



Cloud Computing Study

Executive summary outlining the 2022 research findings

The massive pandemic-driven shift to remote work has kicked the evolution toward cloud-first IT infrastructure into high gear. The majority (69%) of companies have accelerated their cloud migration over the past 12 months, and the percentage of companies with most or all IT infrastructure in the cloud is expected to leap from 41% today to 63% in the next 18 months. In addition, with 60% agreeing that cloud capabilities helped them achieve increased and sustainable revenue in the last year, it is no surprise that next year, organizations plan to allocate an average 32% of their IT budgets to cloud strategy, according to Foundry's annual cloud computing survey.

The 2022 Cloud Computing Survey from Foundry (formerly IDG Communications, Inc.) represents the practices and opinions of 850 IT decision-makers (ITDMs) who are involved in the purchase process for cloud computing and whose organization has, or plans to have, at least one application or a portion of their infrastructure in the cloud.

Migration strategies

Nearly three-quarters (72%) of ITDMs say their organization is defaulting to cloud-based services when upgrading or purchasing new technical capabilities. To migrate existing workflows and applications, though, a third (32%) are rebuilding or refactoring a majority of their applications for the cloud, e.g., as part of a "cloud-first" strategy. Another third (33%) are extending their on-premises environment by migrating core applications with a hybrid cloud approach. Roughly a quarter (23%)

72%

of ITDMs say that their organization is defaulting to cloud-based services when upgrading or purchasing new technical capabilities

are taking a more gradual approach of rebuilding or refactoring a few targeted applications to be hosted with a single cloud services provider. Only 6% have not yet decided on a modernization strategy, while the remaining 6% have no cloud migration plans.

ITDMs with cloud budgets topping \$10M, and healthcare organizations in particular, are most likely to rework most of their applications for the cloud, while ITDMs with cloud budgets of less than \$50K are understandably most likely to have no cloud migration plans at all. Plans also vary based on how much of an organization's IT environment is currently in the cloud. Unsurprisingly, those that are already mostly or entirely in the cloud plan to stay on their cloud-first path. Organizations that have migrated just a few key applications are more

69% of ITDMs agree that their organization has accelerated its migration to the cloud over the past 12 months

inclined toward a hybrid cloud approach, while those whose environment is entirely on-premises are most likely to ease into the cloud by hosting a few targeted applications on a single cloud services provider.

The multicloud question

On average, 63% of companies' public cloud deployments currently leverage one single cloud provider. Still, only 16% rely on a single provider for all their public cloud deployments – increases to 19% for SMBs compared to 13% for enterprises – while 74% use more than one public cloud provider.

In addition, while 18% of ITDMs have no intention of adopting either a hybrid or multicloud architecture, 36% are currently evaluating or researching one or the other. The rest have a distinct preference (29%) for hybrid cloud, with 19% in the process of deploying it and 10% saying they already have a hybrid cloud and don't intend to deploy multicloud. By comparison, 18% are either in the process of deploying (11%) or have deployed (7%) a multicloud architecture.

Enterprises (1,000+ employees) have made more progress on their hybrid and multicloud plans. A third (32%) are deploying (23%) or have deployed (10%) hybrid architecture, compared to 26% of smaller companies, and another 23% are deploying (15%) or have deployed (8%) a multicloud architecture, while only 12% of SMBs have done the same. In addition, SMBs are twice as likely (23%) as enterprises (11%) to have no plans for either.

Only 16%

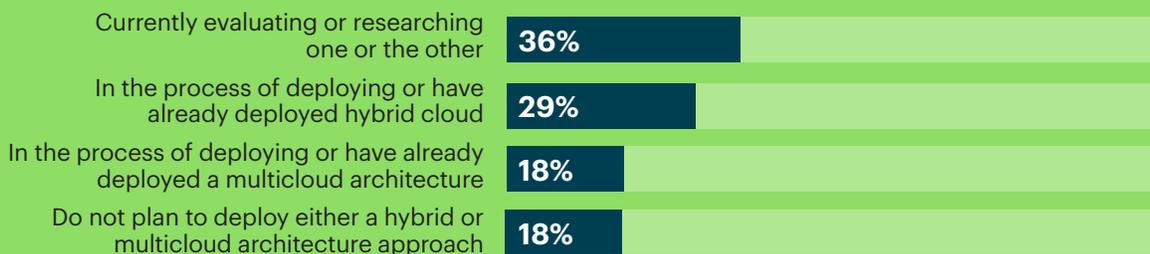
of organizations **rely on a single cloud provider** for their public cloud deployments



Across industries, healthcare and technology are most likely to be in the process of deploying multicloud, while technology is mostly likely to already have a fully deployed a multicloud architecture. Education, services, and government/nonprofit organizations are most likely to say they have no plans for hybrid or multicloud architecture.

