

The background features a complex, abstract pattern of thin, teal-colored lines. These lines are mostly horizontal and slightly curved, creating a sense of movement and depth. On the left side, there is a more dense and intricate cluster of lines that forms a shape reminiscent of a stylized bird or a calligraphic flourish. The overall effect is a modern, digital aesthetic.

2017 Truth in Cloud Report

The rise of multi-cloud:
Combatting misconceptions
and realigning data
management responsibilities

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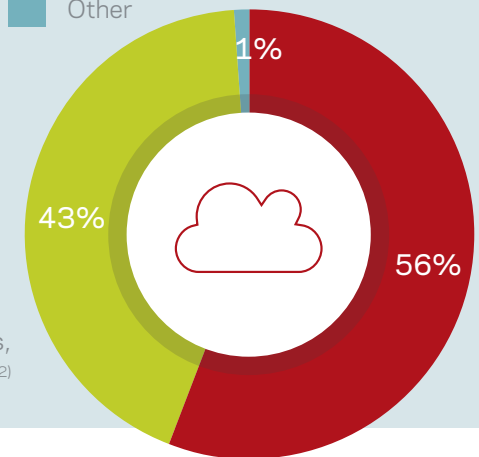
The truth in information.

Cloud-first mentality

Today, many organizations are taking a cloud-first approach when it comes to deploying new applications and workloads. The majority (56%) of senior IT and business decision makers report that their organization operates with a cloud-first mentality and three quarters (75%) state that their organization currently works with infrastructure as a service (IaaS) cloud service providers.

Approach to applications and workload deployment

- We operate with a cloud first mentality
- We consider on-premises first before considering cloud
- Other



When your organization is deploying new applications/workloads, which of the above statements best describes its approach? ²⁾

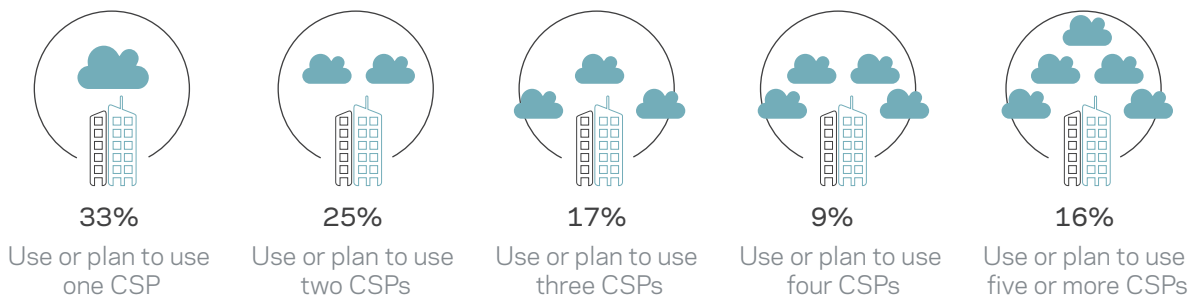
Rise of the multi-cloud

Multi-cloud is increasingly becoming a key component of most organizations' IT strategy. Two thirds (67%) of respondents'

organizations use or plan to use two or more cloud service providers for IaaS, while a quarter (25%) plan to use four or more. On average, those organizations already working with IaaS providers have done so for four years, with more and more

organizations expected to follow a similar path to a multi-cloud world in the future. However, with this approach, organizations must pay close attention to selecting service providers that are right for their business and their specific IT requirements.

Adoption of cloud service providers for IaaS



Analysis of the number of cloud service providers that respondents' organizations currently or plan to work with for IaaS consumption. ²⁾

Key considerations and use cases

Organizations understand the value a cloud provider offers in reducing the organization-driven IT footprint and increasing business agility. They are eager to reduce recurring costs such as those associated with storing massive volumes of secondary data on a long-term basis across multiple clouds. But when it comes to choosing cloud partners, organizations aren't just focused on cost as a business driver. In fact, only 40% of respondents rank pricing as one of their top three selection criteria. More than half of

