Nutanix Delivering Strong Value as a Cost-Effective, Efficient, Scalable Platform for Enterprise Applications

Sponsored by:
Nutanix

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Business Value Highlights

534% five-year ROI

60% reduction in five-year cost of operations

$4.24 million in average annual benefits per organization

7 months to payback

61% more efficient to deploy, manage, and support

97% fewer unplanned outages

$10.56 million in average additional revenue per interviewed organization per year

EXECUTIVE SUMMARY

The datacenter infrastructure market is undergoing a dramatic change. IT executives are increasingly turning to next-generation datacenter technologies that support extensive digital transformation projects while improving operational efficiencies. This is driving new infrastructure spending on solutions that are able to drive down costs, reduce complexity, and increase agility of IT staff. Sales of hyperconverged infrastructure (HCI) have increased dramatically over the past few years because of, in part, the ability of these solutions to collapse core compute, storage, and network services onto a highly virtualized cluster of x86 server resources.

HCI solutions, which address both business and IT resource challenges, provide the performance, provisioning, and scale-out attributes to meet escalating business demands, while the automation, ease-of-use, and orchestration characteristics ensure resource optimization and efficiency.

IDC interviewed 11 organizations about their experiences running various enterprise workloads on Nutanix Enterprise Cloud Platform (Nutanix) solutions. These interviews revealed that the study participants are realizing significant value with Nutanix as a cost-effective, efficient, and business-enabling IT platform built on hyperconverged infrastructure. IDC calculates that study participants will achieve average annual benefits of $4.24 million per organization ($51,077 per 100 users), which would result in a five-year return on investment (ROI) of 534%, because Nutanix:

- Serves as a cost-effective IT platform
- Requires less IT staff time to deploy, manage, and support
- Provides an agile, scalable, and high-performing IT platform
- Enables improved business results and higher user productivity

IDC
ANALYZE THE FUTURE

SITUATION OVERVIEW

Most business leaders are now acutely aware that competitive strengths of the past (e.g., corporate size or brand strength) can no longer be counted on to help a company thrive in today's digital, cloud-based environment. Businesses can thrive only if they are truly agile, leverage highly automated infrastructure, and incorporate real-time data analytics when making critical-business decisions.

This tells us that an organization's ability to be competitive on the global market will be directly tied to the decisions made within the organization's datacenter.

To support the rapidly changing needs of the business, datacenter teams are moving away from infrastructure requiring special skills to configure, tune, or provision. Instead, these teams are deploying infrastructure that automates much of the hardware-related management tasks. They are also leveraging public cloud solutions to completely eliminate the need to own and manage some of their infrastructure. However, public cloud solutions are not a good fit for all workloads, and public cloud solutions can be more expensive than on-premises solutions depending on the workload characteristics. As such, the public cloud is increasingly used along with on-premises, private clouds (aka enterprise clouds). These enterprise clouds often provide levels of agility, automation, and efficiency as well as cost models that are comparable to those of public clouds without forcing users to give up control of data or risk outages related to lower availability of service-level agreements (SLAs).

One of the most popular architectures used to build out private enterprise clouds is known as hyperconverged infrastructure. Today's well-designed HCI solutions are based on web-scale architectures and share many of the architectural attributes of public cloud offerings (server based, software defined, scale out, highly automated, and self-healing). The benefits of HCI solutions include:

- Lower costs can be attributed to the utilization of x86 servers as core building blocks and the scale-out architecture of HCI. The commodity pricing of x86 servers drives down hardware costs, while the scale-out architecture allows for relatively small initial deployments that scale (compute and storage) over time by simply adding nodes to a cluster. Eliminating the need for dedicated storage systems and SAN switches further contributes to lower costs. Together, these factors can have a profound impact on capital costs and, ultimately, lead to higher infrastructure utilization rates.
- The scale-out architecture of these HCI solutions also contributes to increased agility, allowing IT departments to quickly scale compute and storage resources by adding more nodes to existing clusters without taking the application offline.

- Reduced management burdens often begin with simplified deployment and high levels of automation. Many solutions are designed to be "up and running" with the fewest possible steps and geared toward the IT generalist or a virtual machine (VM) administrator. Automation is a critical part of the simplified installation. HCI suppliers also automate as many storage tasks as possible with their offerings. HCI solutions usually do away with LUNs and allow for VM-level managing and monitoring. This not only greatly increases the granularity of the management but also allows nonstorage experts to manage the storage in constructs they know well.

