Introduction

For companies of all sizes, cloud is no longer optional: it’s a requirement in today’s data-driven business landscape. To keep up, many companies have migrated quickly, without fully fashioning a strategy for their cloud deployment.

As a result, businesses often find their lofty expectations met by a cloud reality that is more difficult than anticipated. Many cloud adopters want the flexible, accessible data storage that the cloud provides, but end up facing data management problems. CIOs also often think the cloud will be more cost-efficient, but that isn’t always the case.

To get a sense of the challenges businesses are experiencing with the cloud, Commvault partnered with CITO Research to survey 100 IT professionals to get their insights on cloud migration. This report examines key trends from that survey. To supplement the survey, CITO Research CEO and Founder Dan Woods interviewed a CTO panel with leaders across various industries. Anonymized quotes from this panel are included in this report.

With the breakneck pace of change in the cloud, C-level leaders have a fear of missing out (FOMO) around key cloud developments. The results of this survey clearly show that business leaders recognize that they must embrace cloud and are excited about the potential it holds for their organizations. Yet they’re also experiencing bumps along their cloud migration journey. To truly maximize the potential of the cloud, companies need to have a plan that prepares them for their cloud migration.
Survey demographics

Working in the cloud has become essential for businesses of all sizes and across all industries. This survey questioned IT leaders from a wide number of fields, with responses from leaders in more than ten industries.

Of those surveyed, 62% were at the C-level, including 26 CEOs and 36 CIO, CTOs and other C-suite executives. They offered perspectives from a good representation of small, mid-size, and large firms: 48% of respondents were from firms with 1,000 to 5,000 employees. Additionally, 94% of respondents work at firms with more than 1,000 employees, including 10% from companies with more than 100,000 employees.

Survey respondents offered perspectives from a good representation of small, mid-size and large firms, with 62% of respondents at the C-level.
Fear of missing out (FOMO) is real for C-level leaders: 81% of IT leaders were either extremely concerned or very concerned about missing out on cloud advancements. A mere 6% said they were not concerned. This shows that IT leadership recognizes the importance of the cloud to their business while at the same time reflecting the pressure they feel to achieve its promised benefits. It also demonstrates how much of a buzzword cloud has become, with new features and advancements rapidly being developed and released.

FOMO is not limited to one or even two cloud providers. Rather, IT leaders are attempting to track developments across all four of the major cloud providers mentioned in this survey, with at least 69% of survey respondents worried about keeping up with the latest advancements across those providers’ offerings. When you consider the collective marketing spend and presence of the top four players, this element should not be underestimated.

IT leaders face a constant barrage of cloud releases, so the challenge is to stay on top of the offerings with an eye to finding out what is most relevant for them.
The number one barrier to moving to the cloud is staff. That is what I hear from everyone. It's the culture of moving to the cloud.

Someone needs to create a timeline where people can catch up on all the latest features for a particular cloud platform, so you know what is available to you.

CTO PANEL PARTICIPANT
How do you try to keep up with the cloud?

Given the challenges of keeping up with the cloud and the wealth of information surrounding the topic, how do IT leaders go about acquiring this knowledge? Their answers indicate that trusting the source is the most important factor in deciding how to learn about cloud advancements.

As many people get information from colleagues as they do from tech publications, 60% respectively. Consultants, systems integrators, and channel partners were another key source of information, with 56% getting updates about cloud features from such business partners.

But crucially, it’s nearly as important for leaders to network online via social media (with nearly half doing so), as it is to read about the cloud on blogs and social (50%), or learn from their staff (45%).

60% of respondents get information about cloud developments by networking with colleagues face to face.

Leaders also see the importance of in-person peer interaction: 50% cited the importance of local summits, and 44% cited the importance of conferences in general.

**HOW DO YOU KEEP UP WITH CLOUD DEVELOPMENTS?**

- Read tech publications: 60%
- Network in person with colleagues: 60%
- Consultants, systems integrators, and channel partners: 56%
- Attend local summits: 50%
- Follow blogs and social media of thought leaders: 50%
- Network online with colleagues (LinkedIn, Twitter, etc.): 49%
- My staff educates me: 45%
- Attend conferences: 44%
- Read vendor websites: 33%
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When I go to a conference for three days, if I walk away with one, maybe two insightful ideas and everything else is noise and networking, that's worth it.

