

# OneNeck White Paper

What the Modern CIO Must Consider when  
Moving at the Speed of Business to the Cloud



## NEXT-GENERATION IT LEADERS

As an IT leader, true change in your role is here. IT has moved front and center in all functions of an enterprise, and the cloud is now an integral piece to any organization's IT strategy. According to market research company Forrester, the cloud market will accelerate faster in 2017 as enterprises around the world look to the cloud to power their core business systems in addition to their customer facing applications.<sup>1</sup>

As overall cloud adoption ramps up, it's essential that you become the expert and improve your cloud game. Being a thought leader begins with understanding business strategy to drive mission-critical processes and differentiators in your business. How is your organization using data? If it's primarily to drive sales, then it's crucial to understand how you can provide that data for quicker time to market and improved agility for sales application decision makers.

Having the market knowledge to help shape the business strategy and drive business growth can also be of tremendous value in the boardroom. By actively engaging with IT solution providers (most likely more than one provider), industry bodies and other experts to understand strategic trends in the industry, you can uncover innovative opportunities to benefit your business. It is paramount to your role, to understand which platform the workload should reside on in today's multi-cloud world – to optimize spending and service delivery while enhancing end user experience. If you are currently at a crossroad and need to identify how to get started with your cloud journey, it is critical to start by taking an inventory of what you have today. Once you have the workloads identified, you are one step closer to identifying which cloud solutions are right for your business.

## WHY CLOUD IS THE NEW NORMAL

Financial optimization is one of the most cited reasons for organizations to move from traditional IT infrastructures to cloud-based services. With so many components at play, it's hard to get an exact picture of IT costs. It begins with carefully analyzing the financial obligations of owning and operating a data center against utility pricing for compute and storage resources on an as-a-service basis. Total Cost of Ownership (TCO) is one of the most common measures used to do this analysis and goes beyond comparing standalone infrastructure costs and looks at the cost of service and support over a solution's useful life. A comprehensive TCO analysis must include the expense of on-premises hardware, software and the operational expenses of services, support and maintenance fees to keep the equipment running. Another key consideration to be cognizant of while analyzing TCO, is the effects (cost, business image, time to market) that could be caused by potential downtime.

When analyzing TCO, you should also consider that with the rapid advancement of technology, IT infrastructure needs are becoming less predictable. To meet the needs of your organization, your data center must provide certain levels of flexibility and agility to meet business needs. Cloud requires no upfront capital costs and provides significant reduction in operational costs. What once required dedicated real estate, can now be filled by dedicated

companies that specialize in cloud technology and charge monthly for their services. This provides you with more technology options without having to justify large up-front capital expenditures to pay for it.

In terms of the flexibility provided by the cloud, your organization is undoubtedly requiring more functionality and user-friendly business applications to stay competitive. Cloud solutions can provide multiple applications and different user profiles to access these levels of functionality. By considering the adoption of applications/software/platform as a service, instead of the massive IT infrastructure of the past, you can allow your organization to focus on real innovation.

Beyond managing capital and operational costs, employee productivity and satisfaction is a major topic of discussion with senior leadership. Today's mobile society requires employees to have the ability to work from anywhere and easily collaborate with their teams. As an IT leader, the responsibility falls on your shoulders to enable these requirements of a modern workforce, which will translate into benefits to the bottom line while enhancing the end user experience.

When Pella Corporation, a leading manufacturer of windows and doors, made the move to replace its legacy phone system, it turned to OneNeck® IT Solutions to help them select and ultimately implement a cloud-based Cisco Contact Center Enterprise. Increased flexibility and employee productivity were two of the many resulting benefits.<sup>2</sup>

"We were able to take agents, place them at different locations and potentially allow them to work from home, all the more making us more flexible to meet the needs of our customer's requirements when they want to reach us," said Jim Thomas, Director of IT Operations, Pella Corporation.

Disaster recovery capability was another driver in Pella's desire to move its telecommunications application to the cloud. Storage infrastructure expansion can be costly and is a continual process. With business requirements and regulatory compliance obliging organizations to have effective backup and disaster-recovery mechanisms in place, having a simple and secure storage solution is critical. Cloud-based backup and recovery could help you eliminate one of your biggest concerns while also driving down the recovery time of applications in the event of a disaster.

