

Cloud

Evolution



Mandate to **Modernize**

Contents

| | |
|---|-----------|
| Foreword | 03 |
| About the survey | 03 |
| The inextricable link between cloud and GenAI | 04 |
| GenAI's big bang | 05 |
| Answering the key questions about the journey toward custom GenAI solutions in production | 07 |
| How third-party consulting partnerships are supercharging GenAI progress | 08 |
| Hybrid, multicloud is—and will continue to be—the norm | 04 |
| Multicloud's momentum has created a new enterprise standard | 05 |
| The persistence of on-premises infrastructure | 06 |
| From rehosting to reinventing: Cloud modernization gains momentum | 07 |
| Application modernization practices continue to evolve | 09 |
| Cloud native tools and processes | 10 |
| The market's maturity related to robust multicloud roadmaps | 17 |
| For multicloud operations, third-party consulting partnerships again prove invaluable | 18 |
| Conclusions | 19 |
| How HCLTech can help | 20 |
| Research methodology and demographics | 20 |

Foreword

As organizations navigate the ever-evolving digital business landscape, cloud computing continues to be a core technology driving innovation and efficiency regardless of industry or geographic location. HCLTech's latest iteration of the "Cloud Evolution" research report comes at a time when many organizations are pivoting from lifting and shifting workloads to the cloud to strategically reimagining how applications should be architected to best take advantage of cloud's scalability while enabling developers to increase their throughput and velocity.

Perhaps most significantly, respondents point to an inextricable link between cloud and the rise of generative AI (GenAI). As these AI models require substantial computational resources and vast amounts of data, cloud platforms are emerging as an enabler, but data gravity is pulling organizations down a hybrid path.

Another key theme in this year's data is that organizations are intentionally partnering with multiple cloud infrastructure providers. There is an increased recognition that complete reliance on a single cloud provider creates risk and may force an organization to make problematic tradeoffs related to functionality and performance. Instead, organizations are thoughtfully leveraging the strengths of multiple platforms to enhance capabilities and increase resilience. Organizations can evaluate cloud providers in terms of their industry cloud portfolio, sustainability solutions, sovereign cloud capabilities, native tools, support for emerging technologies, cloud financial management and much more. Such an approach results in quickly realizing business value from cloud investments. For example, industry cloud platforms offering pre-packaged vertical-specific capabilities can help organizations focus on driving business innovation without worrying about the underlying technical complexities or compliance adherence.

Simultaneously, data suggests that the future of IT is not a complete shift to cloud. Instead, organizations are pursuing a hybrid model that weighs the agility of cloud services for some workloads against the control and compliance benefits of on-prem data centers for others. This hybrid approach helps organizations navigate complex regulatory environments and maintain legacy applications while not sacrificing the scalability and innovation advantages of cloud.

The research also confirms that cloud adoption, especially in hybrid and multicloud environments, brings with it cybersecurity challenges like increased data exposure, a larger attack surface and complexities in governance. Many organizations struggle with visibility across different clouds, compliance risks and the need for advanced security expertise. Partnering with cloud security providers that offer innovative, use case-driven solutions built on the latest tools and technologies can help address these challenges. With quick-to-deploy integrations, these solutions provide visibility, monitoring, vulnerability management and data security, ensuring compliance, transparency and resilience. This approach helps businesses stay secure and agile as they navigate today's complex multicloud environments.


Finally, given the complexity of hybrid and multicloud environments and the dynamic evolution of GenAI technology, it is not surprising to see many organizations turning to partners to help them navigate their cloud journeys in a sustainable way. These partnerships bring expertise and innovative solutions to accelerate adoption and help companies compete and win in their markets.

This report and the survey data that underpins it, offers a comprehensive look at these trends and leads us to an array of recommendations for organizations to consider as they plot their path forward.

About the Survey

In June of 2024, HCLTech commissioned TechTarget's Enterprise Strategy Group to execute new, original primary market research on the state of cloud computing. The research comprised 532 web-based interviews with senior executives responsible for their organization's public cloud technology investments. Respondents spanned IT, software engineering and line-of-business (LOB) roles, including CEOs, CFOs, CIOs, CTOs, CISOs and both technical and LOB VPs and directors. This enterprise-focused research included organizations with \$500M+ USD in annual revenue and spanned all private sector verticals. Respondents were distributed globally, including in North America (US, Canada, Mexico, 50%), Western Europe (UK, France, Germany, Spain, 26%) and APAC (ANZ, Singapore, 24%).

The inextricable link between cloud and GenAI



GenAI's big bang

Prior to November 30, 2022, AI was certainly a buzzword in the enterprise tech space. But at that time, it was a less concrete concept typically paired with intimidating concepts that demanded a high level of technical expertise like "data science" and "big data." The launch of ChatGPT at this time represented a seismic shift in the artificial intelligence landscape, putting a practical, easy-to-use AI application directly into the hands of millions of users. This large language model (LLM) demonstrated AI's ability to assist with a wide range of tasks and its availability has sparked excitement and investment in AI technologies across industries and for a multitude of business use cases.

While the industry is still in the early stages of maturity as it relates to LLMs and GenAI applications, the data shows the strong appetite organizations have for customized enterprise solutions in this space. The belief is that, by fine-tuning a general-purpose model with proprietary data, the model will better understand the organization's unique requirements and support its custom use cases (e.g., a healthcare company that tunes an LLM to interpret medical records and support clinical decision-making, or a financial institution adjusting a model to help analyze market trends and assist in risk management). All told, 98% of organizations represented in the survey are interested in GenAI solutions trained on or making inferences based on an organization's proprietary data and just 2% report no plans or interest (see figure 1). While many organizations are very early in their adoption journey and are simply expressing an interest in this type of technology, the vast majority see its tremendous potential.

Generative AI has brought previously unimaginable possibilities and changes to an enterprise's strategy and value streams while democratizing functions like software development and cloud transformation and enabling differentiated business capabilities. Enterprises require a unified data and AI strategy with the underlying cognitive infrastructure to effectively utilize structured and unstructured data for better insights and outcomes.

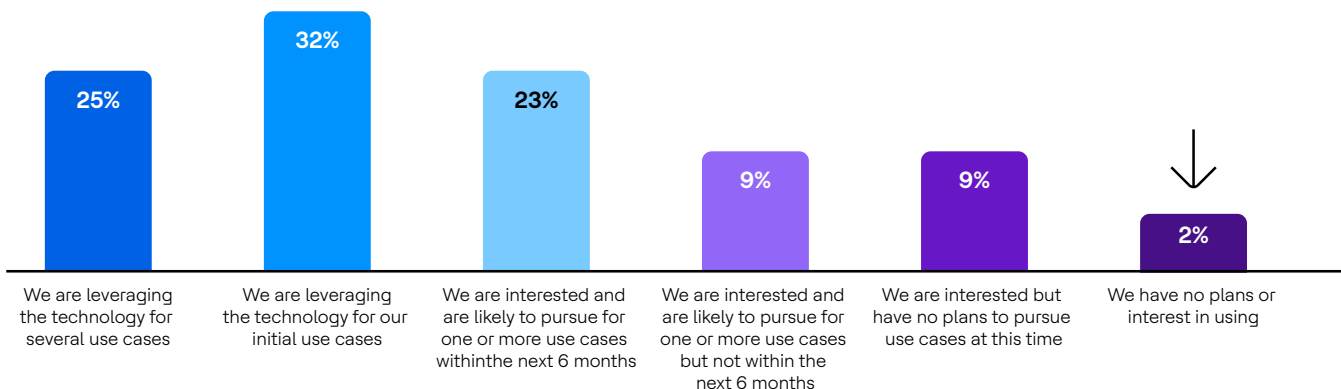
In addition to engineering capabilities, we believe the right change management approaches, new AI-driven KPIs and reskilling and upskilling of employees will be crucial to successfully scaling AI. We call it "AI that delivers ROI."