Local summits are helpful because they're shorter and you can network with colleagues in your own area.

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I have to keep up with a lot, so it’s helpful when my team says, ‘Hey, here’s an interesting new gem that’s out,’ or ‘Here’s an interesting new thing that’s happening with this technology.’

CTO PANEL PARTICIPANT
The state of cloud migration

Companies are moving full-speed ahead to the cloud: 93% of respondents stated they are moving their processes to the cloud, with 37% saying they have identified their ideal footprint and have begun migration. The remaining 56% of this group have moved or intend to move all of their processes to the cloud. Notably, only 6% of respondents said they do not have a cloud migration plan.

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Your cloud journey in one word

WHAT WORD BEST DESCRIBES YOUR CLOUD JOURNEY?

51% of leaders described their cloud journey as “innovative.”

Respondents were asked to characterize their move to the cloud in a single word. A majority of leaders cited “innovative” (51%) as the word that best describes their cloud journey.

Another 35% chose “exciting,” illustrating a generally positive view of the cloud and its potential.

Top reasons to move to the cloud

1. Increase customer focus through business agility
2. Cost savings
3. Enable innovations and development of new apps, products, and services
4. Replacing tape storage
5. Move away from legacy apps and infrastructure
6. See better value from IT staff, by focusing on application innovations versus IT administration

Ranked by C-level IT executives
Barriers to cloud migration

Cloud migration is often more difficult than companies expected. The barriers to cloud migration vary by organization, but they boil down to concerns around data and talent.

In the survey, IT leaders shared the main barriers relate to managing data. 68% of respondents cited the volume of data, while 55% identified policies across cloud and on-premises data as major barriers. While the cloud changes quickly, these statistics show that IT leaders are thinking carefully about data management, a critical step in cloud migration. Because data management encompasses data backup, recovery and protection as well as use of data, it is an area of careful consideration and strategy for IT leaders.

68% cited data volume as a major barrier to cloud migration. 55% cited policies across cloud and on-premises data.

Cloud technology is moving so fast that it’s hard to keep up. Half of respondents cited they had issues understanding how to use cloud services. Finding qualified staff is even more of a problem, with more than half (65%) of survey respondents identifying problems in developing and attracting talent.

WHAT BARRIERS ARE PREVENTING PROGRESS IN MOVING MORE APPS AND DATA TO THE CLOUD?

- Volume of data to move: 68%
- Developing staff skills and acquiring talent to support cloud projects: 65%
- Managing policies across cloud and on-premises data: 55%
- Understanding how to use new cloud services: 50%
- Convincing business executives of cloud's benefits: 48%

2017 Executive Cloud Survey, CITO Research and Commvault
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For large companies, I find convincing leadership is the biggest challenge. You don’t see this with the leadership at small companies – they just want to go the cloud immediately.

“CTO PANEL PARTICIPANT”
Cloud spending will continue to rise

Despite these fears and the challenges companies face with the cloud, their determination to use it and recognition of its importance is unwavering. 87% of respondents said they plan to increase their cloud budget in the year, compared to just 4% who plan to spend less.

What’s important is how companies make and protect those cloud investments.

87% of respondents plan to increase their cloud budget in the next year, while only 4% plan to spend less.
Companies need to realize that moving to the cloud might be budget neutral for them – and it probably should be. It’s not reducing your data and IT budget, you’re just applying that budget elsewhere.

If you do get cost savings, you can then apply them to artificial intelligence or data analytics because you can do more with the cloud.

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Cloud impact

Given how positively leaders view cloud, it’s not a surprise that organizations see it impacting a range of projects. Managing data is a broad concern.