HCI found early success within midsize environments and targeted workloads. Broader acceptance of the technology and increased awareness of the benefits these HCI solutions bring to the table have driven rapid growth in this market. Today, the breadth of workloads running on HCI solutions is expanding rapidly. Mission-critical business applications have become common workloads within these deployments. The growth of new HCI deployments and the expansion of workloads running on these systems helped drive total global HCI sales (including hardware and software) up 110% to more than $2 billion in 2016.

NUTANIX ENTERPRISE CLOUD PLATFORM

Nutanix offers turnkey datacenter infrastructure software and hardware that provides on-premises, enterprise-class private clouds. Built from the ground up to be software defined and hyperconverged, the Nutanix Enterprise Cloud Platform delivers storage, compute, infrastructure management, and monitoring software through a highly virtualized, scale-out architecture. Nutanix provides a resilient pool of abstracted x86 server resources that allow IT administrators to run mission-critical applications efficiently and cost effectively. The company's portfolio of offerings is detailed below. These offerings can be purchased as turnkey appliances with all required software and hardware included or as a software-only option that can be deployed on pre-certified, general-purpose servers. An overview of the core technology within the Nutanix Enterprise Cloud Platform is as follows:

- **Acropolis** is the core software-based distributed storage fabric that provides Nutanix's enterprise-class data, networking, and virtualization services for all workloads running on the solution. Acropolis includes the following components:
  - **AHV** is Nutanix's own enterprise-class hypervisor that is included at no additional license cost. Nutanix AHV can be deployed in lieu of other commercial hypervisors to reduce software licenses and further simplify

management and operation. Acropolis also supports the following hypervisors: VMware ESXi, Microsoft Hyper-V, and Citrix XenServer.

- **Platform Services** are software-defined data services designed to support virtualized applications, nonvirtualized applications, unstructured file data, and containerized applications. These services are optional and can be enabled/disabled on demand.
- **Enterprise Storage Capabilities** represent the distributed storage fabric that provides core storage services such as performance acceleration, compression, data deduplication, data replication (synchronous and asynchronous), automated tiering, snapshots, clones, replication, erasure coding, file services, block services, and container services.
- **Acropolis Network Services** provide network visualization and automation of common network operations.
- **Acropolis Security** provides customers with a hardened platform with security posture auditing and a self-healing framework to reset to a known configuration, built-in key security features such as two-factor authentication, cluster lockdown, data-at-rest encryption, and key management. Acropolis also exposes APIs so that third-party network security, endpoint security, and data security offerings can be integrated into the platform.
- **Nutanix App Mobility Fabric (AMF)** provides virtual machine migration and conversion across a robust matrix of Nutanix and non-Nutanix infrastructure, hypervisors, and clouds.

- **The Nutanix Prism management framework:** Prism provides a single pane of management and greatly simplifies all aspects of managing Nutanix deployments, including virtual machines, hosts and clusters, networking, and data protection. Prism also provides customers with the insights needed to understand their environments and recommends actions to resolve problems and address capacity concerns that arise. Prism management also provides a comprehensive set of management and monitoring APIs to allow for further automation or integration into broader datacenter tooling.

Deploying Nutanix

Nutanix supports a variety of software deployment approaches, including appliances such as native NX-series, OEMed Dell EMC XC, Lenovo HX, and IBM CS series, as well as Nutanix software as a "meet in the channel" offering available on validated Cisco UCS and HPE ProLiant general-purpose servers and ruggedized/tactical platforms from Klas Telecom and Crystal Group. Nutanix offers customizable resource configurations that can be optimized for most enterprise workload profiles. Although components can be configured with different compute, memory, and storage capacity, customers can build clusters with a mix of storage configurations and thus are not forced to create dedicated islands of resources.

THE BUSINESS VALUE OF NUTANIX

Study Demographics

IDC interviewed 11 organizations for this study. IDC asked interviewees, which included IT managers and decision makers, a variety of quantitative and qualitative questions about the impact of deployed Nutanix solutions on their operations, businesses, and costs compared with the three-tiered IT environments they replaced or would have used in lieu of Nutanix.

The average number of employees in interviewed organizations was 12,331, while the average number of IT staff was 192. The average number of business applications was 209. A range of vertical industries were represented, including the construction, healthcare, financial services, and retail sectors, and interviews represented experiences from organizations based in North America; Europe, the Middle East, and Africa (EMEA); and Asia/Pacific (APAC). Table 1 provides detailed information on the organizations' firmographic attributes.

