly collapse core storage and compute silos into a cluster of industry-standard servers that are highly virtualized and managed through a single pane of glass. Hyperconverged solutions help datacenters reduce capital costs by standardizing core building blocks for compute and storage workloads. They eliminate the need for costly centralized storage systems and Fibre Channel switches, all of which must be purchased, powered, cooled, and managed independently. But savings do not stop there. The highly virtualized and scale-out nature of hyperconverged infrastructure helps organizations to quickly scale compute and storage resources at a very granular level and with near-zero downtime. Thus IT departments can eliminate the costly practice of overprovisioning. In short, hyperconverged solutions help improve datacenters so that infrastructure can be purchased, deployed, managed, upgraded, and expanded far more efficiently than traditional architectures. Support for multi-hypervisors and a robust set of enterprise-class applications helps ensure hyperconverged solutions can be leveraged within the most demanding datacenters.

> The highly virtualized and scale-out nature of hyperconverged infrastructure helps organizations to quickly scale compute and storage resources at a very granular level and with near-zero downtime.

Nutanix Xtreme Computing Platform

As an early pioneer of this space, Nutanix has amassed a large set of enterprise customers with its Xtreme Computing Platform (XCP). Made up of two product families, Nutanix Acropolis and Nutanix Prism, XCP is designed to enable application infrastructure independence through its app mobility feature, native virtualization, and search capability. An overview of the software and hardware components of XCP are outlined in the sections that follow.

XCP Software

Nutanix Acropolis is a scale-out data fabric for storage, compute, and virtualization. Acropolis combines the attributes of software-defined storage with built-in virtualization to create a turnkey hyperconverged infrastructure solution that can run any application and scale to meet the needs of today's demanding applications.

» **Acropolis.** Nutanix Acropolis is a scale-out data fabric for storage, compute, and virtualization. Acropolis combines the attributes of software-defined storage with built-in virtualization to create a turnkey hyperconverged infrastructure solution that can run any application and scale to meet the needs of today's demanding applications. Nutanix Acropolis is made up of three foundational components:

  · **Distributed Storage Fabric.** This component provides the core data services such as the distributed file system, data deduplication, automated tiering, and snapshots. It supports multiple storage protocols such as NFS and iSCSI, which is an important capability for customers looking to unify a large number of disparate workloads onto a single platform.

  · **App Mobility Fabric.** The Acropolis App Mobility Fabric provides virtual machine (VM) placement, VM migration, and VM conversion, as well as cross-hypervisor high-availability and integrated disaster recovery.

  · **Acropolis Hypervisor.** While the Distributed Storage Fabric fully supports traditional hypervisors such as VMware vSphere and Microsoft Hyper-V, Acropolis also includes a native hypervisor based on the well-known Linux KVM hypervisor that provides enhanced security and self-healing capabilities based on SaltStack and enterprise-grade VM management. Acropolis Hypervisor will be the first hypervisor to plug into the App Mobility Fabric.

» **Prism.** Prism is a management solution from Nutanix that gives administrators an easy way to manage their virtual environments. Prism greatly simplifies managing Nutanix environments by combining several aspects of datacenter management into a single consumer-grade solution. Prism leverages machine learning technology to mine large volumes of system data and generate actionable insights for optimizing all aspects of virtual infrastructure management.

Hardware

Customers have the option of purchasing Nutanix appliances (NX Series) or Dell XC Web-scale appliances (XC Series). Both series offer different resource configurations that are optimized for a wide range of workload profiles. While all systems come with compute, memory, and storage resources, customers can build clusters with a mix of configurations within the same series.

Nutanix has partnered with Dell to create a hyperconverged solution built with Nutanix software and Dell hardware. The result is Dell's XC Web-scale converged appliances. These systems became generally available during the fourth calendar quarter of 2014.

The Business Value of Dell XC

Study Demographics

IDC interviewed 13 organizations for this study: 10 organizations using Nutanix XCP solutions and 3 organizations using Dell XC Web-scale appliances (collectively, "Nutanix solutions") in April and May 2015. IDC asked interviewees, which included IT managers and business decision makers at these organizations, a variety of quantitative and qualitative questions about the impact of their use of Nutanix solutions on their operations, businesses, and costs. These organizations either migrated workloads from legacy traditional three-tier (server, storage, network) datacenter infrastructures or deployed new workloads on Nutanix solutions. Interviewed organizations ranged from service providers with fewer than 100 employees to larger organizations with up to 18,000 employees, with an average employee base of 4,094. There was also diversity in terms of business application bases, with an average of 185 and a range from 12 to 1,500 (see Table 1).