Apart from data storage (an important but straightforward use of the cloud), respondents cited the concept of protecting and recovering data. After all, the whole point of backing up data is so that it can be effectively recovered, a process that should be tested to ensure it works as expected. More than two-thirds of IT leaders cited the impact of projects related to data protection and backup, the backup and recovery (and uptime) of SaaS applications, and disaster recovery.

Cloud can play a big role in modernizing disaster recovery plans. Compared to traditional disaster recovery targets, cloud has more flexibility and speed in times of emergency, whether it’s a natural disaster or business issue causing a service interruption. 67% of respondents saw cloud as impactful on their disaster recovery plans.

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WHAT CLOUD PROJECTS DO YOU SEE AS MOST IMPACTFUL ON YOUR BUSINESS?

- Data protection and backup: 75%
- Data storage: 73%
- SaaS apps: uptime, backup and recovery: 68%
- Disaster recovery: 67%
- Application databases moving to the cloud: 41%

2017 Executive Cloud Survey, CITO Research and Commvault
Is SaaS data really protected?

Increasing reliance on SaaS applications led us to question how much thought goes into protecting the data in those applications, or even integrating it for purposes such as BI. One member of our CTO panel put it this way: “I was surprised more CIOs didn’t say that software as a service was the main way the cloud can change their business in the future. It has huge potential.” But as SaaS usage increases, one concern is that additional silos of data are being created that can’t easily be recovered or integrated.

Respondents were asked whether they believe they have data protection for their SaaS or cloud-based applications and 91% said yes. The question is, how extensive is this protection and where is the data stored? Are there unknown holes in application data backup? If their own IT team has not validated the backup and recovery procedures related to such data, are the company’s data policies properly applied?

But IT leaders may not be certain about their data protection. 94% of leaders are moderately to extremely concerned about their ability to recover data quickly from the cloud if a disaster were to occur. This includes 63% who are extremely or very concerned.

Given the recent headlines around ransomware, and the potential for cloud outages, natural disasters and geopolitical issues affecting a business, disaster recovery should be a prominent IT conversation. If companies are sure of their data protection, why are they so concerned about data recovery?
The number one barrier to moving to the cloud is staff. That is what I hear from everyone. It's the culture of moving to the cloud.

I don’t know anybody who thinks about backing up their data if they have a SaaS application. But they should. If the SaaS company evaporates with your data, it’s not just their problem; it’s yours.

CTO PANEL PARTICIPANT
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I think there’s a misunderstanding about data recovery and the cloud in general and I think it falls into two camps.

One camp is people who think that it’s in the cloud so the data is automatically recoverable. Then the second camp is people who think it’s in the cloud, but they need to make a copy.

What people need to understand wherever they’re storing their data is the restore procedure – what does it mean? Is there a standby server? And if so, is it a hot standby or a warm standby? I think many CIOs need better explanations of that recovery process than they currently have.

CTO PANEL PARTICIPANT
Conclusion

Cloud is changing the essential elements of the way we do business, and changing it for the better.

As cloud advancements continue, keeping up with those developments is important. But it’s equally important to pay attention to fundamentals.

Organizations with existing on-premises applications, which are still in the majority, are likely to have a hybrid data footprint that blends on-premises and cloud. Organizations need to ensure that their data protection policies can be tested and applied across their entire data landscape.

Learn more about Commvault cloud solutions at www.commvault.com/cloud
Acknowledgments

ABOUT CITO RESEARCH
CITO Research is a source of news, analysis, research and knowledge for CIOs, CTOs, IT and business professionals. CITO Research engages in a dialogue with its audience to capture technology trends that are harvested, analyzed and communicated in a sophisticated way to help practitioners solve difficult business problems.

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ABOUT COMMVAULT
Commvault is a leading provider of cloud data management solutions, helping companies worldwide activate their data to drive more value and business insight out of their data. With solutions and services delivered directly and through a worldwide network of partners and service providers, Commvault solutions comprise one of the industry’s leading portfolios in data protection and recovery, cloud, virtualization, archive, file sync and share. Commvault employs more than 2,700 highly skilled individuals across markets worldwide, is publicly traded on NASDAQ (CVLT), and is headquartered in Tinton Falls, New Jersey in the United States.

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