Respondents of all types and sizes certainly see potential benefits to a multicloud architecture – particularly the agility-enhancing benefits of avoiding vendor lock-in (50%), improving disaster recovery/business continuity (47%), and greater platform and service flexibility (44%). However, enterprises are more interested in platform and service flexibility (55%), while SMBs' top desire is cost savings/optimization (52%). In addition, cost

Hybrid cloud and multicloud intentions



savings/optimization and access to best-of-breed platform and service options are especially appealing potential benefits for companies with most of their IT infrastructure in the cloud.

Among companies that have already deployed multicloud architecture, roughly half (51%) say they're already seeing the benefits of greater platform and service flexibility, while 40% are achieving cost savings/optimization, 39% are successfully avoiding vendor lock-in, and 38% see improvements in their disaster recovery/business continuity. Both enterprises (57%) and SMBs (42%) are enjoying best of breed platform and service benefits, but far more enterprises (46%) than SMBs (21%) say multicloud has allowed them to cut costs.

Motivations and challenges

ITDMs say their top drivers for cloud investment are to enable disaster recovery and business continuity (40%) and to replace on-premise legacy systems (39%). Both make sense given the overwhelming preference for defaulting to cloud-based services for new features and systems. Roughly a third of ITDMs also cite lowering total cost of ownership (34%), improving employee productivity (33%), and increasing flexibility to react to changing market conditions (32%).

IDTM's are also looking toward the future, with the majority (52%) of ITDMs saying that they consider Software-as-a-Service the biggest cloud growth area, followed by Platform-as-a-Service (38%), Security-as-a-Service (37%), and Infrastructure-as-a-Service (36%). However, enterprises rank cloud-based

96%

of ITDMs have experienced significant challenges to implementing their cloud strategy

analytics as their second most likely growth area (38%). IT managers are also significantly more likely (42%) than other ITDMs, including IT executives, to consider cloud-based analytics a top-two growth area.

Virtually all ITDMs (96%) have experienced significant challenges to implementing their cloud strategy. One major issue is **cost control**, including:

- challenges in controlling cloud costs (36%)
- cost of moving data into and between clouds (25%)

Another is **security management**, including:

- data privacy and security challenges (35%)
- lack of cloud security skills/expertise (34%)
- securing and protecting cloud resources (25%)

In addition, companies are wrestling with a **skills gap** that goes beyond the lack of cloud security skills and expertise to include:

- lack of cloud management skills/expertise (33%)
- difficulty finding staff with cloud development skills/expertise (30%) – even though roughly 8 in 10 have added an average of 3.3 new roles and functions as a result of their cloud investment.

Government/nonprofit organizations were more likely than average to report challenges, particularly lack of expertise, difficulty integrating cloud systems with on-premise systems, and the cost of moving data. This is not surprising given that the industry's IT environments are significantly more likely than others to be entirely or predominantly on-premises.

Top cloud growth areas

1. Software-as-a-Service
2. Platform-as-a-Service
3. Security-as-a-Service
4. Infrastructure-as-a-Service
5. Cloud-based analytics

Successful deployment is not trouble-free, either. Most (79%) of ITDMs say they've experienced at least one significant downside to their multicloud migration. The most common complaint is increased complexity (48%), followed by increased costs due to cloud management and security challenges (36%), and increased costs of training and hiring (34%). Larger companies, and companies with larger cloud budgets, are more likely to experience greater downsides. Similarly, companies with some but not most of their infrastructure in the cloud report more downsides than companies with most or all of their infrastructure in the cloud. Conversely, ITDMs in healthcare are more likely than those in other industries to say they've experienced no significant downsides.

To address these challenges and succeed on their cloud journey, 79% of organizations have added new roles and functions as a result of their cloud investments – increases to 89% for enterprises and is 70% for SMBs. The top roles added include cloud systems administrator (33%), cloud architect (30%), security architect (23%), cloud systems engineer (22%) and cloud software engineer (22%).