TABLE 1

Demographics of Interviewed Organizations

	Average	Median	Range
Number of employees	4,094	1,500	45 to 18,000
Number of IT staff	210	62	2 to 1,500
Number of internal IT users	3,738	1,260	45 to 18,000
Number of business applications	185	40	12 to 1,500
Number of terabytes, total environment (raw)	857	200	20 to 5,120
Countries	United States, Canada, the United Kingdom, France, Sweden, Switzerland, Australia		
Industries	Manufacturing, insurance, financial services, healthcare, automobile racing, government, gaming, retail, service provider		

Source: IDC, 2015

Interviewed organizations range from running all of their business applications on their Nutanix infrastructure to several applications, with several expressing their intention to grow their Nutanix workload environments. On average, these organizations have 2,350 employees using 31 applications and 277 virtual machines with about 128TB of storage running within their Nutanix environments.

Nutanix Workloads and Environments

Customers interviewed for this study are running various workloads on their Nutanix solutions, and all interviewed organizations have put multiple workloads on Nutanix and Dell XC. In addition, several organizations noted their intention to expand their Nutanix environments based on positive results with deployments of Nutanix solutions thus far. Table 2 provides an overview of the workloads and business applications select organizations interviewed for this study are running on their Nutanix solutions.

TABLE 2

Overview of Select Organizations' Workloads on Nutanix Solutions	
Industry	Workload Description
Construction	Enterprise resources provisioning platform, HR, payroll, communications applications
Insurance	Application virtualization with Citrix
Financial	Windows Server infrastructure applications
Medical/hospital	Desktop virtualization with Citrix, in process of deploying other workloads on Nutanix solutions
Services provider	Customer-facing enterprise applications, including healthcare applications and software
Gaming	Web workloads, Splunk

Source: IDC, 2015

Interviewed organizations range from running all of their business applications on their Nutanix and Dell XC infrastructure to several applications, with several expressing their intention to grow their Nutanix workload environments. Table 3 provides an overview of the Nutanix solutions interviewed organizations have deployed. On average, these organizations have 2,350 employees using 31 applications and 277 virtual machines with about 128TB of storage running within their Nutanix environments.

TABLE 3

Nutanix Solutions Environments of Interviewed Organizations

	Average	Median	Range
Number of users	2,350	400	45 to 18,000
Number of business applications	31	15	1 to 150
Number of sites	2.2	2.0	1 to 5
Number of clusters	3.3	3.0	1 to 8
Number of nodes	25.5	14.0	4 to 150
Number of virtual servers	277	232	0 to 850
Number of terabytes (data)	128	64	8 to 500

Source: IDC, 2015

An IT manager at Langs Building Supplies in Australia said: "With Nutanix, we are doing far more projects for our business units …. Instead of spending 65% of our time running things, we're spending 65% working on the business …. So we've become an enabler rather than a hindrance."

Financial Benefits Analysis

Customers using Nutanix solutions described achieving operational and cost efficiencies, along with improved application performance, by moving existing workloads from legacy traditional three-tier datacenter infrastructures and placing new workloads on their hyperconverged infrastructure with Nutanix and Dell XC. They also said that their Nutanix environments were providing them with the agility and scalability they need to grow their businesses. An IT manager at Langs Building Supplies in Australia described the impact of Nutanix solutions on the IT department at his organization as transformational: "With Nutanix, we are doing far more projects for our business units …. Instead of spending 65% of our time running things, we're spending 65% working on the business …. So we've become an enabler rather than a hindrance."

Based on the interviews it conducted, IDC calculated the benefits it projects that these organizations will achieve with Nutanix solutions (see Figure 1). IDC projects that, on average, these organizations' use of Nutanix solutions will yield benefits worth an average of $2.22 million per year over five years ($94,321 per 100 users of applications running on Nutanix solutions) in four categories:

» **IT infrastructure cost reductions and avoidances.** Organizations reduce and avoid datacenter-related capital and operating expenses because of the strong performance, scalability, and efficiencies of Nutanix solutions. IDC projects that, on average, these organizations will reduce and avoid costs worth $203,204 per year over five years, or $8,646 per 100 users.

IDC calculated that, on average, these organizations will reduce and avoid IT infrastructure-related costs by 30.6% compared with their previous environments or other potential infrastructure solutions.

