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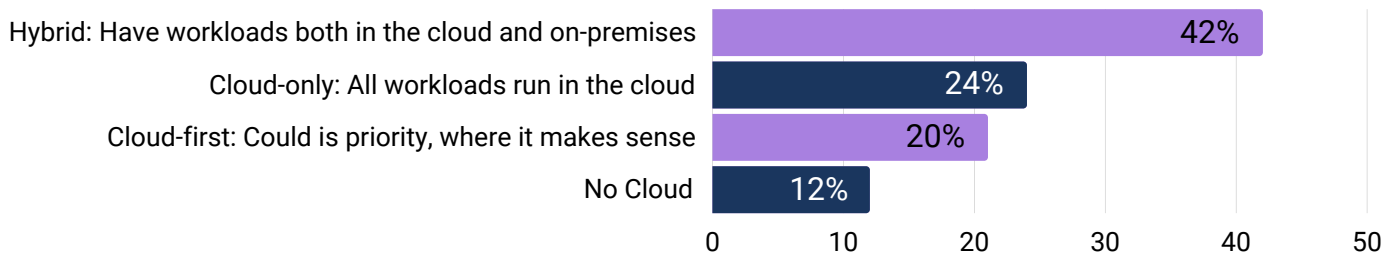
Applications don't just move to the cloud. Instead, they require effective migration planning to determine how to best move the data, applications and configurations to the chosen cloud providers—and can mean the difference between failure and a successful initiative. Typically, the cloud migration process involves moving applications out of on-premises data centers, but it increasingly includes inter-cloud migration.

Regardless, the process requires reliable and fast data movement between cloud providers and on-premises data centers. Current technology alternatives include general-purpose backup and purpose-built solutions for common environments like Kubernetes, OpenShift and Docker. Additionally, data and application migration requires protecting the data against external attacks, cloud outages and internal errors like misconfigurations.

In 2022, Techstrong Research polled our community of DevOps, cloud-native, cybersecurity and digital transformation readers and viewers to take their pulse on approaches to migrating data, applications and configurations to the cloud. We found that most respondents (55%) have two or more clouds in use and that 76% believe migrating applications across distributed infrastructure is important or very important. A full 42% of them use general-purpose backup software to assist in the migration. When asked about the types of applications on the move, 43% move traditional applications while 58% use at least some cloud-native infrastructure.

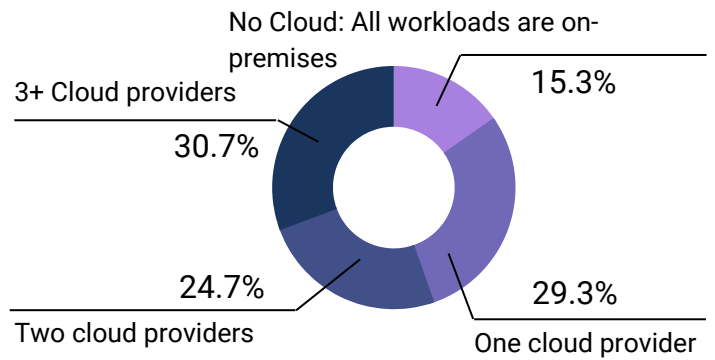
How would you describe your organization's approach to cloud computing?

Unsurprisingly, the vast majority of respondents embrace the cloud, whether cloud-only, cloud-first or a hybrid approach



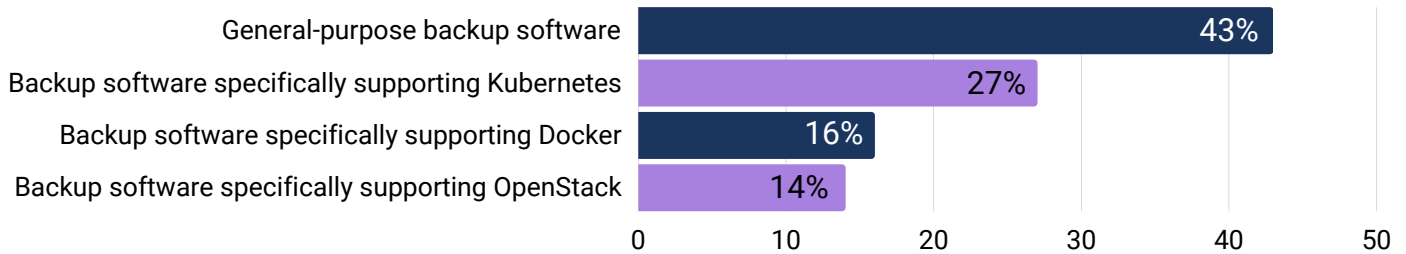
In how many cloud providers do you have workloads deployed?