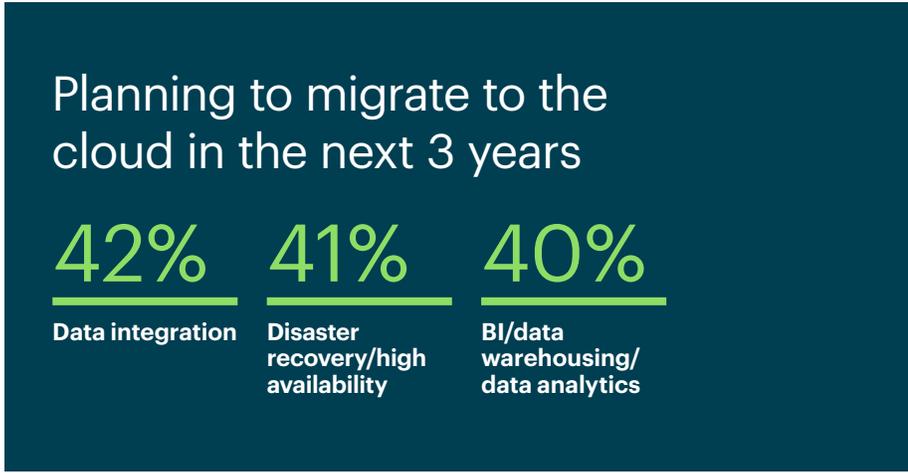
Priorities and timelines

Overall, the larger a company's cloud budget or the more of its IT infrastructure is already in the cloud, the more likely it is to have any given application or workload in the cloud or be in the process of migrating it. This makes sense given that a larger cloud budget and cloud presence indicate a greater commitment to cloud computing. However, organizations that are still mostly on-premises but have moved some infrastructure to the cloud are notably more likely to be planning to migrate any given application or workload than organizations that are either entirely on-premises or mostly in the cloud – presumably because moving a few things to the cloud creates greater pressure to move more.

Companies have already deployed or are currently migrating websites/web apps (42%), collaboration and communication solutions (41%), and storage/archive/backup/file server (35%) – all of them obvious candidates for moving off-premises.

Manufacturing organizations are least likely to be actively migrating almost any application or workload but are more likely to have already migrated Internet of Things connectivity and management. IoT migration is significantly more likely to be underway at education, healthcare, and retail organizations, though it's otherwise at the bottom of the list.

Among applications and workloads that companies aren't currently migrating, they're most likely to be planning to migrate data integration (42%), disaster recovery/high availability (41%), and BI/data warehousing/data analytics (40%). Government/nonprofit organizations are significantly more likely than others to be planning to migrate data integration to the cloud, while manufacturing companies may fall behind others that have already started migrating mobile apps and websites/web apps but are significantly more likely to be planning to migrate them.



Some organizations are planning to launch these plans sooner than others. About one in five ITDMs say they plan to migrate data integration, disaster recovery/high availability, databases, BI/data warehousing/data analytics, development/testing, identity and access management, and AI/ML in the next 12 months. Another one in five say they plan to get to data integration, BI/data warehousing/data analytics, disaster recovery/high availability,

API management, and storage/archive/backup/ file servers in the next 1 to 3 years. Plans also vary across industries; retail is most likely to be planning to migrate API management on a shorter timeframe, while manufacturing is most likely to have a 1-to-3-year runway for migrating websites/web apps, development/test workloads, and data integration.

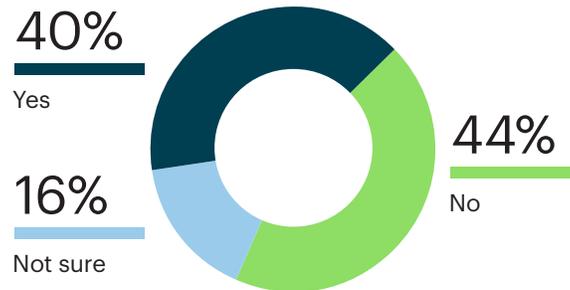
Support and influence

Overall, 44% of organizations that use multiple cloud providers do not consider one of them a strategic partner, while 40% do. However, enterprises and companies with cloud budgets of \$10M+ are significantly more likely to say that one of their providers is a strategic partner, as are ITDMs in high tech and retail. By contrast, those in healthcare and services are more likely to say they don't have a strategic partnership with any of their cloud providers.

Nonetheless, the majority of ITDMs also say that system integrators (43%), managed service providers (40%), and consulting firms (32%) – that is, individuals and groups with direct experience integrating and managing cloud systems – are likely to influence their organization's cloud purchase decisions. This increases for enterprise organizations, with 48% saying that systems integrators influence cloud purchase decisions, followed by managed service providers (43%) and consulting firms (39%).

As they consider how to successfully advance their cloud strategy over the next year, ITDMs' top needs from current and future cloud providers include security expertise (41%), better cloud management capabilities (40%), cost management

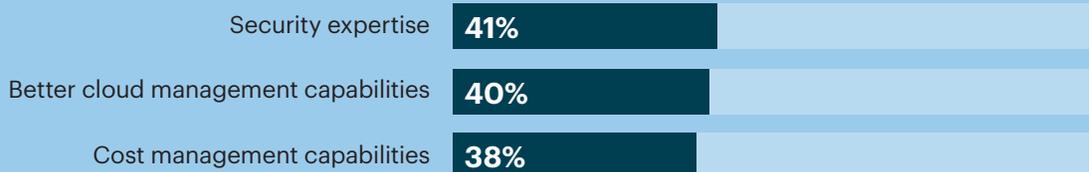
Do ITDMs consider one cloud provider to be a strategic partner?



capabilities (38%), and strategic guidance on overall cloud strategy/roadmap (35%). Financial services organizations want stronger governance tools above all, as befits a highly regulated industry, while education's top priority is training/support services. Overall, security remains a top priority – a response that reflects the 2022 State of the CIO survey's indication that most CIOs will focus on security overall security in the coming year.