» **IT staff productivity benefits.** Organizations benefit from more efficient IT staff operations because Nutanix software reduces the complexity of deploying, administering, and managing infrastructure. In addition, these efficiencies increase the time IT has available for innovation and can help reposition IT as a business enabler. IDC calculates that these time savings and productivity improvements for IT staff will have an average value of $863,568 per year over five years, or $36,744 per 100 users.

» **Risk mitigation — user productivity benefits.** Organizations lose less productive employee time because of the high resiliency of Nutanix solutions and are able to carry out quick and nondisruptive updates and upgrades that do not impact users. IDC puts the average value of increased user productivity at $206,483 per year over five years, or $8,786 per 100 users.

» **Business productivity benefits.** Organizations benefit from better scaling applications to meet business demand and from improved application performance with Nutanix solutions. The result is higher employee productivity and even higher revenue, which IDC projects will be worth an average of $943,495 per year over five years, or $40,145 per 100 users.

FIGURE 1

Average Annual Benefits per Interviewed Organization
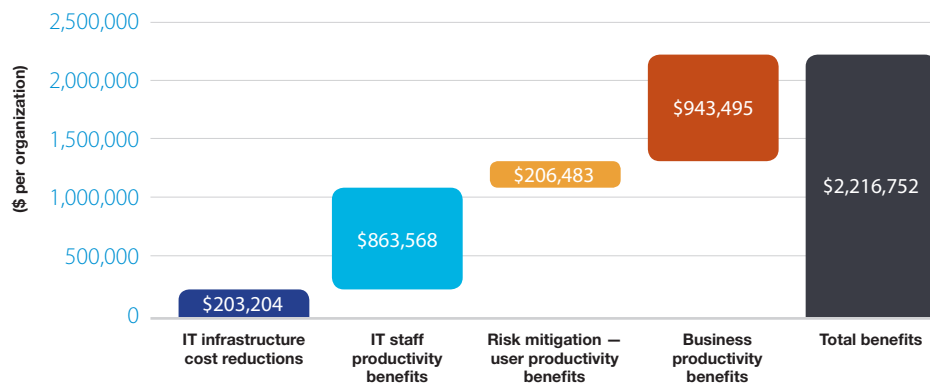
Total average annual benefits: $2.22 million

Source: IDC, 2015

IT Infrastructure Cost Reductions and Avoidances

Nutanix solutions, including Dell XC, serve as a cost-effective infrastructure platform for business applications used by interviewed organizations. IDC calculated that, on average, these organizations will reduce and avoid IT infrastructure-related costs by 30.6% compared with their previous environments or other potential infrastructure solutions. These cost efficiencies come on top of other benefits discussed in this study, such as improved scalability, operating efficiencies, and higher performance. Customers reported savings with Nutanix solutions for both hardware and software as well as substantial reductions in costs associated with power and datacenter space (see Figure 2).

Interviewed organizations described a number of ways that their Nutanix solutions have enabled them to achieve cost efficiencies:

» **Storage optimization.** Provisioning storage can be complex and costly in traditional datacenter architectures. However, Nutanix solutions help organizations reduce the need to overprovision and increase storage utilization rates by providing storage as a single resource pool that can be easily moved between workloads and increased as needed. In addition, the high resiliency of Nutanix solutions can help avoid costs associated with provisioning storage for secondary and disaster recovery sites. According to an IT manager at Protected Trust, a United States-based IT services company: "We'd probably have to buy another SAN at our disaster recovery site without Nutanix …. We'd be at a million dollars total of additional SAN costs."

» **Reduced datacenter footprint.** Nutanix solutions require substantially lower power consumption (53.2% on average) and datacenter space (69.5% on average), helping organizations to minimize infrastructure operating costs. An IT manager at a U.S. governmental organization said, "We've saved more than 50% on power by moving to Nutanix, and the impact on floorspace needed is huge." Another manager at the County of San Mateo reported: "We're at about 20% of the footprint we used to have. One of my staff's favorite things is to show visitors rows of racks of servers that have gone away and point to one rack where Nutanix is and say, 'all that is over there.'"

» **Enabling ease of scalability.** Several interviewed IT managers likened Nutanix solutions to Lego blocks, a comparison that expresses the ease of expanding resources to meet demand with Nutanix rather than having to acquire the various resources, including server, storage, network hardware, and software licenses, to meet potential demand. An IT manager at an IT services company in New Zealand explained the cost benefit of this: "With a traditional approach, we would have had quite a substantial capital layout, because it needs to be scalable, and you need to invest in that up front with enough horsepower, whereas with Nutanix, you can just keep adding Lego blocks to it and it gives you more performance as you scale."