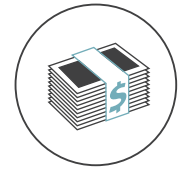
Common Goals of Multi-Cloud Adoption are



to improve resiliency



to improve data security

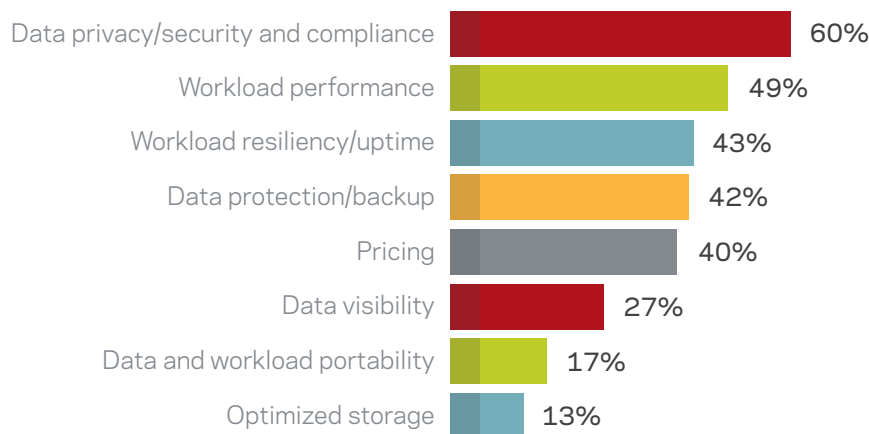


to reduce capital expenditures and operating expenses

respondents (60%), state that they are most concerned about data privacy/security and compliance when it comes to selecting a cloud service provider. This is not surprising given that, with the EU's General Data Protection Regulation (GDPR) on the horizon, it is critical that data is protected and not exposed to potential breaches.

Organizations are also very concerned about how their workloads will function in the cloud - both in terms of performance (49%) and resiliency/uptime (43%). For organizations to both comply and compete successfully in today's crowded marketplace, they need to ensure that business disruption is kept to a bare minimum.

Key factors in selecting a cloud service provider



Which of the above areas are of most importance to your organization when it comes to selecting a cloud service provider? Combination of responses ranked first, second and third. ²⁾

Misconceptions of data management

With organizations embracing cloud technologies and increasingly selecting multiple cloud service providers to advance their cloud journey, it is critical that enterprises understand who ultimately owns responsibilities for data management in the cloud. Our research shows that many organizations believe they can fully offload data management

responsibilities to the cloud service provider, leaving themselves exposed across multiple areas. However, the Veritas legal team reviewed contracts from multiple public cloud service providers to help Veritas understand what customers and cloud service providers are responsible for with respect to data management in the public cloud. Despite customers' belief that cloud providers hold

the responsibility of data management, findings from the Veritas legal team show that cloud service provider contracts usually place data management responsibility on customers. This research explores three areas of data management specifically: data privacy and compliance, data protection, and application uptime.

76%



"My organization's cloud provider takes care of all data privacy and compliance regulations."^{1) 2)}

Responsibility for data privacy and compliance

Data privacy and compliance (60%) is the main area of importance for respondents' organizations when selecting a cloud service provider. The vast majority (76%) of respondents believe that their cloud service

providers take care of all data privacy and compliance regulations, which may be inaccurate, and around four in ten (38%) believe cloud service providers are responsible for auditing to ensure compliance. However, despite this apparent transfer of trust when it comes to compliance, only around six

in ten (61%) respondents say that their organization has written guarantees from their cloud service provider that data, including backups, will be permanently deleted upon contract termination. It's critical that businesses ensure they are in compliance, regardless of where their data is stored, whether on-premises, in the

83%



"My organization's cloud provider takes care of protecting our data in the cloud." ^{1) 2)}

cloud or in complex hybrid environments. With stringent compliance regulations pending around the world, including the European Union's forthcoming General Data Protection Regulation (GDPR), businesses found to be in non-compliance could face significant penalties, extensive brand reputational damage, or both.

Responsibility for data protection

As organizations move to the cloud, many may incorrectly believe their cloud service provider holds the principal responsibility for data protection - over eight in ten (83%) believe

that their organization's cloud service provider takes care of protecting their data in the cloud. This is often not the case. In addition, over half of respondents see responsibility for the secure transfer of data between on-premises and cloud (54%) and backups of workloads running in the cloud (51%) as sitting primarily with their cloud service provider. So, are organizations again leaving themselves exposed to additional risks?