Vijay Guntur
CTO and Head, Ecosystems,
HCLTech



Figure 1. The near-universal appeal of custom GenAI solutions

Which of the following best describes your organization's use of, or interest in, GenAI models trained on or that make inferences from your organization's proprietary data (i.e., this excludes the use of public GenAI apps like ChatGPT)?
(Percent of respondents)



Source: Enterprise Strategy Group, a division of TechTarget, Inc.

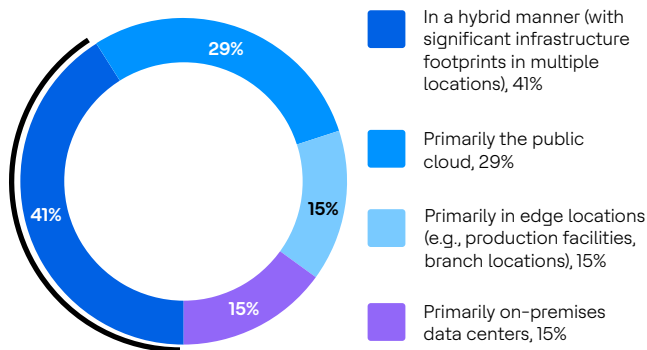
For organizations heading toward custom GenAI solutions, nearly all enterprises, the critical question is, “Where is the data we need to train the model or provide to the model for inferencing?” As reported by respondents, the answer to this question can loosely be answered in one word: “everywhere.” When asked where the data needed for custom GenAI solutions resides today, the typical respondent said that 45% is in the public cloud, while 55% is on-premises. The resulting data gravity is reflected in the survey responses: The plurality of respondents say they are most likely to run infrastructure to support custom GenAI solutions in a hybrid manner, with significant infrastructure footprints in multiple locations (see figure 2). This finding is reinforced when we isolate the leaders in the custom GenAI space. Of the 25% of respondents indicating their organization is leveraging custom GenAI solutions for multiple use cases, the majority (52%) report the infrastructure underpinning those solutions is most likely hybrid (vs. 41% of organizations using custom GenAI solutions for their initial use case and 33% of organizations interested in but not yet using custom GenAI solutions). Said another way, as organizations’ GenAI initiatives mature, their infrastructure is increasingly hybrid.

Data gravity:

A descriptor for how data and applications are naturally drawn to each other, much like how physical objects are attracted by gravity. In the context of infrastructure hosting, data gravity refers to the tendency of compute and storage to run where large amounts of data are stored.

Figure 2. Data gravity makes a hybrid approach to custom GenAI infrastructure most likely

Where would your organization most likely run the infrastructure required to support GenAI solutions trained on/making inferences based on your organization’s proprietary data? (Percent of respondents)



Source: Enterprise Strategy Group, a division of TechTarget, Inc.



While a hybrid infrastructure environment, by definition, includes public cloud infrastructure, it is important to note how much GenAI projects impact public cloud decisions. When respondents were asked what their primary use cases for public cloud infrastructure are today, the top response was to implement new GenAI, artificial intelligence and/or machine learning use cases (61%), meaning AI has quickly supplanted more canonical public cloud use cases like BC/DR (43%), application test and dev (42%) and as a mechanism to react to spikes in infrastructure needs (40%).

Answering the key questions about the journey toward custom GenAI solutions in production

Our research provides numerous peer-based insights to help organizations effectively navigate the road toward running custom GenAI solutions in production. Questions these organizations may find themselves grappling with include:

1. **What solution attributes should my organization prioritize when selecting infrastructure to support these projects?**
2. **What internal steps should my organization take to set itself up for success?**

To answer these questions, we look at the data. When respondents were asked what factors would most impact their infrastructure decisions related to custom GenAI applications, there were two standouts: The majority of respondents placed security and access to bleeding-edge technology as top decision criteria (see figure 3). Both of these responses make sense. Given the sensitivity of the data used to train LLMs or on which LLMs make inferences, it is clear that the security of the infrastructure must be prioritized to mitigate the risk of a breach. Given the pace of change and innovation in the GenAI space, it is also logical that organizations want to ensure they aren't locked into an infrastructure platform that could be quickly made obsolete.

In terms of steps organizations should be taking to set themselves up for success, the data enables us to make four key recommendations (see figure 4):

1. **Ensure perspectives from across the organizations are represented in GenAI strategy development.** Nearly all organizations (90%) emphasize cross-functional collaboration as they build their GenAI strategies. Given that GenAI can be applied to a variety of business problems, taking a democratized approach to use case identification and prioritization is important. It helps align expectations across business and technical teams and ensure risks that might be missed in taking a myopic view of a project are uncovered and accounted for.
2. **Be prepared to do the work related to research and knowledge base building.** As GenAI is a nascent and rapidly evolving technology, organizations are dedicating significant time and resources to self-education. This is an important step in identifying skill gaps, understanding solution vendors' points of view and tracking how peers and competitors are taking advantage of GenAI.

3. Look to leaders to help you advance your priorities.

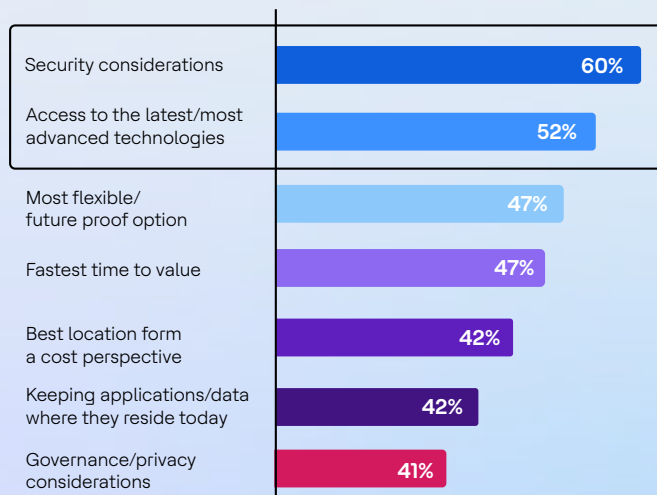
In their urgency to develop and deploy custom GenAI solutions, many organizations find themselves running into roadblocks related to skills and expertise. From use case identification and prioritization to infrastructure, data integration and preparation, and from model selection and tuning to ongoing management, many organizations find they do not have the staff scale or skills to bring their strategies to life and 86% of respondents report seeking help from external sources to bridge the divide between their vision and what they can deliver internally.