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IT Infrastructure Costs — Annualized per Interviewed Organization
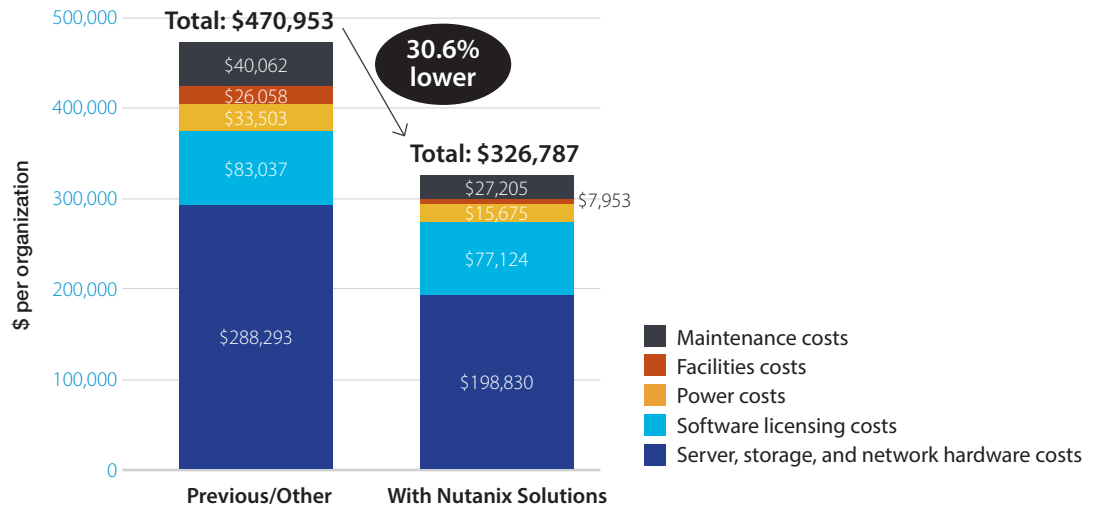
	Previous/ Other ($)	With Nutanix ($)	Cost Savings/ Avoidance ($)	Cost Savings/ Avoidance (% change)
Server, storage, and network hardware costs	288,293	198,830	89,463	31.0
Software licensing costs	83,037	77,124	5,913	7.1
Power costs	33,503	15,675	17,829	53.2
Facilities costs	26,058	7,953	18,106	69.5
Maintenance costs	40,062	27,205	12,857	32.1
Total	**470,953**	**326,787**	**144,167**	**30.6**

Note: Figure 2 does not include benefits in terms of third-party contractor and tools cost savings and avoidances.
Source: IDC, 2015

IT Staff Productivity Benefits

Nutanix software enables substantial efficiencies in terms of deploying, managing, and troubleshooting Nutanix solutions, especially for storage. Organizations interviewed for this study reported that they are able to deploy Nutanix solutions, including Dell XC, an average of 55.9% faster and with 49.6% less staff effort than traditional infrastructure approaches, shaving more than one month off of the average total deployment time and saving the average equivalent of 10.5 months of one employee's time (see Figure 3). For these organizations, this represents an efficiency for both IT staff members and users who benefit from workloads

An IT manager at an insurance company in Europe explained: "We're now more proactive with Nutanix because I can predict more easily how I want to change my infrastructure …. This means that 80% of my time is proactive; before, it was like 40%. We're doing projects and other work with this saved time and creating business value."

running on this infrastructure at an earlier time. Meanwhile, interviewed organizations expressed widespread praise for the ease of administering, managing, and troubleshooting their Nutanix environments, with the IT manager at the County of San Mateo saying, "My staff sings the praises of Nutanix all day long. A box will show up, and they can have it up and running before lunch time, and then it pretty much self-manages."

For these organizations, the value of these efficiencies does not end with saving IT staff time. The value is broader in that the transition to Nutanix solutions represents an opportunity for IT departments to position IT as a business enabler and partner. An IT manager at an insurance company in Europe explained how Nutanix solutions are helping accomplish this: "We're now more proactive with Nutanix because I can predict more easily how I want to change my infrastructure …. This means that 80% of my time is proactive; before, it was like 40%. We're doing projects and other work with this saved time and creating business value."