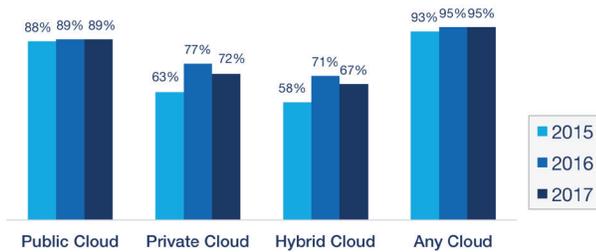
But is cloud really a benefit when it comes to security and compliance? The answer is: absolutely. Cloud providers have made large investments in compliance frameworks to help remove that burden from the end customer, thereby becoming a competitive differentiator when in their clouds. On the security side, cloud providers have some of the most cutting edge security offerings because of the visibility of their workloads and also because of their size. Most offer enterprise solutions to provide end-to-end protection while enhanced features are also available to detect, thwart and mitigate risk for your organization.

As data breaches occur at an alarming rate, most organizations are fighting a losing battle of resources. The cloud is primarily about sharing resources to achieve an economy of scale. Security-as-a-Service solutions can dedicate teams to a specific activity, such as monitoring logs, and spread the cost across many different customers, lowering the unit cost for everyone.

<sup>1</sup>Dave Bartoletti, Lauren E. Nelson, Andras Cser, Sophia I. Vargas, William Martorelli, Liz Herbert, Andre Kindness, Paul Miller, Charlie Dai, and Frank Liu, "Predictions 2017: Customer-Obsessed Enterprises Launch Cloud's Second Decade," Forrester, November 2, 2016

<sup>2</sup>OneNeck IT Solutions, Pella Corp. Case Study, 2013

**Respondents Adopting Cloud 2017 vs. 2016**



## WHAT TYPE OF CLOUD SHOULD I USE?

There are essentially two types of clouds today in the service provider landscape – private cloud and public cloud (also commonly referred to as hyperscale). A private cloud is most commonly characterized by providing dedicated computing infrastructure to a single organization within the service provider’s data center. A public cloud (hyperscale) is most commonly characterized by the large scale of shared compute resources which are available to many tenants, thereby offering economies of scale and global reach. Any combination of these two different types of clouds by organization is referred to as a hybrid cloud scenario.

In January 2016, RightScale consulting services conducted its annual State of the Cloud Survey. The survey questioned technical professionals across a broad cross-section of organizations about their adoption of cloud infrastructure.<sup>3</sup>

As seen above, key findings include:

- 95% of respondents are now using cloud up from 93% in 2015.
- Private cloud adoption increased from 63% in 2015 to 77%, driving hybrid cloud adoption up from 58% to 71% year-over-year.
- The use of public cloud grew slightly from 88% in 2015 to 89%.

To understand which type of cloud(s) is right for your organization, it is important to segment your business by workload and application. Once segmented you can test based on the application’s RTO/RPO requirements with different cloud platforms to ensure you are getting the right level of service for the business. It is very important to remember that one single cloud will most likely not fit for all workloads. It is a multi-cloud world and businesses report that they are using an average of 6 clouds as seen below.

# of Clouds Used	Public Clouds <i>All respondents</i>	Private Clouds <i>All respondents</i>
Running applications	1.8	2.3
Experimenting	1.8	2.1
<b>Total</b>	<b>3.6</b>	<b>4.4</b>

*Source: RightScale 2017 State of the Cloud Report*

“Your IT services partner will be able to quickly determine your infrastructure and performance requirements to deliver the type of cloud deployment that will meet your performance, scalability and compliance needs,” says Clint Harder, CTO, OneNeck IT Solutions. “They should also help you architect your data center for maximum flexibility and utilization of current IT investments with the ability to adjust as needs change.”

