



Migrating to the Cloud:

When Should Your Business Make the Move?

By Lauren Gibbons Paul

Information technology is undergoing rapid change as organizations of all types begin to embrace the idea of moving computing infrastructure from on-premises to the cloud. It is easy to understand why the cloud has taken off faster than any technology phenomenon in recent memory. The cloud has the potential to reduce total cost of ownership (TCO) while enabling quicker responses to fast-moving markets and ever-changing customer needs.

“Being able to flex your compute resources based on changes in volume and customer demand increases agility, making going to the cloud a very attractive proposition for our customers,” says Brian Johnston, chief technology officer for QTS in Overland Park, Kansas, a provider of data center solutions and fully managed services.

The 2014 State of the CIO survey from CIO magazine shows cloud and mobility are the top items on IT leaders’ radar screens (see Figure 1). Survey respondents rated cloud and mobility as most likely to impact their roles as head of the IT organization.

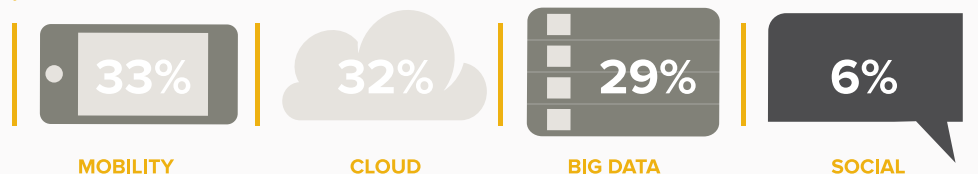
Cloud Continues to be a Top Focus for IT

FIGURE 1

QUESTIONS:

In your opinion, which of the following will have the most profound effect on the CIO role in the future?

HEADS OF IT



BUSINESS DECISION-MAKERS

In your opinion, which of the following tech trends will have the most profound effect on your organization and your organization’s IT department overall in the future?



SOURCE: CIO MAGAZINE TECH POLL/TECH PRIORITIES, NOVEMBER 2013. IDG ENTERPRISE IT ROLE & INFLUENCE SURVEY 2013: GMI SAMPLE



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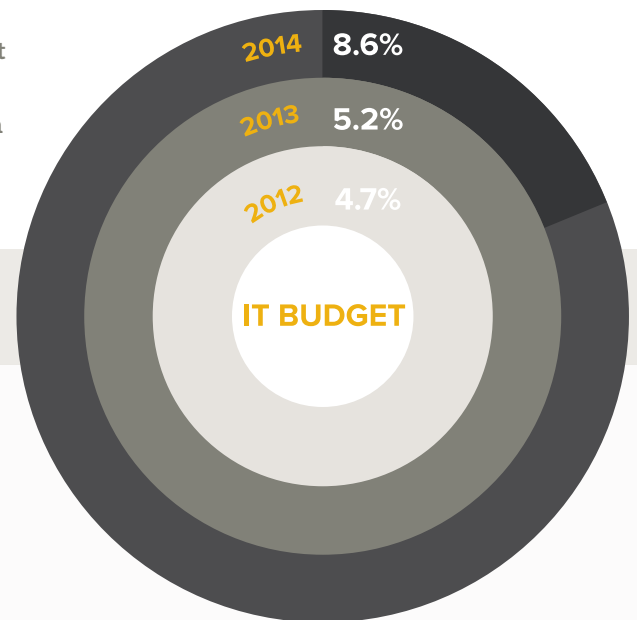


Meanwhile, the opportunity to lower TCO is among the top three selling points for both public and private cloud investments, according to the 2013 Cloud Computing report from IDG Enterprise. Faster deployments, broader user access, pay as you go and saving on capital expenses are also important.

And there's more good news. Corporate purse strings are loosening a bit, leaving CIOs room to invest in next-generation IT infrastructure that enables business flexibility and serves as a platform for innovation. According to the 2014 State of the CIO report, CIOs reported their average IT budget as a percentage of revenue is 8.6 percent, up from 5.2 percent last year and 4.7 percent in 2012 (see Figure 2). This implies that companies everywhere are recognizing the power IT can provide in terms of cloud, Big Data, and mobility, and that in some cases these trends are converging.