FIGURE 3

IT Staff Productivity Gains with Nutanix Solutions

Source: IDC, 2015
(% change)

Organizations using Nutanix solutions provided a number of examples of efficiencies they are capturing with software-defined policy, especially in terms of minimizing the complexity of provisioning and managing storage resources:

» **Deployment.** The IT manager at the County of San Mateo explained how his organization could deploy Nutanix faster and more efficiently: "We needed two days with Nutanix to deploy. The old way, it would take 1-2 months for a new storage system — we'd have to buy storage separately, then buy the compute separately, and then buy networking gear, and only then could we plug it all together."
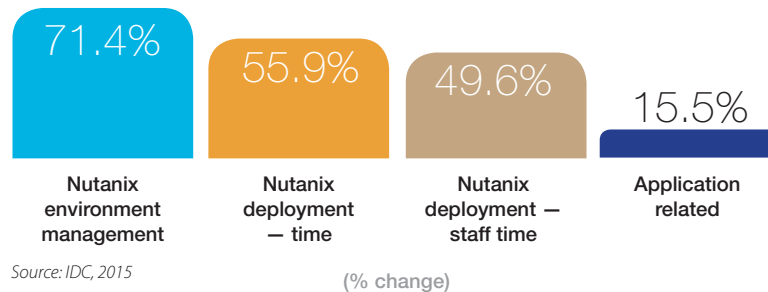
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» **Ongoing management.** Efficiencies in maintaining and managing Nutanix environments have been particularly evident for interviewed organizations in terms of diminishing the complexity of managing and provisioning storage resources as well as helping to break down storage silos. An IT manager at an EMEA bank reported: "For managing storage, we basically don't need any time with Nutanix. We probably need one hour per month compared with one hour per day."

Most organizations interviewed for this study said that they have yet to experience any unplanned downtime since deploying Nutanix. On average, these organizations have experienced under 1.5 minutes of unplanned downtime per year running important business applications on Nutanix.

Risk Mitigation — User Productivity Benefits

Interviewed organizations reported that they have substantially reduced the impact of unplanned outages related to their datacenter infrastructure since deploying their Nutanix solutions, including Dell XC. In fact, most organizations interviewed for this study said that they have yet to experience any unplanned downtime since deploying Nutanix. On average, these organizations have experienced under 1.5 minutes of unplanned downtime per year running important business applications on Nutanix. In addition, they cited being able to carry out zero-downtime upgrades as another advantage of their Nutanix environments, which help them ensure more robust application performance and resiliency without impacting users during upgrades. On a per-user basis, IDC calculates that productive time lost due to unplanned and planned downtime has gone from 1.84 hours per year to minutes per year, almost a 100% reduction in productive time lost (see Table 4).

TABLE 4

| Risk Mitigation Key Performance Indicators				
Unplanned downtime	**Previous/ Other**	**With Nutanix Solutions**	**Difference**	**Benefit (%)**
Unplanned downtime instances per year	3.28	0.08	3.20	97.7
Time to resolve unplanned downtime (hours)	2.13	0.31	1.81	85.3
Unplanned downtime per year (minutes)	418.0	1.4	416.6	99.7
Productive hours lost per year per user due to unplanned downtime	1.34	0.00	1.33	99.7
Planned downtime				
Planned downtime instances per year	6.00	0.00	6.00	100.0
Time to resolve planned downtime (hours)	3.56	0.00	3.56	100.0
Productive hours lost per year per user due to planned downtime	0.50	0.00	0.50	100.0
Total productive hours lost due to downtime per year per user	**1.84**	**0.00**	**1.84**	**100.0**

Source: IDC, 2015

The cost and operational efficiencies of Nutanix solutions, along with their high resiliency, mean that organizations running workloads in a Nutanix environment have a substantially lower total cost of ownership (TCO) compared with legacy or alternative infrastructure solutions. IDC calculates that, on average, these organizations will reduce their TCO by 58.3% over five years (see Figure 4).

TCO of Nutanix Solutions

The cost and operational efficiencies of Nutanix solutions, including Dell XC, along with their high resiliency, mean that organizations running workloads in a Nutanix environment have a substantially lower total cost of ownership (TCO) compared with legacy or alternative infrastructure solutions. IDC calculates that, on average, these organizations will reduce their TCO by 58.3% over five years (see Figure 4).