Responsibility for application uptime

Around six in ten believe that the cloud service providers are responsible

for ensuring the uptime of workloads running in the cloud as well as for the performance of workloads running in the cloud (58%). Furthermore, most respondents (83%) believe that their organization's cloud service provider takes care of ensuring workloads and data are protected against outages. With massive repercussions to any business if they incur a service outage, such as loss of profits, revenue and customers, it's imperative that organizations understand that they probably own primary responsibility for business uptime even for applications running in the cloud.

54%



"My organization's cloud provider takes care of secure transfer of data between on-premises and cloud" ^{1) 2)}

Challenges with adoption

Despite being driven to the cloud in anticipation of security, resiliency and operating cost advantages, challenges with adoption remain for most respondents and their organizations.

According to respondents, most (92%) organizations' business strategies involve moving more infrastructure and workloads to the cloud over the next 12-24 months. Nearly a quarter of businesses (27%) plan to move all infrastructure and workloads to the cloud during that time period. However, organizations state they are facing serious challenges as they make this transition to the cloud, including: complexity of the migration (37%) and legacy technology



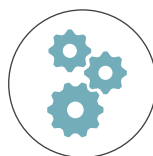
limitations (36%), a lack of in-house skills (38%) and a lack of a clear strategy (32%) in their cloud migration. Many organizations turn to third parties for support and expertise. Over half (54%) use or plan to use consulting firms and around a third (36%) use or plan to use other vendor solutions.

Cloud migrations challenges



38%

Lack of in-house skills



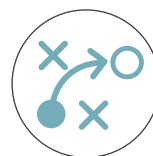
37%

Complexity



36%

Legacy technology limitations



32%

Lack of clear strategy



27%

Data siloes

What challenges did your organization face in its cloud migration?

Showing the results of the 593 IT decision maker respondents whose organization is migrating systems to the cloud

Cloud outages

Most (94%) respondents are confident in cloud service providers' abilities to protect workloads against outages, yet despite this, many respondents still report their organization experiencing service disruptions. Over a third (36%) admit to having cloud service disruptions.



As a result, service downtime (73%) is the most commonly reported consequence, and many also experienced a hit to customer satisfaction

(46%) and loss of revenue (37%).

On average organizations report experiencing approximately 22 minutes of downtime each month. Almost a third of all organizations (31%) have even faced more than 30 minutes of downtime per month.

Cloud lock-in

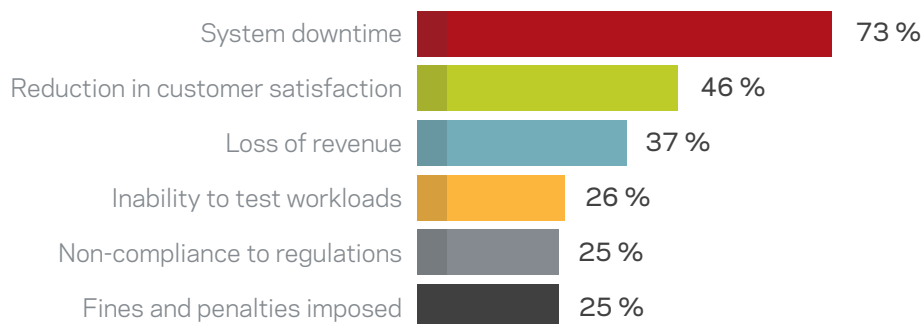
The majority (84%) of respondents report that cloud lock-in (the inability to easily transition to an alternative cloud or non-cloud hosted model) is a concern for their organization. For almost four in ten (37%), this concern has inhibited accelerating cloud adoption. And despite the wide use (or planned use) of

cloud service providers, it is interesting to note that only 8% of respondents report that they are happy with their current provider and would not choose to move.



Only 12% of respondents say that their organization can leave their cloud service provider immediately - for most (70%) it would take up to 12 months to detach themselves. Around a third (31%) do not have an established plan for data retrieval (or don't know if their organization does), if they opt to move back to on-premises or to another cloud.