Given that the majority of ITDMs have already moved or are in the process of moving a significant portion of their IT infrastructure to the cloud, it makes sense that what they want most from vendors is ongoing help managing their cloud infrastructure as a coherent, cohesive, affordable whole.

Assistance needed from cloud vendors



Conclusions

There is no doubt that cloud computing plans are not slowing down, however it is also apparent that technology decision-makers need assistance in order to successfully execute their cloud strategy. Key points from the 2022 cloud research that technology marketers must consider are:

- **Cloud budgets continue to increase** – on average, organizations will spend \$78 million on cloud computing over the next 12 months, which is up from \$73M in 2020.
- Software-as-a-Service, Platform-as-a-Service, Security-as-a-Service, Infrastructure-as-a-Service, and cloud-based analytics are **considered to be the top cloud growth areas for 2022**. However, these areas differ by company size and industry. Be sure to understand your target audience and provide them with the resources they need to stay up-to-date on these trends.
- Organizations are defaulting to cloud-based services when upgrading or purchasing new technical capabilities. **It's important to have a grasp on what business objectives are driving their cloud investments.**
- As in every aspect of the business, security remains top of mind when investing in cloud solutions. **The number one business driver for cloud computing is to enable disaster recovery and business continuity**, while data privacy and security challenges are one of the top obstacles to implanting a cloud strategy.
- **Despite the benefits organizations see from the cloud, a variety of challenges still get in their way**, mostly around cost control, security expertise and a skills gap. Provide solutions to your customers and prospects to combat these challenges.

About the survey

Released under the IDG Communications, Inc. brand for past iterations, Foundry's 2022 Cloud Computing Survey is the 9th year of this research and was conducted to measure cloud computing trends among technology decision-makers including: usage and plans across various cloud service and deployment models, investments, business drivers and impact on business strategy and plans. The study was fielded throughout February 2022 and is based off of the responses of 850 global IT decision-makers that are involved in the purchase process for cloud computing and their organization has, or plans to have, at least one application, or a portion of their infrastructure, in the cloud.

Examining the marketplace

Research is an invaluable way for marketers to better understand customers and prospects, with the goal of building quality connections. At Foundry this is one way we are focused on building bridges between tech buyers and sellers. Our first-party relationships with the most important tech buyers and influencers around the world, allows us to apply value across our customers marketing stack. Our research portfolio explores our audiences' perspectives and challenges around specific technologies — from analytics and cloud, to IoT and security — and examines the changing roles within the IT purchase process, arming tech marketers with the information they need to identify opportunities.

To see what research is available, visit [FoundryCo.com/tools-for-marketers](https://foundryco.com/tools-for-marketers). For a presentation of full results from any of these studies, contact your Foundry sales executive or go to [FoundryCo.com/contact-us](https://foundryco.com/contact-us).

Buying process

Each year we take a deep dive into the enterprise IT purchase process to learn more about who is involved and who influences decision-making, what sources purchasers rely on to keep up to date with technology — and throughout the purchase process — and how they want to engage with the vendors they are working with. Visit [FoundryCo.com/customerjourney](https://foundryco.com/customerjourney) for more information.

Role and Influence of the Technology Decision-Maker

This survey is conducted to gain insight into the evolving role and influence of IT decision-makers in today's corporations. The research identifies key decision-makers and examines their involvement during each stage of the tech purchase process and the primary influences and information sources they rely on.

Customer Engagement

This survey examines the role content consumption plays in the purchase process for major technology products and services, and provides insights for tech marketers to map their engagement touch-points to customers' information needs. The survey looks at how a wide variety of content types are consumed, discussed and shared throughout the stages of the tech purchase process and how that maps to marketing and sales alignment.

Technology insights

Each year we explore the technologies that are top of mind among our audiences to understand the business challenges, drivers, and adoption within the enterprise. These research studies are designed to help IT marketers understand what their customers are focused on and where the market is moving.

Role and priority studies

- CIO Tech Poll: Tech Priorities
- State of the CIO

Technology-specific studies

- Data & Analytics
- Cloud Computing
- Digital Business
- Security Priorities

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