FIGURE 4

Five-Year TCO of Nutanix Solutions per Interviewed Organization
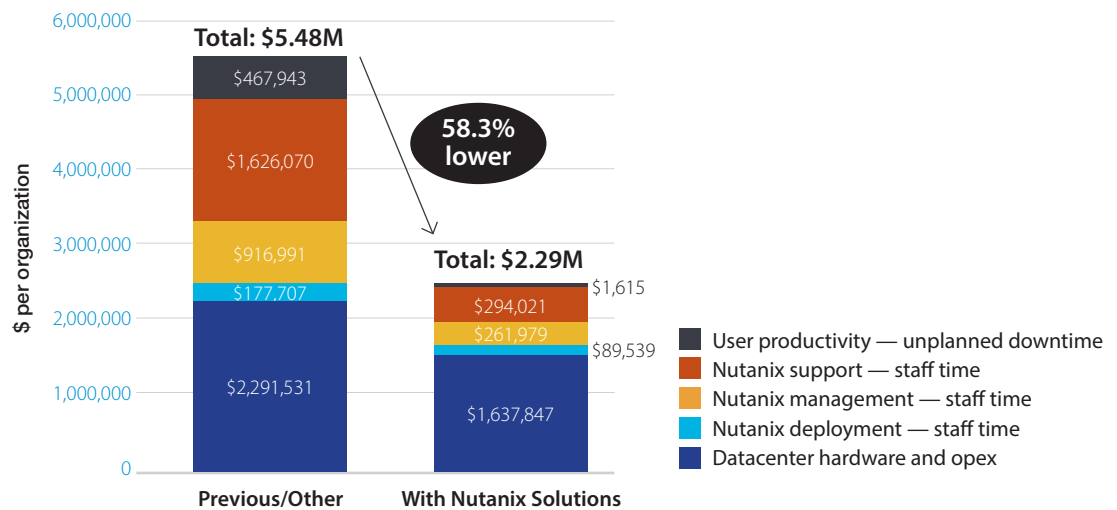
	Previous/ Other ($)	With Nutanix ($)	Cost Savings/ Avoidance ($)	Cost Savings/ Avoidance (% change)
Datacenter hardware and opex	2,291,531	1,637,847	653,684	28.5
Nutanix deployment — staff time	177,707	89,539	88,168	49.6
Nutanix management — staff time	916,991	261,979	655,012	71.4
Nutanix support — staff time	1,626,070	294,021	1,332,049	81.9
User productivity — unplanned downtime	467,943	1,615	466,328	99.7
Total	**5,480,242**	**2,285,001**	**3,195,241**	**58.3**

Source: IDC, 2015

An IT manager at a United States–based federal systems integrator said: "We called up Nutanix, and in 72 hours, we were up and running. With a different vendor, I couldn't have even gotten a PO in this time …. It probably would have been at least three weeks. There would have been no way to achieve what we did."

According to the IT manager at Protected Trust: "Nutanix impacts the performance of our services to the end user, which means they are happier …. That results in more sales for us. There are customers that we probably would not have gotten if it weren't for Nutanix. The impact to revenue is probably [in the] millions — $1-2 million per year currently."

Business Productivity Benefits

Interviewed organizations also credited Nutanix solutions such as Dell XC with enabling them to better meet business challenges. By moving to a hyperconverged infrastructure, these organizations have improved the agility of their IT services, which enables them to better meet business demand. Nutanix software and increased virtualization are helping these organizations provision storage and server resources in far less time, which shortens development cycles for applications and services and makes IT more nimble and flexible in supporting the business. As a result, these organizations can better address business opportunities as they arise, and their users benefit from having access to new applications and application updates sooner. For interviewed organizations, these performance improvements translate to an ability to provide scalable IT services for supporting business operations, higher revenue, and decreased operational costs in the form of higher user productivity. Table 5 shows business productivity KPIs of these businesses.

Interviewed organizations provided a number of examples of how Nutanix solutions have positively impacted their businesses and users:

» **Scalable business.** An IT manager at a United States–based federal systems integrator credited the scalability it achieved with Nutanix for getting 2,000 employees onboarded in a matter of days to support an important business objective: "We called up Nutanix, and in 72 hours, we were up and running. With a different vendor, I couldn't have even gotten a PO in this time …. It probably would have been at least three weeks. There would have been no way to achieve what we did."

» **More sales.** The IT manager at Protected Trust explained that its customers were seeing improved performance of the services it provides, which translates to higher customer satisfaction and ultimately more revenue: "Nutanix impacts the performance of our services to the end user, which means they are happier …. That results in more sales for us. There are customers that we probably would not have gotten if it weren't for Nutanix. The impact to revenue is probably [in the] millions — $1-2 million per year currently."