IT Budget Increasing as Percentage of Revenue

FIGURE 2



QUESTION:

What percent of your company's total revenue does the IT budget represent?

SOURCE: STATE OF THE CIO SURVEY, C/O MAGAZINE, JANUARY 2014

At the same time, an organization's IT needs are growing more complex, making flexibility and scalability critical while limiting capital expenditures (see Figure 3). From these forward-looking studies, it is clear that the current trend will only continue – with departments outside of IT wielding power to drive technology decision-making. This creates a compelling argument for IT to be as efficient as possible while aligning with service providers that can help them do this. Driving operational excellence while improving business flexibility will continue to be a critical success factor moving forward – especially as IT embraces (and in some cases is disrupted by) technologies that various lines of business bring into the enterprise.

These pressures add up to a compelling case for IT departments to choose a go-to service provider to deliver sophisticated requirements, while driving down TCO delivered via operating expense and leveraging an organization's existing investments.



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Technology Budgets Controlled by IT

FIGURE 3

ONLY 35%

**OF THE TOTAL DOLLARS
INVESTED IN TECH IS NOT
DIRECTLY CONTROLLED BY IT**

(now & in the next 3 years)

QUESTION:

Which other groups or functions in your organization have/will you have budgets specifically embarked for investments in technology products and services currently? In 3-5 years?

**OTHER GROUPS THAT HAVE/
WILL HAVE BUDGET FOR
TECH INVESTMENT**

CURRENTLY

**IN THE NEXT
3-5 YEAR**

OPERATIONS

1 42%

2 39%

MARKETING

2 39%

1 40%

FINANCE/ACCOUNTING

3 34%

3 30%

SALES

4 27%

3 30%

ENGINEERING

5 24%

5 25%

HUMAN RESOURCES

6 23%

6 24%

ADMINISTRATION

7 22%

7 21%

SOURCE: STATE OF THE CIO SURVEY. C/O MAGAZINE, JANUARY 2014.

The Timing is Right

While the questions of "why" and perhaps "how" to move to the cloud are becoming better understood, the issue of when to move is less clear. CIOs at companies of all sizes – across all industries – are pondering the questions of when is the right time to move to the cloud and which applications and parts of their technical infrastructure should be included.

Many IT executives have already taken the leap. Nearly 40 percent of CIOs said they will complete a cloud project this year and ranked it as the technology trend that will most profoundly impact them, reveals CIO's 2014 State of the CIO survey. The picture that emerges is of leading edge CIOs who want to find effective new ways to leverage technology in support of their business. Cloud can be a speedy path to big-payoff projects such as Big Data and analytics, a fact not lost on survey participants.

For those IT leaders who have not taken the plunge: When is the right time to move to the cloud?

There are obvious triggers for cloud migration, including fewer outages, product launches, technology refreshes, M&A transactions, or a desire to otherwise overcome technological obsolescence. However, most of the time, the decision of when to migrate is less clear-cut. Many CIOs prefer to retain some of their investments in technical infrastructure to run in-house or via a managed services provider. As such, they engage a cloud provider only to handle peak volumes.

"CIOs don't have to buy a huge environment to handle peak demand," says Johnston. "They can buy what they want,



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when they want, how they want and scale up when needed.” Transitioning to a usage-based model is a significant advantage for CIOs who want to “burst” into a vast pool of resources for a temporary period of time.

“We have structured our capabilities around the changing needs of business. A customer can move in and out of each product in our portfolio, depending on their needs and compute lifecycle at the time,” says Johnston. Increasingly, his team is often called on to help clients create a cloud roadmap, including the implementation timeline, driven by business objectives and pinpointing the best starting points.

QTS recognizes that enterprises are on a journey – they are evolving in uncertain times and facing industry disruption. They need a partner that can help them navigate and course-correct depending upon what the business needs to be successful. As such, it is not uncommon for a client to start off, for example, using colocation services to leverage existing investments and then migrate to cloud resources as infrastructure ages and is decommissioned.

Other companies start out in the cloud with a pilot project for a new application or function, which is a low-risk way to prove it will work for them, says Johnston. “Say they’re developing a mobile app. They might say, ‘Let’s create it in a ‘sandbox’ environment’ – a perfect use case for cloud.”