4. On-premises environments are often an attractive test bed for initial GenAI initiatives.

Three-quarters of respondents report that if they were starting a new GenAI initiative tomorrow, it would run on-prem initially and scale to the cloud over time. There are many reasons why on-prem infrastructure may be appealing, including control and cost predictability. While there is no "one right way" to pursue a new GenAI project, this data implies organizations should certainly not adopt a cloud-only approach by default.

Figure 3. What to prioritize in infrastructure supporting generative AI initiatives

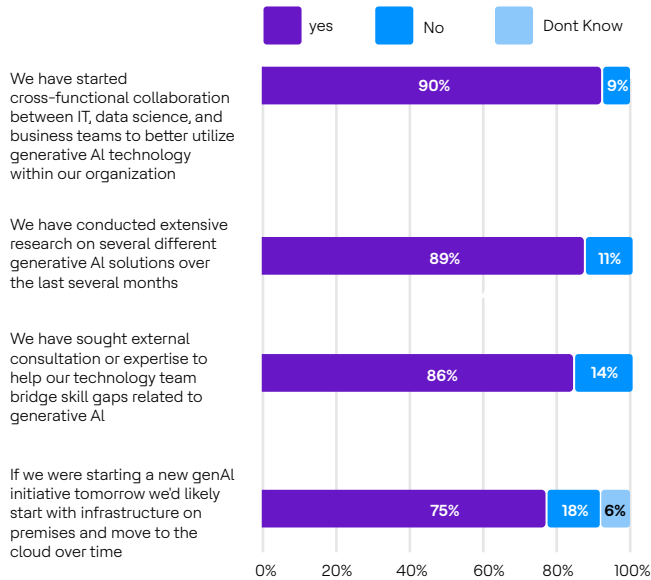
When implementing GenAI solutions trained on/making inferences based on your organization's proprietary data, what factors impact your choice of infrastructure? (Percent of respondents, multiple responses accepted)



Source: Enterprise Strategy Group, a division of TechTarget, Inc

Figure 4. What your peers are doing to prepare for GenAI

Which of the following statements are applicable to your organization as it relates to GenAI? (Percent of respondents)



Source: Source: Enterprise Strategy Group, a division of TechTarget, Inc.

How third-party consulting partnerships are supercharging GenAI progress

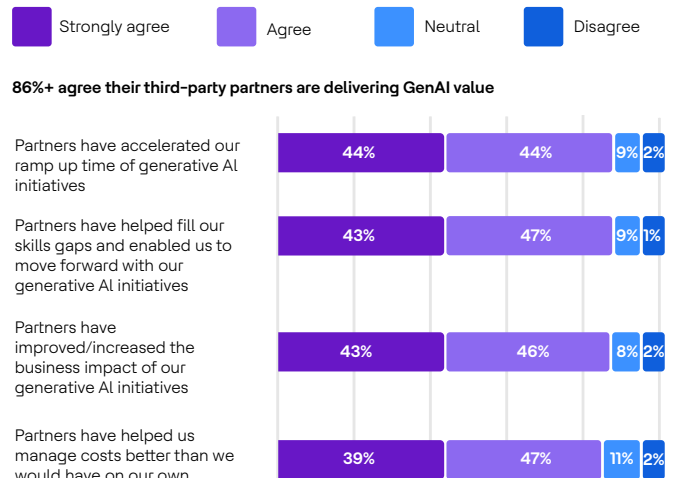
Beyond simply asking if organizations are working with third-party consultants to accelerate GenAI strategies, the survey went further to understand how effective these partnerships have been. In this regard, responses were very favorable, with between 86% and 90% of respondents agreeing that partners have accelerated adoption, filled skills gaps, increased the business impact of solutions and helped optimize costs (see figure 5). Additionally, organizations partnering with third parties on GenAI were found to be 69% more likely to have several use cases in production, indicating these partnerships are helping organizations scale up significantly. The implication is clear that organizations all along the GenAI adoption curve should seek partners with expertise and differentiated intellectual property in GenAI to improve their project outcomes.

Advanced AI solutions require the cloud. The computational requirements and extreme data needed to train the models depend on the scale of the cloud. AI solutions will optimize business processes, enhance customer experiences and improve decision-making capabilities. By leveraging



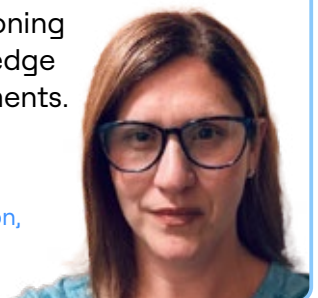
Figure 5. What third-party consultants offer organizations pursuing GenAI

Please rate your level of agreement with the following statements related to the experience partnering with external entities (vendors, providers, consultancies, etc.) (Percent of respondents)



AI, organizations are positioning themselves at the cutting edge of technological advancements.

Tammy Lawson
 Manager, Database Administration,
 Sonoco Products Company



A person in a dark suit stands with their back to the camera, looking out from a futuristic, reflective hallway. The hallway's floor and walls are highly reflective, mirroring the vibrant sunset colors of orange, pink, and purple. The ceiling is a dark, grid-like structure. The person's reflection is clearly visible on the polished floor. The background shows a vast, calm body of water meeting a sky filled with soft, colorful clouds at dusk or dawn.

Hybrid, multcloud is
—and will continue to be—
the norm

Multicloud's momentum has created a new enterprise standard

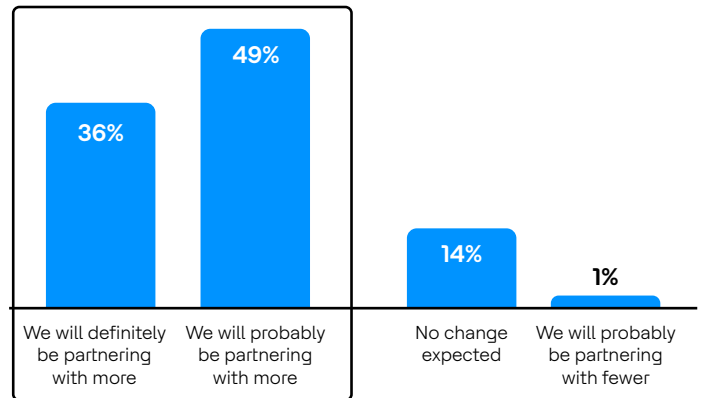
Organizations have increasingly embraced multicloud—or partnering with multiple public cloud providers for their cloud infrastructure needs. In fact, when respondents were asked to identify the cloud infrastructure providers they partner with today, 87% selected more than one provider, and the average respondent selected three. This diversification across providers like Amazon Web Services (AWS), Microsoft Azure, Google Cloud Platform (GCP), Oracle, SAP, Red Hat and others helps companies avoid vendor lock-in and select the best tools and services tailored to their specific needs. This approach also creates the opportunity to optimize costs by taking advantage of provider price competition and improving resiliency by partnering with providers that operate multiple data centers in key geographic areas for redundancy.

And while multicloud operations are the norm today, the data shows pent-up demand for even more public cloud diversification. When asked how many cloud providers their organization will partner with 12 months out, 85% of respondents stated they will definitely or probably be partnering with even more than they currently do. Perhaps even more noteworthy, just 1% of respondents expect their organization to undergo any degree of cloud partner rationalization (see figure 6).