TABLE 1 Demographics of Interviewed Organizations

	Average	Median
Number of employees	12,331	6,800
Number of IT users	11,315	5,440
Number of IT staff	192	160
Number of business applications	209	75
Countries	United States, Canada, Australia, Belgium, and France	
Industries	Apparel, construction, financial services, government, healthcare, luxury, natural resources, and retail	

n = 11

Source: IDC, 2017

Study Participants' Use of Nutanix

Interviewed organizations have deployed an average of 62 Nutanix nodes with 315TB of storage to support 63 business applications. Nutanix platforms make up a significant portion of the organizations' overall IT infrastructures: On average, their Nutanix platforms run more than one-third of business applications that are used by more than two-thirds of their employees. Table 2 provides detailed information on study participants' use of Nutanix.

TABLE 2 Nutanix Solutions Environments of Interviewed Organizations

	Average	Median
Number of sites	3	2
Number of Nutanix nodes	62	46
Number of virtual servers	861	902
Number of terabytes (data)	315	110
Number of business applications supported by Nutanix	63	53
Number of users	8,301	5,000

n = 11

Source: IDC, 2017

Organizations interviewed for this study are running a variety of workloads on their Nutanix platforms, and all interviewed organizations have put multiple types of workloads on Nutanix. In addition, several organizations noted that their intention to continue to expand their Nutanix environments is based on positive results with deployments to date. That said, several interviewees stressed that Nutanix was already their primary IT infrastructure platform: According to one participant, *"[T]he majority of our workloads have already been migrated to Nutanix," while another participant commented that, "[w]e pretty much have everything running on Nutanix."* One organization reported that it had decommissioned its mainframe and moved those applications to Nutanix.

Study participants are running a mix of business applications on Nutanix that includes:

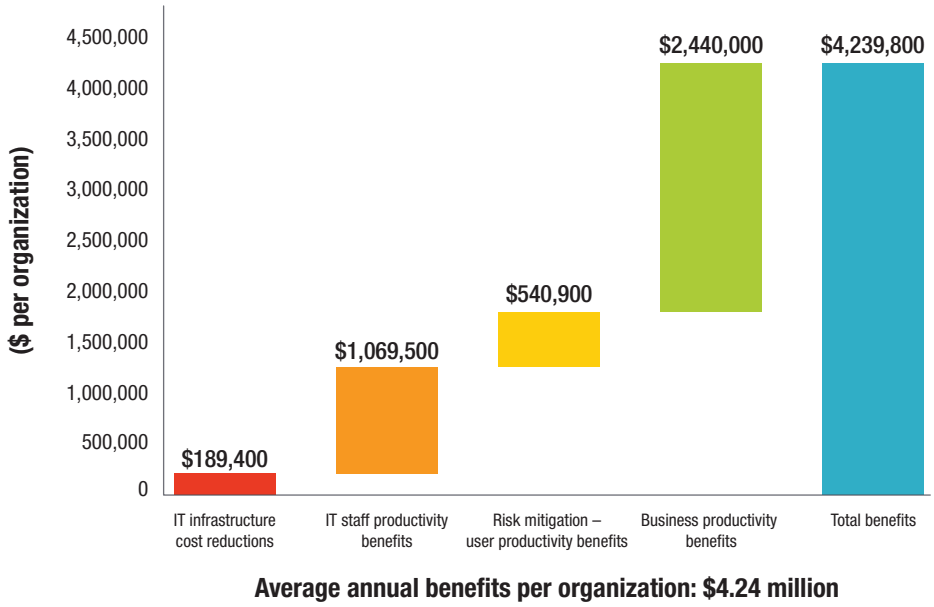
- Logistics management application
- Health system, human services, and criminal justice applications (public sector)
- Online banking
- Patient-focused clinical application
- Other applications include SQL, relational database workloads, VDI, Microsoft Exchange, collaboration tools, and Microsoft Dynamics point-of-sale workloads

Business Value of the Nutanix Enterprise Cloud Platform

Interviewed organizations reported that Nutanix serves as a cost-effective and efficient IT platform that provides the levels of reliability and performance that their businesses demand compared with the infrastructure solutions they replaced. The deployment of Nutanix has resulted in significant levels of value, especially in terms of enabling these organizations to address business opportunities and generate new business. IDC projects that the total value that these Nutanix customers are realizing will be worth an annual average of $4.24 million per organization ($51,077 per 100 users of applications running on Nutanix) over five years in the following areas (see Figure 1):