Since it is often straightforward to move an ongoing workload to the cloud, a one-time or periodic activity often is ideal to run in the cloud, he adds. For example, a marketing department for a high-tech company might run its major product launch campaign in the cloud.

“The ability to run a cloud-based campaign can bring better economics as demand for campaign content and web traffic increase,” says Johnston.

Any business with seasonal workloads, such as retail, tax preparation, media companies, and others are naturals for the cloud. “These companies may need a very modest environment for 80 percent of the year, but during tax season, most of their work for the year has to be done in a very compressed period of time,” says Johnston. After April 15, the firm doesn’t need the infrastructure anymore. “In the past, you would have to buy all of that for 20 percent of the year. You see a lot of business cases driven by variable capacity and the need to support the larger peaks of demand.”

The cloud can also enable advanced business capabilities that leverage technologies such as a Big Data and analytics, social and mobility. A company seeking to innovate based on these capabilities could use the cloud to obtain that capacity much more quickly than in a traditional environment, creating a high-performance, distributed architecture associated with Big Data environments. For example, a retailer might need a better understanding of how online consumers think. Using an analysis tool to discern the drift of social sentiment could give the company quick and actionable insights.

The cloud can be a good fit for any company that needs to interact with massive data loads, says Johnston, especially where demand periodically spikes. That same company might decide to move most of its data center to a provider like QTS that has the highest level of power, floor space, reliability, security and performance while also providing cloud capabilities for the unpredictable portion of the demand.



Conclusion

QTS Solutions: Room to Grow

QTS is one of the largest and fastest-growing data center providers in the United States. QTS offers a range of services and solutions that allow organizations maximum computing flexibility, including C1 (custom data center), C2 (colocation) and C3 (cloud and managed services). These solutions offer clients the flexibility to move back and forth between the environments as their needs change.

QTS offers two cloud IaaS solutions: QTS Enterprise Cloud and QTS Federal Cloud (for government agencies). Both deliver true cloud services and are geared toward helping organizations gain maximum business agility and flexibility. QTS Enterprise Cloud customer data is housed in premium, secure, compliant, QTS-owned data centers that leverage best-of-breed platform technologies from VMware, EMC and Cisco. QTS Cloud Services provide all the necessary infrastructure services, compute, storage, network and security components required to make workloads operational and available to the business rapidly.

QTS Federal Cloud takes that one step further and is designed to meet the mandates that federal agencies, government contractors and system integrators are facing, including the Federal Data Center Consolidation Initiative (FDCCI), Cloud First and Shared Services, and in mid-2014, FedRAMP. This physically isolated cloud is housed in two of the world's largest and most secure data centers: the highly secure QTS Richmond Data Center and the QTS Atlanta-Metro Data Center.

According to Johnston, QTS works with customers – whether they are using QTS Enterprise Cloud or QTS Federal Cloud – to arrive at the best solution for their unique needs, whether that be a pure private or hybrid cloud, managed services, or a custom-tailored solution.

“They can get the best of both worlds, with a hybrid IT model that uses our C2 and C3 products. They can evolve with us. The idea is that QTS customers can move and shift within the 3C solution set as their needs change,” Johnston says. “Chances are, IT in three years will look very different from the way it does today. Clients don’t want to be boxed in. QTS has the complete set of capabilities for clients to evolve and future proof their infrastructure for years to come.”

Lauren Gibbons Paul is a freelance business and technology journalist in Waban, Mass., who writes frequently on cloud and collaboration. She was a staff writer at PC Week and has written for industry publications including CIO, CFO, CSO, CMO, Computerworld, Channel Pro and Network World.



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QTS Realty Trust, Inc. (NYSE: QTS) is a leading national provider of data center solutions and fully managed services. The company offers a complete, unique portfolio of core data center products, including custom data center (C1), colocation (C2) and cloud and managed services (C3), providing the flexibility, scale and security needed to support the rapidly evolving infrastructure demands of web and IT applications. With 10 data centers in seven states, QTS owns, operates and manages approximately 3.8 million square feet of secure, state-of-the-art data center infrastructure and supports more than 875 customers.

For more information about QTS, visit www.qtsdatacenters.com or call toll-free 877.QTS.DATA.

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