More than just partnering with additional vendors, organizations' operations are also expected to become more cloud-reliant: 87% of respondents agree that there are many workloads on-prem today that the organization would prefer to modernize and migrate to the cloud (see figure 7). As organizations move more of their business-critical workloads to the public cloud, they must prepare for how operations will be fundamentally transformed. This shift alters the focus of IT teams from managing physical, on-prem infrastructures to overseeing cloud resources, which requires new skills and tools. As more of the IT budget transitions from capital to operational expenditures, a critical need emerges for FinOps expertise to forecast resource utilization and associated costs over time. Cloud migration also reshapes risk, meaning organizations must employ different approaches to security, data management and disaster recovery. In short, the continued move to cloud accelerates changes in technical processes and strategic planning alike.

Figure 6. Organizations seek to further diversify their cloud partnerships

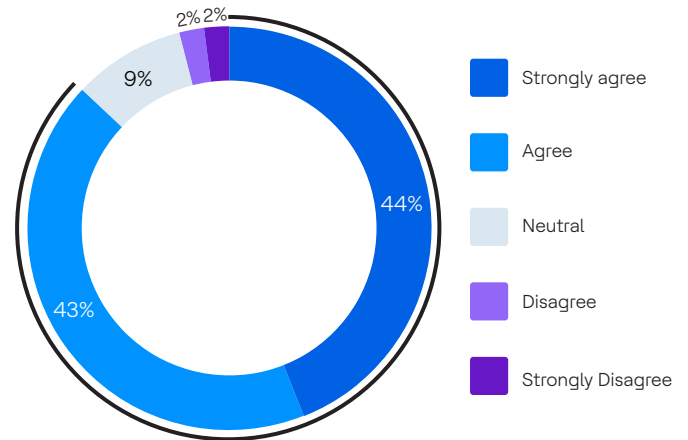
Looking ahead 12 months from now, which best matches your expectation regarding how many public cloud infrastructure providers your organization will be partnering with? (Percent of respondents)



Source: Enterprise Strategy Group, a division of Tech Target, Inc.

Figure 7. Most organizations seek to modernize and migrate many more workloads

Agree or disagree: There are many workloads on-premises today that we would like to modernize to a cloud native architecture and migrate to the cloud. (Percent of respondents)



Source: Enterprise Strategy Group, a division of TechTarget, Inc.



Sixty percent of companies that participated in the research have IT and business leaders at the table to discuss the suitability of different CSPs for discreet workloads and data requirements. Modernization initiatives utilize multiple cloud services within a single heterogeneous infrastructure. Managing multicloud requires IT to design and implement a governance framework for managing these cloud resources and FinOps to increase ROI and provide guidance for aligning security configurations and ensuring access controls are in place.”

Siki Guinta, EVP and Head, Cloud Native Center of Excellence, HCLTech



The persistence of on-premises infrastructure

The data makes it clear both that public cloud computing technologies will continue to be more broadly adopted and that cloud-only approaches will be the exception, not the norm: 68% of respondents agree their organization currently has data and workloads on-prem that will never be migrated to the cloud because of security and/or control considerations, while 62% agree they have workloads running on-prem that are so stable and unchanging that migrating them to the cloud would not make sense either due to the increase in associated operational costs or because refactoring them for the cloud is not an efficient use of development resources. Taken together, 81% of respondents agreed with one or both of these two statements, indicating that most organizations have a need for a material on-prem infrastructure footprint (see figure 8).

Given the vast majority of organizations will be partnering with a multitude of public cloud providers while also maintaining on-prem infrastructure, they must prepare to grapple with challenges related to operational complexity. Each cloud environment brings its own

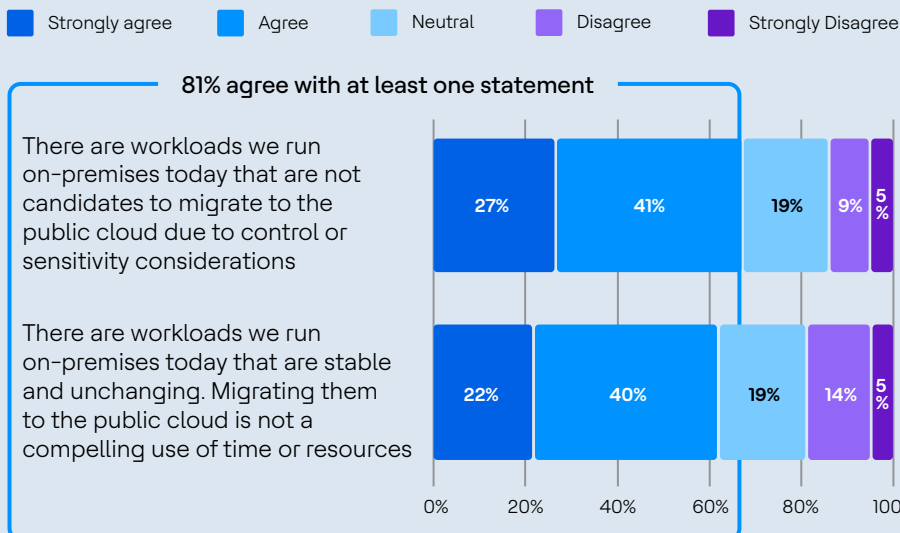
set of management tools and APIs, causing IT teams to often struggle to learn and optimize different taxonomies and workflows specific to each cloud, potentially leading to inconsistent application of security policies. Moreover, a team's inability to effectively manage infrastructure across various cloud providers and on-prem data centers can result in performance issues and unplanned outages and create delays that hurt the business's ability to innovate.

To mitigate complexity, organizations should focus on implementing solutions that provide consistency across different environments, enabling IT teams and developers to work with familiar interfaces regardless of where the underlying infrastructure is hosted. Such solutions include container orchestration platforms like Kubernetes and cloud-agnostic infrastructure management tools that are extensible across clouds and even to on-prem data center environments. Beyond tooling, there is a clear imperative for organizations to fund training programs to ensure that their teams are equipped to navigate the intricacies of a hybrid, multicloud ecosystem.



Figure 8. On-premises environments will be retained by most organizations

Please rate your level of agreement with the following statements related to your organization's on-premises data center environment. (Percent of respondents)



Source: Enterprise Strategy Group, a division of TechTarget, Inc.

“The recognition of cloud as a business enabler is at an all-time high, with organizations investing in cloud to drive transformative change. By leveraging cloud technologies, businesses innovate faster, scale efficiently and position themselves to gain a competitive edge. There is no question that cloud is playing a significant role in enabling enterprises to achieve long-term objectives and remain agile in highly competitive markets.”

Andrew Faid
Head, Cloud Business Office, oCTO,
Fonterra





From rehosting to reinventing: Cloud modernization gains momentum

The data shows that the way organizations adopt and deploy cloud infrastructure has shifted significantly. Three years ago, 57% of respondents reported their organization usually or always refactored applications when migrating them to the cloud. Today, 73% say they undergo this degree of application modernization in the migration process. This trend is likely to continue, with 80% agreeing that the value of the public cloud can only be fully realized if applications are modernized when they are migrated (vs. just lifting and shifting them) and the same percentage agreeing that their organization needs to increase its focus on refactoring and rewriting apps for the cloud moving forward (see figure 9).