- **IT infrastructure cost reductions:** Interviewed organizations reported that Nutanix costs less than comparable three-tiered solutions and enables cost savings in areas such as maintenance, power, facilities, licensing, and disaster recovery, resulting in 39% lower infrastructure costs on average. IDC calculates that study participants will reduce costs associated with running workloads on Nutanix by an annual average of $189,400 per organization ($2,281 per 100 users, not including infrastructure-related savings to avoid double counting benefits).
- **IT staff productivity benefits:** Study participants explained that Nutanix requires on average 61% less IT staff time to deploy, manage, and support than their legacy infrastructures. IDC projects that interviewed organizations will realize value through IT staff time savings and higher productivity worth an annual average of $1.07 million per organization ($12,884 per 100 users).
- **Risk mitigation — user productivity benefits:** Nutanix customers reported that they experience fewer unplanned outages and can resolve them faster. IDC puts the value of higher user productivity and revenue losses avoided at an annual average of $540,900 per organization ($6,516 per 100 users).
- **Business productivity benefits:** Study participants tied the agility, scalability, and performance benefits realized with Nutanix to improved business results and higher user productivity. IDC calculates that these organizations will realize higher revenue and operational efficiencies in the form of higher user productivity worth an annual average of $2.44 million per organization ($29,395 per 100 users).

FIGURE 1 Average Annual Benefits per Interviewed Organization

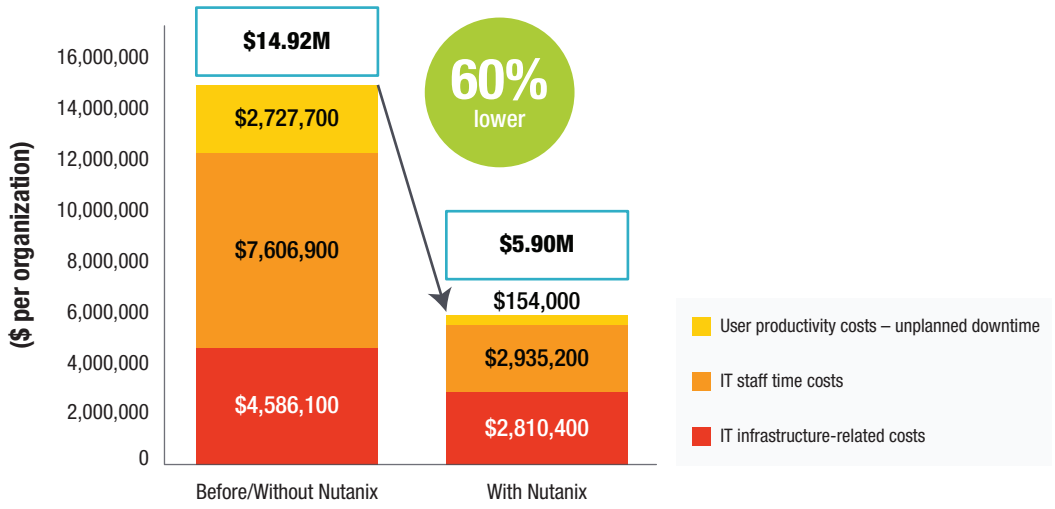


Source: IDC, 2017

Providing a Cost-Effective, Efficient IT Foundation for Enterprise Applications

Study participants achieved various operational efficiencies and cost efficiencies by moving applications to Nutanix from legacy three-tier datacenter infrastructure while improving application performance and gaining needed agility and scalability. Based on the interviews conducted, IDC calculates that, on average, study participants will reduce the five-year cost of operations of supporting workloads they are running on Nutanix from $14.92 million to $5.90 million per organization ($179,752 to $71,074 per 100 users), representing a reduction of 60% (see Figure 2).

FIGURE 2 Five-Year Cost of Operations



Source: IDC, 2017

The drivers of lower cost of operations are described in the sections that follow.