## BEST USES OF THE CLOUD

Because we are now living in a world of instant gratification and Twitter-like attention spans, you need to embrace a more agile, contemporary and innovative operational model to move at the speed of business. Deploying software-as-a-service (SaaS), platform-as-a-service (PaaS) and infrastructure-as-a-service (IaaS) offerings enables your organization to leverage the cloud and place applications closer to your customers and enable a faster, better user experience.

SaaS is widely accepted to have been introduced to the business world by the Salesforce Customer Relationship Management (CRM) product. Since that early entry, email, financial management, customer service and expense management have also gotten good uptake via SaaS.<sup>4</sup>

IaaS is a standardized, highly-automated offering, where compute resources, complemented by storage and networking capabilities are owned and hosted by a service provider and offered to organizations on-demand. The last thing you want to worry about when working to help your organization reach its business objectives is whether the infrastructure can keep pace with the need to innovate and respond to competitive pressures.

PaaS provides a rich set of development and deployment services that software developers can tap, as needed, for projects of any size. By freeing developers from the IT maintenance chores they traditionally end up owning – installing and provisioning hardware, software upgrades, tool implementation, patches, middleware updates – they are able to focus completely on development. Imagine how much more productive your development team can be if all of the infrastructure maintenance is abstracted away, they have instant access to all of the resources they need, and only had to pay for services they actually use.

Creating new lines of business by partnering with external providers is another lucrative use of the cloud. For example, payroll giant ADP partnered with a cloud-based talent management firm to offer new HR services to its customers, faster and at a much lower cost than trying to build an internal team.<sup>5</sup>

“Like every business decision, moving to the cloud has benefits and costs,” says Harder. “It’s important to understand the applications and benefits of the cloud and assess your organizations cloud readiness. It’s all about choosing the right cloud for the right application at the right time.”

<sup>3</sup>“2016 State of the Cloud Report,” RightScale

<sup>4</sup>Ben Kepes, “Understanding the Cloud Computing Stack: SaaS, PaaS, IaaS,” Rackspace

<sup>5</sup>Josh Bersin, “ADP Rocks the Talent Management Market with New Integrated Solution,” May 29, 2012

## WHAT APPLICATIONS SHOULD I MOVE TO THE CLOUD?

As Harder points out, "It's important to consider which applications you should move to the cloud. Some make sense, others do not. It's best to start by considering every application as a possibility, then examine all potential security risks associated with each."

The following is a list of applications that can be considered as good candidates when embarking on a cloud migration:

- Applications written in the last 15 years that can talk to the cloud. Bloated or inefficient on-premise applications will still be bloated and inefficient in the cloud if you don't take the time up front to clean them up or throw them out entirely.
- New applications that require high performance, such as large-scale simulations and data mining
- File storage, disaster recovery and backup
- "Vanilla" offerings where the solution is largely undifferentiated such as email, CRM, teleconferencing, video hosting and basic office applications
- Software where demand spikes significantly, for example tax or billing software used once a month
- Applications that have a significant need for web or mobile access, such as mobile sales management software
- Software that is only to be used for a short-term need, such as collaboration software for a specific project

## CONCLUSION

Forrester states that cloud computing has been one of the most exciting and disruptive forces in the tech market in the past decade. As the cloud continues to transform IT and your role as an IT leader, the need to understand and embrace it is greater than ever.

Because you now have mature and powerful options for using the cloud, the advantages far outweigh any caveats. Cloud computing can transform your business and provide you the opportunity to scale and increase revenues, employee productivity and security.

The best uses of the cloud for your organization boils down to choosing the right cloud for the right application at the right time. By partnering with an IT provider with the expertise, high-touch customer service and end-to-end solutions, you can position your organization to better serve your customers, increase revenues and compete globally.

## ABOUT ONENECK IT SOLUTIONS

OneNeck IT Solutions LLC offers hybrid IT solutions including cloud and hosting solutions, managed services, enterprise application management, advanced IT services, IT hardware and top-tier data centers in Arizona, Colorado, Iowa, Minnesota, New Jersey, Oregon and Wisconsin. OneNeck's team of technology professionals manage secure, world-class, hybrid IT infrastructures and applications for businesses around the country.

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