As enterprises continue to accelerate their digital transformation agendas, they are increasingly focused on platform-driven business models as a cornerstone to drive innovation and growth. Robust and scalable platforms help enterprises engineer secure, reliable and optimized cloud-native applications that can scale rapidly as the business grows without compromising on security, reliability, availability and a seamless and secure cloud experience.

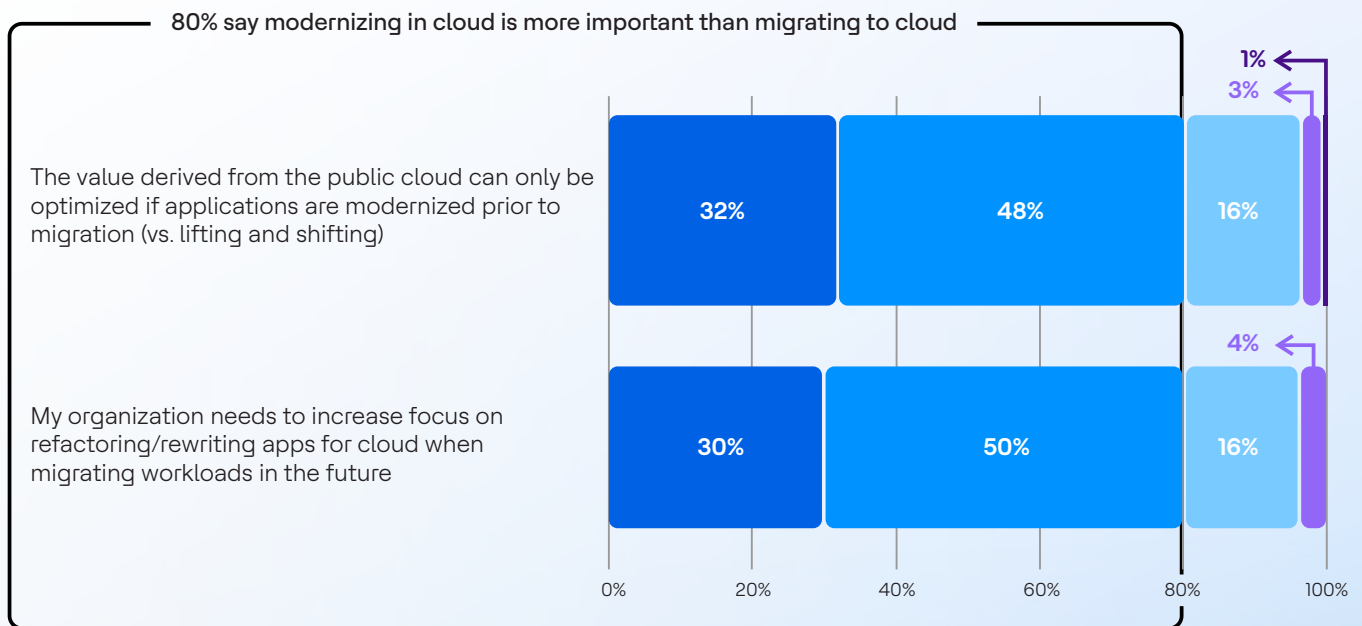


Hari Sadarahalli
CVP and Global Head,
Engineering and
R&D Services,
HCLTech

Figure 9. Why organizations are pivoting from lifting and shifting

Please rate your level of agreement with the following statements. (Percent of respondents)

Strongly agree Agree Neutral Disagree Strongly Disagree



Source: Enterprise Strategy Group, a division of TechTarget, Inc.

Application modernization practices continue to evolve



Survey participants are in complete agreement that modernization of applications during and after migration adds business value. In fact, a large percentage admit to having a substantial number of migrated applications that were initially only migrated that could now benefit from also being modernized.

Application modernization is not a new concept. Based on migration timelines and available talent, organizations have implemented multiple approaches to modernization, from simple rehosting and re-platforming to the more challenging refactoring and rearchitecting of applications to be cloud native. Application modernization continues to evolve similarly to the evolution of cloud.

Rearchitecting (i.e., utilizing new technologies and development practices) continues to be challenging for some organizations given the constraints of time and talent. Containerization has proven to be simpler than refactoring but doesn't provide the same benefits as applying cloud native architectures. Containerization may improve

application structure, performance and maintainability to a degree, but businesses seem to seek value that only refactoring or rearchitecting may provide. It's not surprising, then, that the survey revealed high adoption rates of platform engineering as an enabler.

The survey also revealed that organizations have been adopting platform engineering in an effort to create a seamless and efficient environment for developing and deploying cloud native applications. The platforms enable a self-service infrastructure for developers that can automate code testing and deployment, automatically apply security and governance guardrails to applications and provide granular visibility into application components and their performance. These platforms are built on cloud native application technologies and seek to optimize developer productivity. When asked about the adoption of platform engineering, 76% of respondents reported they employ platform engineering either extensively or for some subset of their development projects (see figure 10).

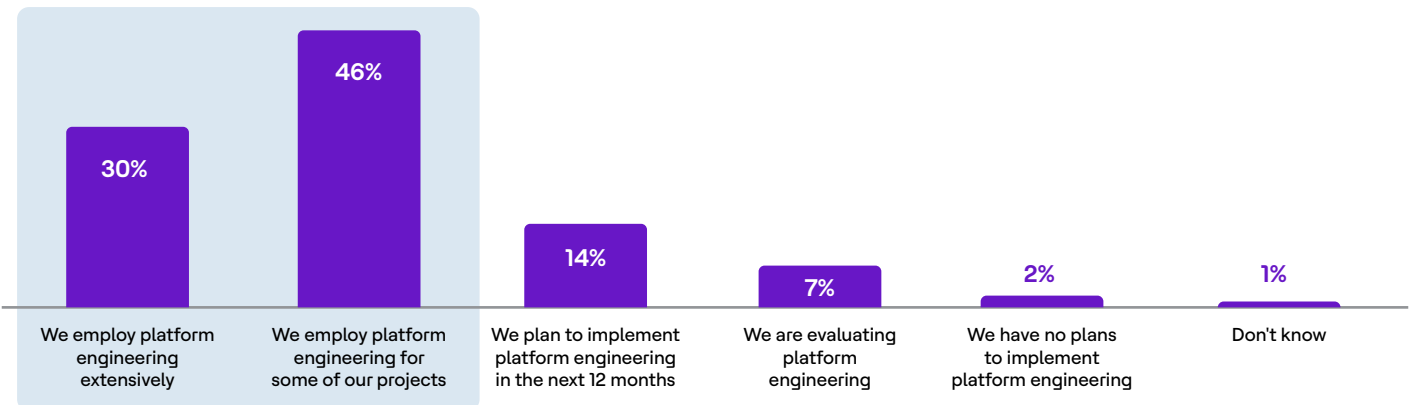
Site Reliability Engineering:

Organizations are transforming legacy software applications and building new applications to align with business needs and technological advancements like GenAI. Whether they are making apps cloud-ready, using containerization or rearchitecting important applications to be cloud native, businesses are realizing they need to change how these applications operate in production.

Successful application rearchitecting makes applications more sensitive to cloud characteristics. Achieving this stage of modernization increases visibility for site reliability engineering (SRE). Application modernization is incomplete without changing the way IT operates these applications. AI is bringing this level of modernization within reach.