IT Infrastructure Cost Reductions

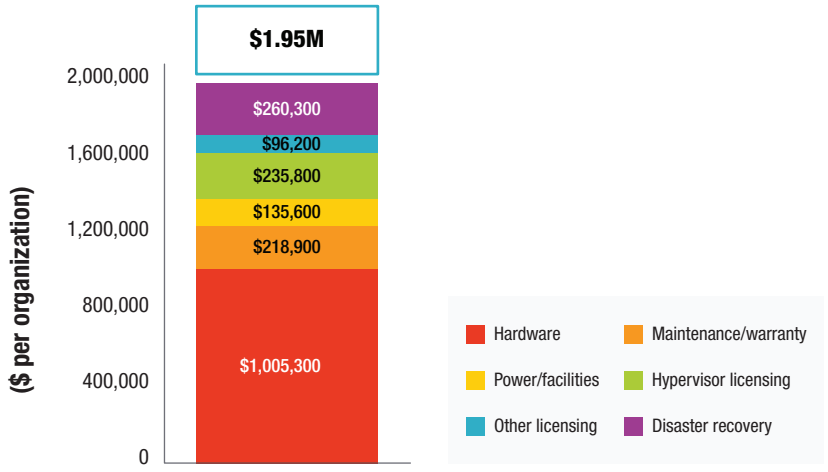
Nutanix serves as an optimized and efficient IT platform, which is enabling interviewed organizations to reduce and avoid datacenter-related capex and opex. Study participants consistently reported that Nutanix costs less than a comparable three-tier solution. They attributed the lower cost to several factors, prominent among them being the need to spend less on SAN and network hardware. Further, most interviewed organizations attributed cost savings to power and datacenter space requirements. One study participant commented: *"Nutanix was about 40% less expensive than the comparable three-tiered solution we looked at, and we wouldn't have been able to get comparable specifications on that solution."* In addition, interviewed organizations noted that they are achieving these cost savings even as they benefit from increasing their SSD footprints (increasing from almost 0 SSD to 60TB on average) with Nutanix and its attendant advantages in performance.

Study participants also reported achieving other discrete cost efficiencies with Nutanix. Several study participants are using the included Nutanix AHV hypervisor, thereby enabling them to reduce the number of hypervisor licenses and additional operational management software they must purchase from other vendors. One study participant that intends to begin using Nutanix AHV explained: *"We expect to retire 200 hypervisor licenses, and maybe even more."* Several study participants also said that by moving to a more consolidated Nutanix environment, they require fewer

licenses for other software they are using. Additional cost savings can be realized because Nutanix is sufficiently robust and cost effective to enable more efficient disaster recovery operations.

IDC calculates that overall, Nutanix infrastructure savings will amount to an average of $1.95 million per organization ($23,516 per 100 users) over five years (see Figure 3).

FIGURE 3 IT Infrastructure Savings per Interviewed Organization Over Five Years



Source: IDC, 2017

IT Staff Productivity Benefits

Nutanix solutions also require significantly less IT staff time to deploy, manage, and support. Study participants have leveraged the Nutanix Enterprise Cloud Platform to reduce inefficiencies by taking advantage of automation and software-defined processes and breaking down organizational silos.

In addition, Nutanix Prism provides a singular interface to facilitate more efficient management processes. In the aggregate, these attributes mean that more IT staff time is made available for other activities, with study participants providing examples such as supporting disaster recovery operations, tackling ongoing DevOps projects, and expanding the reach of software-defined networks. Table 3 provides specifics on hours per node spent by IT staff over a five-year period, with study participants needing 61% less IT staff time to deploy, manage, and support equivalent workload environments with Nutanix.

TABLE 3 Impact of Nutanix on IT Staff Productivity (Hours per 100 Users Over Five Years)

	Before/Without Nutanix	With Nutanix	Difference	Benefit (%)
Deployment	27	8	19	70
Management	630	251	379	60
Support	1,055	402	653	62
Total	1,712	661	1,051	61

Source: IDC, 2017

Study participants offered numerous examples of such efficiencies. One IT manager commented: *"We currently have one engineer who supports our Nutanix environment, whereas we previously needed five people. We're more than triple our output in terms of what we're delivering for the business with technology and delivering more business capabilities."* Another manager said: *"We've gone from needing eight people to two people to manage our Nutanix environment. Instead, we're spending a lot more time designing automated solutions for our shop floor that were traditionally very manual, so it's a significant benefit for the business by having IT working on the business."*

Several study participants referenced the efficiency of deploying and upgrading new compute, storage, and hypervisor resources with Nutanix, which reduces staff time spent on these activities. According to a Nutanix customer that has reduced the staff time for completing hypervisor upgrades by almost 90%, *"[I]t's easier now because it's automated through Nutanix, so it just takes a few hours. Before Nutanix, it would be more like a week's worth of effort."*

Supporting the Business with Reliability, Agility, and Performance

Study participants described achieving significant benefits in terms of reliability, agility, and performance by moving their applications to Nutanix platforms. These organizations require a robust and high-performing IT infrastructure platform that moves at the speed required by their businesses. With Nutanix, they have substantially limited the impact of unplanned outages, sped up the deployment of compute and storage resources, and benefited from improved application performance. The improved business results and operational efficiencies that they attribute to Nutanix underscore the importance of these attributes.