» **Performance.** The IT manager at Langs Building Supplies explained how Nutanix was speeding up batch processes: "We do batch jobs all the time, but the main one is invoicing every day. That used to take pretty much all night, a full eight hours, but now it runs in an hour and 15 minutes. Sometimes, it wouldn't be finished the next morning, but now, we start at 4 p.m. and it's done before we leave the office."

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TABLE 5

Business Productivity Key Performance Indicators

	Change
Improved application performance (%)	50.6
Reduced time to release for applications (%)	37.8
Reduced time needed per new storage deployment (%)	85.3
Reduced time needed per storage upgrade (%)	82.6
Reduced time per physical server deployment (%)	69.8
Reduced time per virtual server deployment (%)	64.8
Average user productivity improvement (%)	3.1
Average revenue increase per year per interviewed organization — operational efficiencies ($)	499,560
Average revenue increase per year per interviewed organization — reduced downtime ($)	190,863

Source: IDC, 2015

ROI Analysis

IDC uses a discounted cash flow methodology to calculate the ROI and payback period. ROI is the ratio of the net present value (NPV) and discounted investment. Payback period is the point at which cumulative benefits equal the initial investment.

Table 6 presents IDC's analysis of the average discounted benefits, investment, and return on investment (ROI) for the Nutanix and Dell customers interviewed for this study. Based on its analysis, IDC projects that these organizations will invest a discounted average of $1.29 million per organization over five years ($1.21 million over three years) in Nutanix solutions, which will yield discounted benefits of $7.85 million per organization ($4.86 million over three years). This results in an average five-year ROI of 510% (three-year ROI of 302%) and a payback period of 7.5 months.

TABLE 6

ROI Analysis

	Five-Year Average per Organization	Five-Year Average per 100 Users	Three-Year Average per Organization	Three-Year Average per 100 Users
Benefit (discounted)	$7.85 million	$333,882	$4.86 million	$206,821
Investment (discounted)	$1.29 million	$54,700	$1.21 million	$51,417
Net present value (NPV)	$6.56 million	$279,182	$3.65 million	$155,405
Return on investment (ROI)	510%	510%	302%	302%
Payback period	7.5 months	7.5 months	7.5 months	7.5 months
Discount rate	12%	12%	12%	12%

Source: IDC, 2015

Based on its analysis, IDC projects that these organizations will invest a discounted average of $1.29 million per organization over five years ($1.21 million over three years) in Nutanix solutions, which will yield discounted benefits of $7.85 million per organization ($4.86 million over three years). This results in an average five-year ROI of 510% (three-year ROI of 302%) and a payback period of 7.5 months.

Challenges and Opportunities

Years of operating with silos of infrastructure have left many IT departments on a refresh treadmill where the completion of one infrastructure refresh project is immediately followed by another, which is quickly followed by another. Such environments leave corporations highly vulnerable to datacenter outages and ultimately ill prepared for today's rapidly changing competitive landscape. And while these are exactly the types of challenges that hyperconverged infrastructure can help eliminate, breaking this cycle may require a multiphased rollout approach. In such instances, realization of benefits may be measured as incremental improvements that compound over time as additional workloads or business units are migrated to an ever-expanding hyperconverged environment. Over longer periods of time, organizations could see adoption of hyperconverged infrastructure create a harmonizing effect on some parts of their datacenter infrastructure refresh cycle.

The good news is that, with so many workloads having already been migrated to virtualized servers, the collapsing of storage and compute infrastructure into a common set of highly virtualized physical resources is often considered a natural evolution toward a truly software-defined datacenter.

IDC's research demonstrates that organizations running workloads on Nutanix solutions are benefiting from cost and staff efficiencies, the ability to scale their infrastructure incrementally, very high resiliency, and strong application performance.

Summary and Conclusion

Organizations increasingly require IT infrastructures that support the speed at which their businesses must operate through simplicity, efficiencies, agility, and strong performance. Hyperconverged infrastructure solutions, which enable organizations to minimize or nearly eliminate inefficiencies and complexity associated with maintaining storage and compute silos, have emerged as a strong potential solution for such organizations. IDC's research demonstrates that organizations running workloads on Nutanix solutions such as Dell XC are benefiting are benefiting from cost and staff efficiencies, the ability to scale their infrastructure incrementally, very high resiliency, and strong application performance. This is helping interviewed Nutanix solutions customers better meet business challenges and has led many of them to establish plans for expanding their hyperconverged workload environment with Nutanix solutions.