Figure 10. Platform engineering is past the tipping point

Which of the following best describes your organization's adoption of platform engineering? (Percent of respondents)



Source: Enterprise Strategy Group, a division of TechTarget, Inc.

Cloud native tools and processes

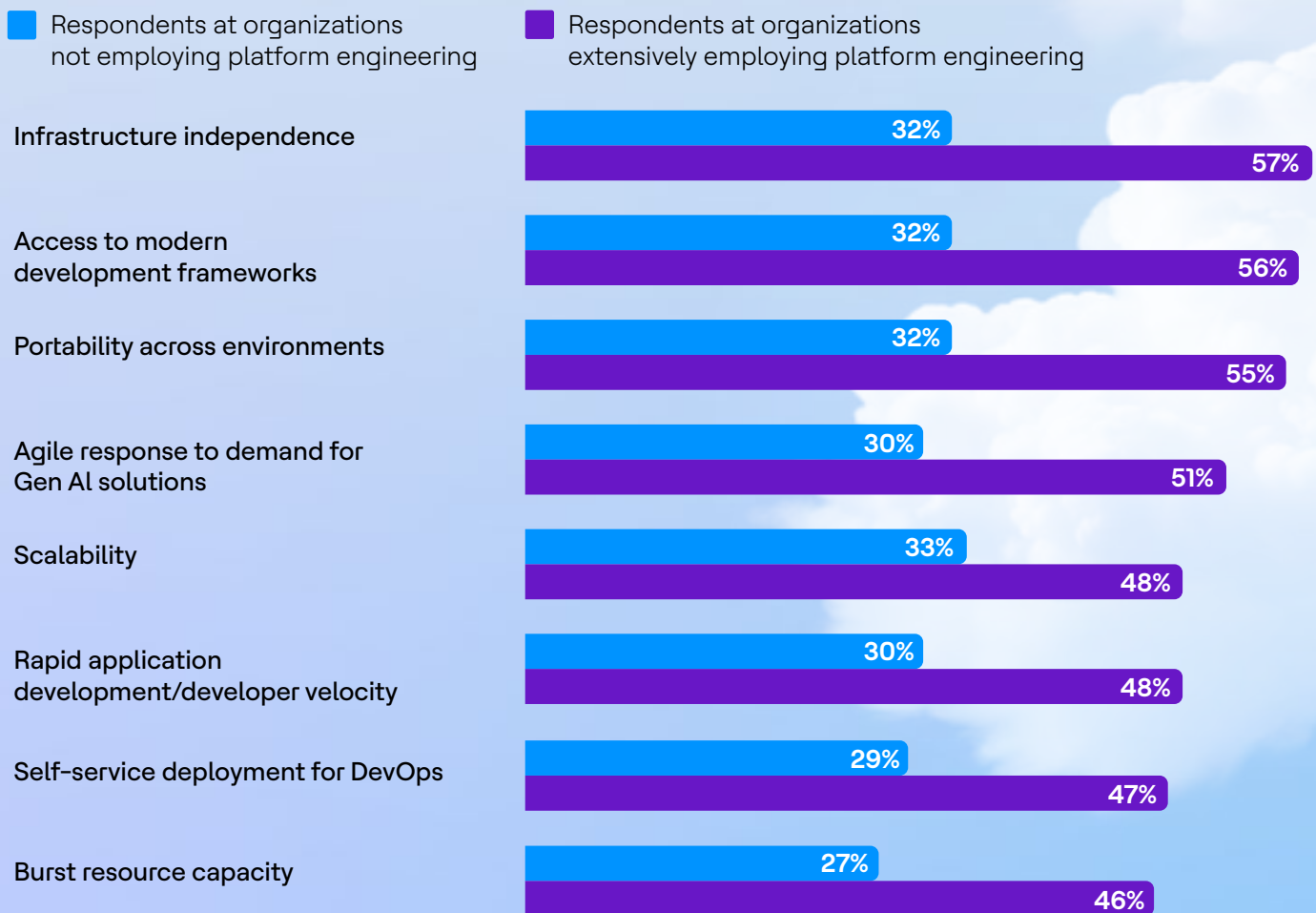
Nine of ten respondents reported that their organization was proficient with cloud native tools and processes. Those respondents were, in turn, asked if their organization's approach to cloud native development was improving a range of development outcomes like application scalability, portability, developer velocity, the ability to build GenAI solutions and more. When we compared

the responses from individuals at organizations that extensively employ platform engineering to those at organizations not leveraging platform engineering, a clear divide emerged. Respondents at organizations with strong platform engineering practices were much more likely to strongly agree that cloud native application development is improving outcomes across the board (see figure 11).



Figure 11. Platform engineering is unlocking the value of cloud native application development

Please rate your level of agreement with this statement: My organization's approach to cloud native applications has helped to improve. (Percent of respondents selecting "strongly agree")



Source: Enterprise Strategy Group, a division of TechTarget, Inc.



Application modernization demands the seamless integration of cloud technologies, agile practices and generative AI to resolve technical debt, creating a positive cycle of increased agility and revenue growth. It's about creating a future-ready technology landscape that boosts agility, efficiency and long-term growth."

Pawan Vadapalli, CVP and Global Head, Digital Business Services, HCLTech



Platform teams and the platforms they've built also appear to be reducing the friction that can sometimes exist between developers and IT operations teams. While development teams are chartered with experimenting, innovating and getting new services to market fast, IT teams are frequently focused on reliability and stability. With these two conflicting goals, IT teams often find the pace of change developers strive for problematic, while developers' appetite for risk frequently exceeds what may be acceptable to the rest of the organization. Platform engineering accelerates development time by providing developers with standardized, automated workflows while simultaneously ensuring reliability through built-in best practices and policy-based security measures. The impact is clear in the data: When asked to describe the communications between ITOps and development teams at key points in a project's journey, those that extensively use platform engineering today were:

~2x

(59% vs. 30%)

as likely to say defining cloud initiatives is highly collaborative

2.3x

(56% vs. 24%)