Risk Mitigation — User Productivity Benefits

Interviewed organizations reported that with Nutanix, they have improved their business continuity by reducing the frequency and duration of unplanned outages affecting applications and services running on their Nutanix platforms. In particular, study participants benefit from having a single view of their environments with Nutanix Prism as well as improved disaster recovery and failover capabilities.

The result is that these organizations have reduced the impact of unplanned outages on their employees by 94%, with each user losing only four minutes of productive time per year with Nutanix (see Table 4). According to one IT manager: *"We've had zero downtime since 2013 with Nutanix. We have what we call the one-button upgrade approach, so we're able to implement a lot of the new software upgrades with every release Nutanix has and we don't have to take the system down. We just do a one-click upgrade for the OS."*

Study participants also benefited from being able to improve their security and regulatory postures in a cost-effective manner with Nutanix. In terms of security, Nutanix works to incorporate security across the development life cycle, from design and development to testing and hardening, and has developed its own Security Technical Implementation Guide (STIG), which is used along with automation and self-healing security models to help its customers maintain security. Leveraging automation and self-healing and having the ability to provide robust disaster recovery operations are particularly impactful. One study participant explained: *"From an auditing perspective related to PCI compliance, we have to regularly patch and maintain our systems, and Nutanix helps us do this much more easily."* With respect to disaster recovery, another Nutanix customer commented: *"We've removed a vendor contract for disaster recovery with Nutanix that is saving us over $100,000 per year, and we're saving a week of time for 10 people doing onsite disaster recovery work."*

TABLE 4 Risk Mitigation Key Performance Indicators

	Before/Without Nutanix	With Nutanix	Difference	Benefit (%)
Frequency of unplanned downtime per year	18.8	0.6	18.1	97
MTTR (hours)	4.0	2.3	1.7	43
Lost productivity per user per year (minutes)	74	4	70	94
FTE productivity impact per year	7.7	0.4	7.3	94

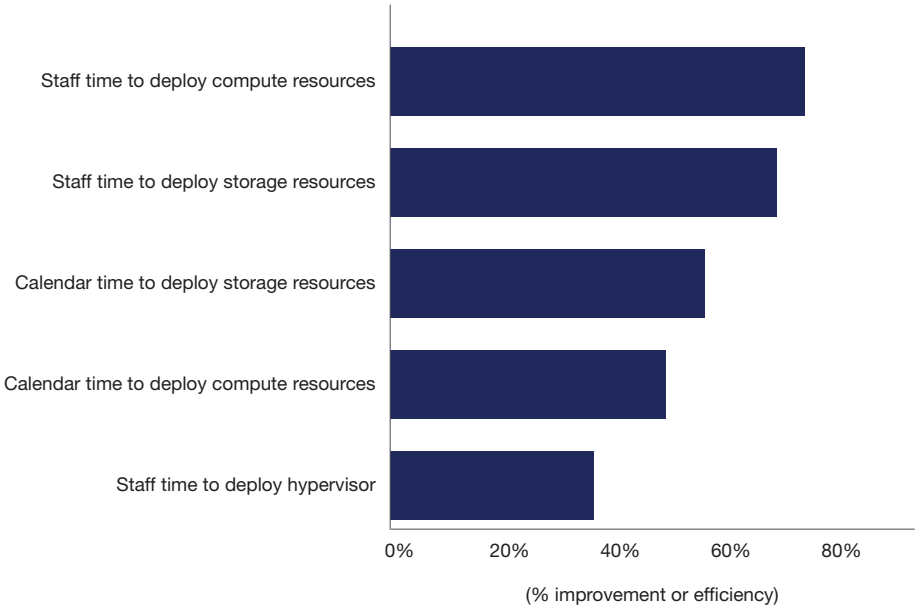
Source: IDC, 2017

IT Agility and Scalability

As previously described, Nutanix solutions offer the companies surveyed significant benefits in terms of IT agility and scalability. These benefits allow organizations to support the changing requirements associated with today's fast-paced business operations. In particular, Nutanix customers reported that deployment and upgrades of compute and storage resources take significantly less time. They traced these benefits back to Nutanix's hyperconverged nature, having access to common pools of compute and storage resources, and being able to easily add new Nutanix hardware to their existing environments. One study participant that has reduced the time required per compute deployment by almost three-quarters noted: *"Nutanix has impacted our IT scalability, that's for sure. It's much easier and quicker to add in capacity that we need."*