With a majority using two or more clouds, we believe we've passed the tipping point toward a multi-cloud world



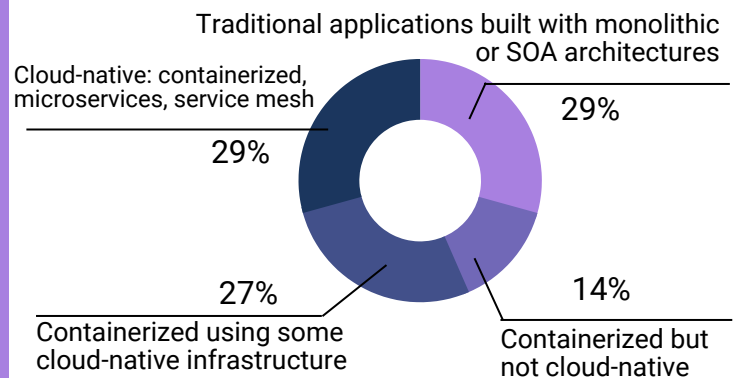
What are you using to move data, applications and configurations as part of your cloud migration?

Many organizations start with generic tools and realize soon enough that purpose-built tools work better in specialized environments



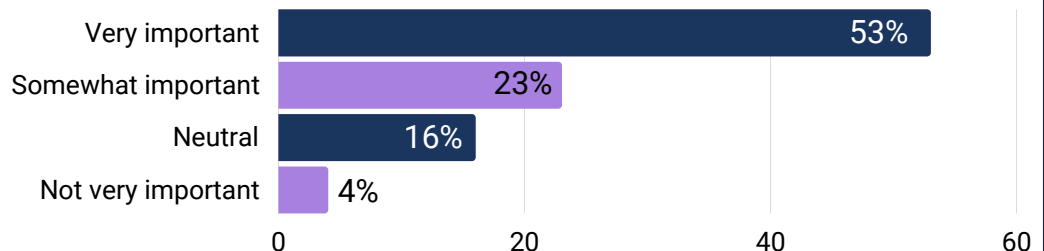
What kinds of applications are you migrating to the cloud?

There is an almost even split between old and new applications migrating to the cloud



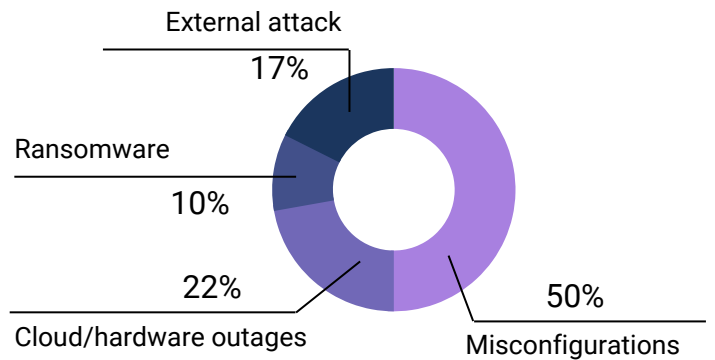
How important to your business is the ability to migrate applications across distributed infrastructure?

The multi-cloud mentality shines through here as organizations realize applications may move multiple times and will need to support that requirement



What issues are you worried could cause downtime on your cloud-native infrastructure?

Misconfigurations remain the top concern in causing cloud-native downtime. Surprisingly, attack-related downtime is less of a concern



Techstrong Research Analyst View

As more organizations need to accelerate the movement to the cloud, a standard set of processes and tools to ensure fast, consistent and effective migrations emerge. Whether a legacy application or an application consisting of microservices and service mesh, data, source code and configurations need to migrate to the new platform. General-purpose solutions for data migration will give way to purpose-built tooling for a simple reason – migration teams don't have time to compensate for missing features when the expectation is to move hundreds of applications over the next year.

Since 76% of respondents believe moving applications across the distributed infrastructure is very or somewhat important, they clearly don't believe the first migration is the only one they'll need to perform. This multi-cloud reality puts a premium on tooling that can natively support a variety of platforms and application architectures without requiring significant customization or operational oversight.

And once the applications have found their new home, poor operations that cause downtime remain the most significant concern, with 50% mentioning misconfigurations and another 23% worrying about cloud provider outages. Attacks (external and ransomware) make up the other 27%. Although security remains a high-profile concern (as it should), the folks in charge of migration understand that poor operational practices present an even bigger risk.

The bottom line is that application migration to cloud platforms will dramatically accelerate in the short term. We advise all organizations to build a migration strategy and utility that can handle all of the platform and application types that will be moving—and then moving again.