as likely to say discussions about cloud challenges are highly collaborative

2.6x

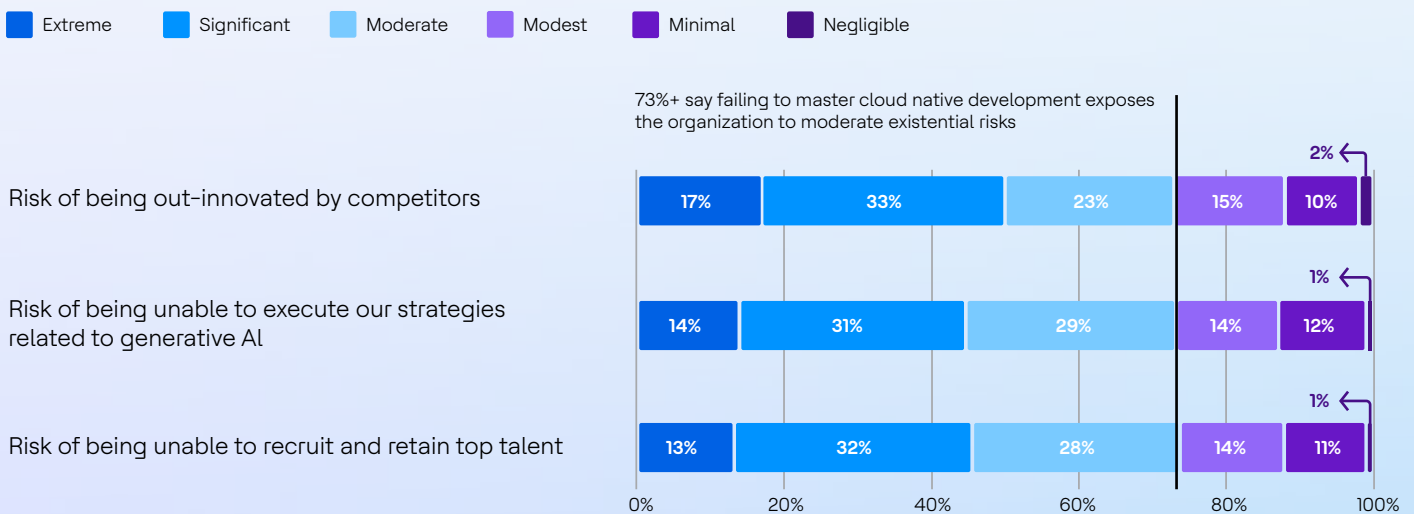
(55% vs. 21%)

as likely to say goal and KP assessments are highly collaborative

Here, the concept of enabling teams to effectively discuss challenges and arrive at solutions is of particular note, as many respondents say failing to overcome cloud native development challenges will have severe consequences. Specifically, 73% of respondents say they face at least moderate levels of risk of being unable to recruit and retain top talent, as developers and IT operations professionals will seek more sophisticated organizations. Disruptive GenAI solutions will likely call for cloud native architectures, so it is not surprising to note that 74% of respondents see at least moderate risk of GenAI project failure associated with failing to overcome cloud native challenges. Finally, nearly three-quarters of respondents see moderate risks associated with being left behind by competitors if cloud native hurdles cannot be overcome. These existential risks to the organization underscore the importance of cloud native mastery and make it clear why so many organizations are prioritizing investments in platform engineering (see figure 12).

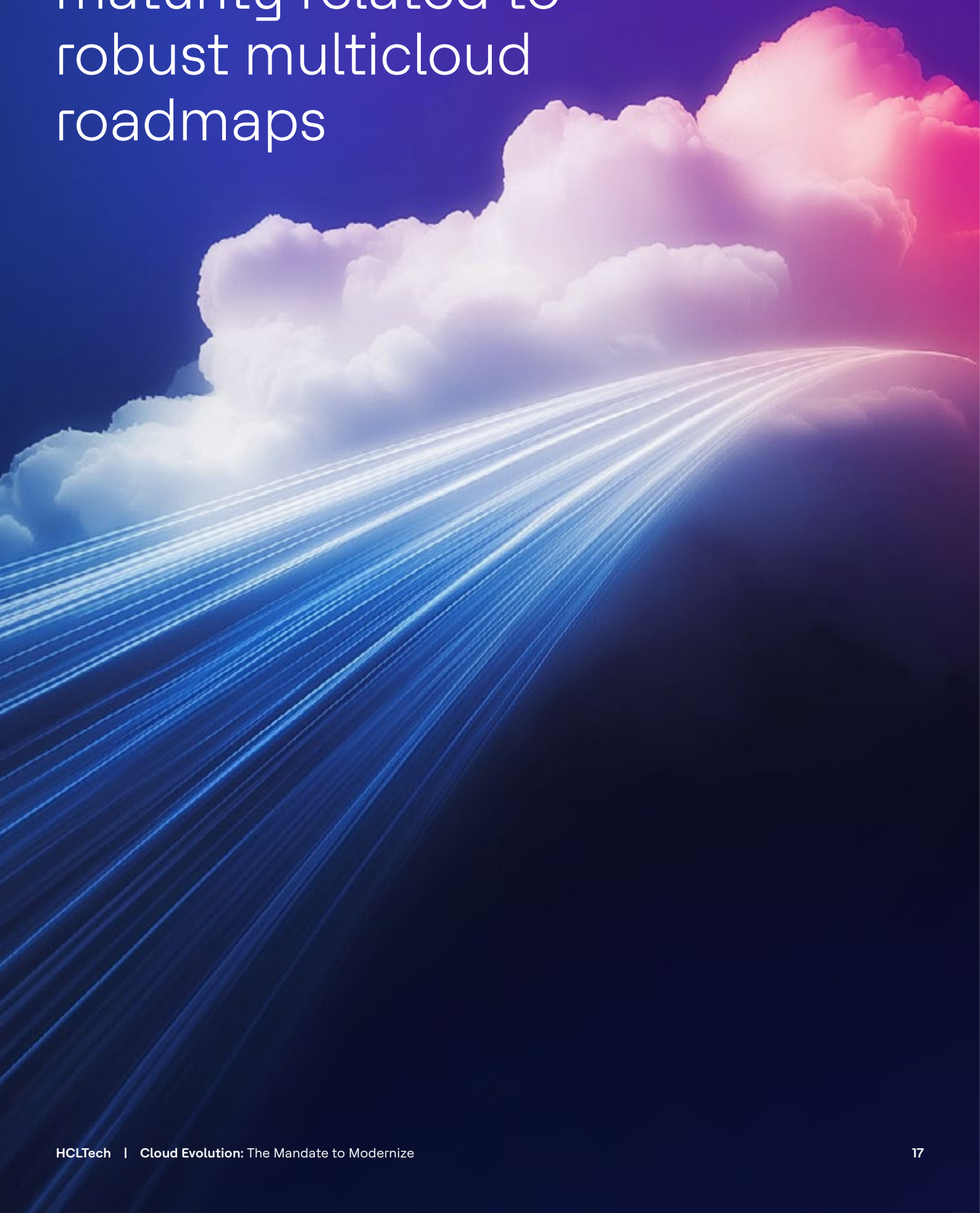
Figure 12. The risks associated with failing to optimize cloud native application development

How would you rate your organization's exposure to the following risks if it cannot overcome its challenges related to cloud native applications? (Percent of respondents)



Source: Enterprise Strategy Group, a division of TechTarget, Inc.

The market's maturity related to robust multicloud roadmaps



Earlier in this report, we discussed how common it is for organizations to have adopted a multicloud approach. The research reveals that multicloud, in and of itself, is not a new phenomenon, but that the way organizations arrive at a multicloud setup has shifted meaningfully.

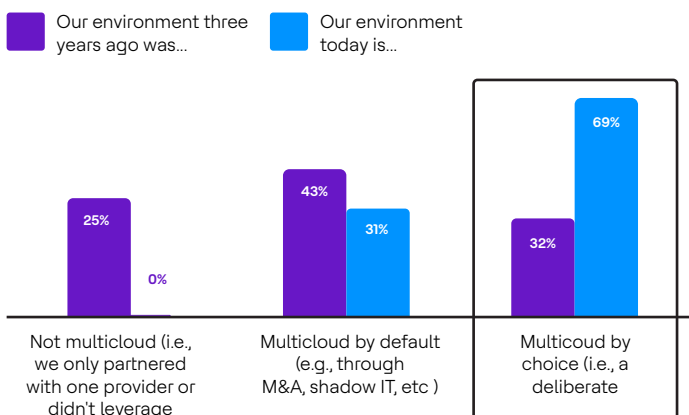
In the past, many organizations found themselves deploying and managing multiple clouds by default, whether due to M&A activity or shadow IT. Once deployed, multiple clouds tend to be “sticky” and hard to deprovision. Organizations operating in this mode frequently struggle coordinating across the teams responsible for each cloud in use to ensure a consistent security posture and find themselves grappling with an unwieldy array of CSP-provided management tools.