Impact of cloud service disruption



What impact did your organization experience as a result of cloud service disruption?
Showing the results of the 432 respondents whose organization has been impacted by a cloud service disruption

98%



of respondents will move infrastructure and workloads to the public cloud

Future cloud trends

Despite these challenges, organizations have big plans for cloud over the next two years, with adoption and investment expected to grow. Almost all (92%) respondents state that over the next 48 months, their organizations will move infrastructure and workloads to the public cloud. Additionally, within two years' time, respondents estimate that on average, almost a fifth



(18%) of the IT budget will be spent on cloud technologies, rising from 12% today.

The reliance on multiple cloud service providers will also continue to expand. Of the minority (33%) of respondents' organizations that only use or plan to use a single cloud provider for IaaS, most (58%) are considering switching their approach to use multiple providers in the future. The message is clear: multi-cloud is here to stay.

58%



of all organizations who just use one provider, want to switch their approach to multiple providers

Conclusion

More and more organizations look to harness the power of a multi-cloud approach, increasingly turning to cloud ahead of their own existing on-premises capabilities for IaaS consumption. Investment will continue to rise over the next two years and in that time more workloads will be migrated-

embedding cloud into the very core of their operations and they will do so via multiple providers. However, is this multi-cloud approach currently leading to clarity (as it should) or complexity (as it could)? Data privacy and compliance, protection and resiliency are key areas for organizations working with cloud service providers but worryingly, many may be inadvertently shifting too

much accountability onto their cloud service providers. Organizations need to clearly understand their retained responsibilities in order to avoid the risks of non-compliance and cloud disruption that can have massive implications on their business. Doing so will allow them to properly access the benefits that a multi-cloud approach can offer.

Veritas recommendations

As more companies embrace a cloud-first mentality, the need to navigate the complexities of a multi-cloud world is critical. As with on-premises environments, customers should consider all aspects of data management as they journey to the cloud, from data protection, compliance readiness, and workload portability to business continuity and storage optimization. It's important to keep in mind that adopting the multi-cloud can create environment fragmentation, so a unified approach to data management across on-premises and the multi-

cloud is ideal. Another key aspect to a successful, long-term cloud strategy is to ensure flexibility and mobility of business applications and data, so organizations can benefit from all that the multi-cloud has to offer without being locked-in to any one cloud. Veritas fully embraces a multi-cloud approach and is collaborating with many leading cloud service providers to help customers manage their data and extract maximum value from it, while helping to ensure that no misconceptions abound regarding data management responsibilities.

Veritas' multi-cloud data management solutions can help organizations get to the cloud, from the cloud or between clouds with ease. We offer a wide range of solutions for data privacy and compliance, cloud migration, to and in cloud disaster recovery, storage optimization, and backups and snapshots for data protection. Our holistic approach to managing data and applications across both on-premises environments and the multi-cloud is geared toward helping organizations be more competitive by attaining a digital-first footprint.

Learn how Veritas can help you reliably manage data in a multi-cloud world, without cloud lock-in, by visiting [veritas.com/solution/cloud](https://www.veritas.com/solution/cloud)

Scope and methodology

Veritas commissioned independent technology market research specialist Vanson Bourne to undertake the research on which this report is based. 1,200 senior IT and business decision makers from large private and public organizations in the US, Canada, UK, France, Germany, Switzerland, Australia, New Zealand,

Brazil, China, Singapore, Japan and the Republic of Korea were interviewed in July to August 2017. All came from organizations that currently or planned to work with Infrastructure as a Service (IaaS) public cloud providers.

Interviews were conducted using a mixture of online and telephone interviewing.

All were undertaken using a rigorous multi-level screening process to ensure that only suitable candidates were given the opportunity to participate. Unless otherwise indicated, the results discussed in this report are based on the total sample.

- 1) Analysis of the respondents who agree with the above statement.
- 2) Showing the results of all 1200 respondents

ABOUT VERITAS TECHNOLOGIES LLC

Veritas Technologies empowers businesses of all sizes to discover the truth in information—their most important digital asset. Using the Veritas platform, customers can accelerate their digital transformation and solve pressing IT and business challenges including multi-cloud data management, data protection, storage optimization, compliance readiness and workload portability—with no cloud vendor lock-in. Eighty-six percent of Fortune 500 companies rely on Veritas today to reveal data insights that drive competitive advantage. Learn more at www.veritas.com or follow us on Twitter at [@veritastechllc](https://twitter.com/veritastechllc).

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