Appendix 1: Methodology

IDC utilized its standard ROI methodology for this project. This methodology is based on gathering data from current users of Nutanix solutions and Dell XC Web-scale converged appliances as the foundation for the model. Based on these interviews, IDC performs a three-step process to calculate the ROI and payback period:

» Measure the savings from reduced IT costs (staff, hardware, software, maintenance, and IT support), increased user productivity, and improved revenue over the term of the deployment.

» Ascertain the investment made in deploying the solution and the associated training and support costs.

» Project the costs and savings over a five-year period and calculate the ROI and payback for the deployed solution.

IDC bases the payback period and ROI calculations on a number of assumptions, which are summarized as follows:

» Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and manager productivity savings.

» Downtime values are a product of the number of hours of downtime multiplied by the number of users affected.

» The impact of unplanned downtime is quantified in terms of impaired end-user

productivity and lost revenue.

» Lost productivity is a product of downtime multiplied by burdened salary.

» Lost revenue is a product of downtime multiplied by the average revenue generated per hour.

» The net present value of the five-year savings is calculated by subtracting the amount that would have been realized by investing the original sum in an instrument yielding a 12% return to allow for the missed opportunity cost. This accounts for both the assumed cost of money and the assumed rate of return.

Because every hour of downtime does not equate to a lost hour of productivity or revenue generation, IDC attributes only a fraction of the result to savings. As part of our assessment, we asked each company what fraction of downtime hours to use in calculating productivity savings and the reduction in lost revenue. IDC then taxes the revenue at that rate.

Further, because IT solutions require a deployment period, the full benefits of the solution are not available during deployment. To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.

Appendix 2: Nutanix Customer Quotes Used In This Study

An IT manager at Langs Building Supplies in Australia: "With Nutanix, we are doing far more projects for our business units …. Instead of spending 65% of our time running things, we're spending 65% working on the business …. So we've become an enabler rather than a hindrance."

An IT manager at Protected Trust in the United States: "We'd probably have to buy another SAN at our disaster recovery site without Nutanix …. We'd be at a million dollars total of additional SAN costs."

An IT manager at a U.S. governmental organization: "We've saved more than 50% on power by moving to Nutanix, and the impact on floorspace needed is huge." Another manager at the County of San Mateo reported: "We're at about 20% of the footprint we used to have. One of my staff's favorite things is to show visitors rows of racks of servers that have gone away and point to one rack where Nutanix is and say, 'all that is over there.'"

An IT manager at an IT services company in New Zealand: "With a traditional approach, we would have had quite a substantial capital layout, because it needs to be scalable, and you need to invest in that up front with enough horsepower, whereas with Nutanix, you can just keep adding Lego

blocks to it and it gives you more performance as you scale."

An IT manager at the County of San Mateo: "My staff sings the praises of Nutanix all day long. A box will show up, and they can have it up and running before lunch time, and then it pretty much self-manages."

An IT manager at an insurance company in Europe: "We're now more proactive with Nutanix because I can predict more easily how I want to change my infrastructure …. This means that 80% of my time is proactive; before, it was like 40%. We're doing projects and other work with this saved time and creating business value."

The IT manager at the County of San Mateo: "We needed two days with Nutanix to deploy. The old way, it would take 1-2 months for a new storage system — we'd have to buy storage separately, then buy the compute separately, and then buy networking gear, and only then could we plug it all together."

An IT manager at an EMEA bank: "For managing storage, we basically don't need any time with Nutanix. We probably need one hour per month compared with one hour per day."

An IT manager at a United States–based federal systems integrator: "We called up Nutanix, and in 72 hours, we were up and running. With a different vendor, I couldn't have even gotten a PO in this time …. It probably would have been at least three weeks. There would have been no way to achieve what we did."

The IT manager at Protected Trust: "Nutanix impacts the performance of our services to the end user, which means they are happier …. That results in more sales for us. There are customers that we probably would not have gotten if it weren't for Nutanix. The impact to revenue is probably [in the] millions — $1-2 million per year currently."

The IT manager at Langs Building Supplies: "We do batch jobs all the time, but the main one is invoicing every day. That used to take pretty much all night, a full eight hours, but now it runs in an hour and 15 minutes. Sometimes, it wouldn't be finished the next morning, but now, we start at 4 p.m. and it's done before we leave the office."

Note: All numbers in this document may not be exact due to rounding.

About IDC

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