These benefits, including 73% less IT staff time per compute deployment and 68% less IT staff time per storage deployment, provide the study participants' business operations with much needed agility (see Figure 4). In other words, these participants have confidence that they can ensure that their IT operations keep up with demand from their businesses. One study participant described this benefit in terms of scalability: *"Nutanix is easier to scale. If we need more storage or more equipment, we just add it. This is important because it means our business is not waiting for additional systems or capacity or whatever they need, and we don't risk losing a customer. We've potentially increased revenue by 1–2% as a result."*

FIGURE 4 IT and Business Agility and Performance with Nutanix



Source: IDC, 2017

Performance

Study participants were unanimous that Nutanix provides markedly better performance than the infrastructure they replaced. Interviewed IT managers reported that they had improved application response times with Nutanix, helping ensure that users had access to high-performing business applications. The ability of interviewed organizations to add a significant amount of SSD to their Nutanix environments has been especially beneficial in terms of application performance and minimizing latency. One interviewed IT manager commented: *"Our application performance is at least two times better now. I know this because we do a lot of performance testing looking at response time and the ability to scale during busy periods."*

Delivering Better Business Results and Operational Efficiencies

Business Productivity Benefits

The previously described agility, scalability, and performance benefits have real-world impacts for the organizations surveyed. These organizations are running a variety of enterprise business applications on their Nutanix platforms that are used by thousands of employees and customers each day. Thus they reported that Nutanix has enabled them to achieve not only better business results but also operational

efficiencies. The derived business productivity benefits include realizing higher revenue from being able to address business opportunities and support the following:

- Expansion into new locations and markets
- Faster delivery of new applications and services
- Strong performance of applications that improves user productivity levels

One organization pointed out that the flexibility and agility it gained from using Nutanix enabled it to complete an important merger in less time: *"We had a recent merger and needed another 100 or so servers right away to be used for six months to do the merger. We could spin those up and use them right away with Nutanix. If we didn't have that capability, we would have had to postpone the merger until we had the infrastructure brought in to do that."* Another organization referenced the extent to which Nutanix supports its efforts to meet seasonal demand: *"The nature of our business is that we see significant volumes of transactions at certain times. So it's very important that our architecture can scale during those seasonal periods, and Nutanix does this."*

Table 5 reflects the extent to which study participants have leveraged agility, scalability, faster delivery of applications and services, and performance with Nutanix to better address business opportunities and achieve better results. IDC calculates that, on average, these organizations will earn additional revenue of $10.56 million per organization per year ($127,213 of additional revenue per 100 users).

Meanwhile, improved performance of applications running on Nutanix has enabled employees. On average, surveyed organizations reported that more than 1,000 employees have become more productive with Nutanix. One study participant explained: *"All of our employees are more productive with Nutanix. First, because the IT team has time to engage in more innovation. Second, there's also an application performance gain that helps these users."*

TABLE 5 Business Productivity Benefits with Nutanix

	Per Organization	Per 100 Users
Revenue impact, better addressing business opportunities		
Additional revenue per year	$10.56 million	$127,213
Recognized revenue per year, IDC model*	$1.58 million	$19,082
Revenue impact, unplanned downtime impact		
Additional revenue per year	$174,300	$2,099
Recognized revenue per year, IDC model*	$26,139	$315
User productivity impact		
Number of users impacted	1,172	14
Equivalent FTE gain	12.2	0.2

* 15% operating margin assumption is applied to additional revenue for purposes of financial analysis.

Source: IDC, 2017

ROI Analysis

Based on interviews with organizations using Nutanix to run and support various enterprise-level workloads, IDC conducted the ROI analysis using the following three-step method:

1. **Gathered quantitative benefit information during the interviews using a before-and-after assessment of the impact of Nutanix:** In this study, the benefits included IT staff time savings and productivity benefits, IT-related cost reductions, and higher revenue.

2. **Created a complete investment (a five-year total cost analysis) profile based on the interviews:** Investments go beyond the initial and annual costs of deploying Nutanix and can include additional costs related to migrations, planning, consulting, configuration or maintenance, and staff or user training.

3. **Calculated the ROI and payback period:** IDC conducted a depreciated cash flow analysis of the benefits and investments for study participants' use of Nutanix over a five-year period. ROI is the ratio of the net present value (NPV) and the discounted investment. The payback period is the point at which cumulative benefits equal the initial investment.

Table 6 presents IDC's analysis of the benefits and costs associated with study participants' use of Nutanix to run various enterprise workloads. IDC calculates that, on average, these organizations will make a discounted investment of $2.30 million per organization ($27,752 per 100 users) and can expect to achieve discounted

benefits worth $14.60 million per organization ($175,933 per 100 users) over the five-year period. This would result in a five-year ROI of 534%, with breakeven on their investment in Nutanix occurring in seven months.

TABLE 6 ROI Analysis

	Five-Year Average per Organization	Five-Year Average per 100 Users
Benefit (discounted)	$14.60 million	$175,933
Investment (discounted)	$2.30 million	$27,752
Net present value (NPV)	$12.30 million	$148,181
Return on investment (ROI)	534%	534%
Payback period	7 months	7 months
Discount rate	12%	12%

Source: IDC, 2017

CHALLENGES AND OPPORTUNITIES

IT leaders understand that transformation is necessary to keep pace with changing business demands. The era of digital transformation and cloud computing is driving a massive amount of innovation and opportunity. Aligning IT with these new business imperatives is mandatory for next-generation IT organizations. Hyperconverged solutions represent a revolutionary change to the way in which datacenter infrastructure is designed, deployed, and managed. This change is likely to affect IT processes, the technology used, and the people responsible for managing datacenter infrastructure. As such, IT leaders considering transformation strategies should evaluate how they can leverage enterprise clouds and hyperconverged systems to realize the most material benefits with the least disruption to people, process, and technology. Revolutionary (rather than evolutionary) technology shifts such as hyperconvergence and cloud can drive the type of change to an IT team that may be hard to navigate. However, it is often with the most revolutionary change that the most material benefits are realized.

The benefits gained through enterprise cloud and hyperconverged deployments are expected to expand over time to include parts of the IT realm not initially captured during the early days of this market. One such area includes security. There are ample areas within an IT organization's security practices where automation can help reduce costs (e.g., one government customer saved approximately $150,000 per year by automating security policies).

SUMMARY AND CONCLUSION

Business success increasingly depends on having an IT infrastructure that is truly agile and capable of providing real-time data to be used to make critical business decisions. As a result, many organizations have had to reconsider traditional approaches to datacenter infrastructure that requires special skills to configure, tune, or provision. Instead, organizations are looking to solutions that are more automated, software defined, and flexible. Hyperconverged infrastructure has emerged as one of the most popular architectures on which organizations can build private enterprise clouds that offer these attributes.

For this study, IDC interviewed organizations using the Nutanix Enterprise Cloud Platform, which delivers storage, compute, virtualization, infrastructure management, and monitoring software through a highly virtualized, scale-out architecture, to understand the impact of the solution on their IT and business operations. Study participants reported that Nutanix is a cost-effective and efficient platform for running a variety of enterprise-type business applications. In addition, Nutanix is providing these organizations the levels of reliability, performance, and agility they need to meet business demand and address growth opportunities. The result is that they are achieving strong value through their investment in Nutanix, especially in terms of supporting the generation of new business, while reducing the cost of operations for supporting these workloads by 60% on average. IDC projects that these Nutanix customers will realize value worth an average of $4.24 million per organization per year ($51,077 per 100 users) over five years, which would mean a return on their investment of 534% and breakeven in only seven months.

APPENDIX

IDC's standard ROI methodology was utilized for this project. This methodology is based on gathering data from current users of Nutanix as the foundation for the model. Based on interviews with seven organizations using Nutanix Enterprise Cloud Platform solutions, IDC performed a three-step process to calculate the ROI and payback period:

- Measure the benefits from use of Nutanix in terms of IT infrastructure cost savings and avoidances, IT staff time savings and productivity gains, user productivity gains, and revenue attributed to use of the Nutanix platform.
- Ascertain the investment made in deploying Nutanix and associated migration, training, and support costs.
- Project the costs and savings over a five-year period and calculate the ROI and payback period for the deployed solution.

IDC bases the payback period and ROI calculations on assumptions that are summarized as follows:

- Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and productivity savings. IDC assumes a fully burdened salary of $100,000 per year for IT staff, including developers, and $70,000 for other employees, with an assumption of 1,880 hours worked per year.
- 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.
- 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.

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

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