Many of these challenges can be mitigated if the organization is able to build a proactive, deliberate multicloud strategy. Such strategies help ensure inter-team alignment and standardized best practices, reducing the learning curve for CloudOps staff. It also positions the organization to better define and implement uniform security protocols and open management tools that can span cloud environments, reducing redundancy and complexity.

The data shows that many organizations have crossed this chasm from being multicloud by default to having a defined, deliberate multicloud strategy. In fact, organizations today are 2.2x as likely to be pursuing a thoughtful multicloud strategy vs. three years ago (see figure 13).

Figure 13. Organizations have embraced a deliberate multicloud strategy

Which of the following best describes your organization’s multicloud environment three years ago? How does that compare to today? (Percent of respondents)



Source: Enterprise Strategy Group, a division of TechTarget, Inc.

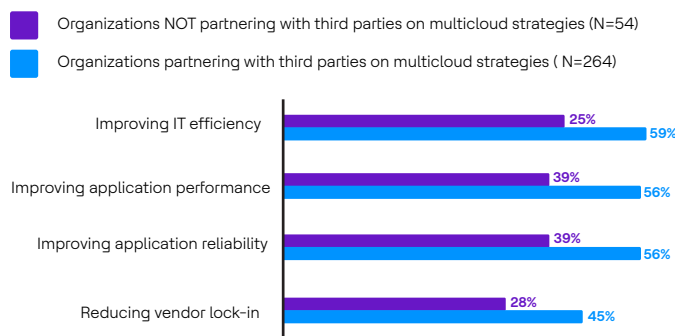
For multicloud operations, third-party consulting partnerships again prove invaluable

Mirroring earlier findings related to GenAI, more than four out of five organizations (83%) have opted to partner with third-party consultants to help architect their deliberate multicloud strategies. And just as with GenAI, these organizations that tap into the expertise of third-party consultants achieve better outcomes than their peers going it alone. When we asked respondents to consider a range of business outcomes and evaluate how their multicloud strategies are (or aren't) contributing to the success of those outcomes, respondents at organizations that partnered with third parties on their strategies were much more apt to say those strategies were very successful improving outcomes like IT efficiency and application performance, as well as reducing lock-in (see figure 14). And more than just correlations, when explicitly asked how important the organization's partnerships with third-party consultants had been in achieving the desired business outcomes targeted by their multicloud strategies, 98% of respondents said they had been either “critical” or “important”.

Beyond the expertise consultants can bring to bear, we believe IT teams are so bogged down in their day-to-day operations and focusing on supporting business-critical LOB teams they simply don't have the bandwidth to step back and create a robust multicloud roadmap on their own.

Figure 14. Third-party collaboration increases the success of multicloud strategies

Please consider the following business outcomes. For each, please indicate how successful your organization's approach to multicloud adoption has been at improving your organization's performance. (Percent of respondents selecting "very successful")



Source: Enterprise Strategy Group, a division of TechTarget, Inc.

The convergence of multicloud, cloud native architectures and generative AI is reshaping the enterprise landscape. Global System Integrators (GSIs) are at the forefront, providing organizations with cutting-edge solutions and accelerators built on deep industry expertise to tackle these complexities. GSIs can cocreate executable strategies that drive measurable outcomes, empowering businesses to transform faster, innovate at scale and unlock the full potential of their technology investments with precision and agility. From optimizing multicloud environments to supercharging AI adoption, we're committed to our customer's success."

Jagadeshwar Gattu, President, Digital Foundation Services, HCLTech



Conclusions

Reflecting on the survey results and applying our experience working with our clients, there are several recommendations we can make to organizations to help them meet the mandate to modernize in the cloud:

- **Invest in technologies that make IT operations frictionless across clouds.** Complexity is the bane of the cloud model. If all the agility benefits of offloading infrastructure hosting to cloud providers are offset by inefficiencies introduced by the proliferation of myriad closed and proprietary tools, IT teams won't be able to deliver on their multicloud visions. Organizations should focus on deploying open solutions that enable consistency across clouds.
- **Build and invest in your platform engineering team.** The degree to which we found that platform engineering helps organizations unlock the advantages of cloud native applications is significant. If your organization hasn't actively begun to build out this practice area, it needs to start. For those that have, it is critical that the organization invest in building a platform that prioritizes developer experience and enables developers to focus on innovating rather than mastering complex, cloud native technologies.
- **To make GenAI projects successful, plan for a hybrid infrastructure and seek solutions that are secure by design and have a consistent track record of innovation.** The data that will power custom GenAI solutions is distributed across on-premises and cloud infrastructure, which implies that the infrastructure running GenAI will be similarly hybrid. This aligns with organizations' overall expectations that IT environments will remain hybrid and multicloud in the future. Custom GenAI solutions are likely to access a range of sensitive and proprietary data, so your peers report prioritizing the infrastructure solutions with leading security capabilities while also seeking partners that provide access to or integrate with the most advanced AI technologies.
- **Be proactive in your multicloud strategies.** To optimize cloud outcomes, organizations should engineer a deliberate multicloud strategy that evaluates each cloud provider to determine which environment offers the best capabilities for each workload to be hosted at the lowest cost. Organizations that are multicloud by default (e.g., as a result of shadow IT or M&A activity) see demonstrably less success than their peers.
- **Recognize how and why third-party consultants can help.** There is a confluence of meta-trends complicating the lives of every IT organization today, from multicloud to cloud native architectures to GenAI. At the same time, funding and staffing for many IT teams is tight due to macroeconomic concerns. Many teams simply lack the time and skills to execute their visions. This is where engaging third-party system integrators and consultants can provide a meaningful lift by accelerating project timelines and increasing the business impact of projects.

How HCLTech can help

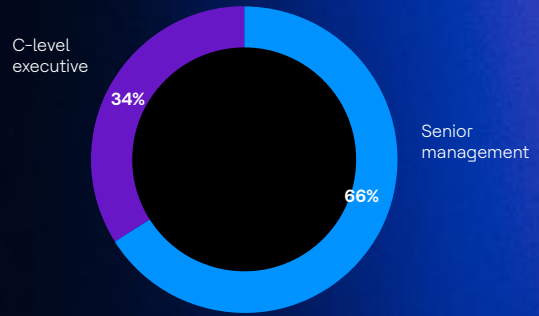
HCLTech's unique CloudSMART strategy provides enterprises with a complete, high-value cloud consulting and delivery platform. Drawing from HCLTech's engineering roots and partnership with leading cloud providers, the CloudSMART strategy was designed as an adaptive portfolio of solutions enabling continuous modernization, increased agility and improved operational efficiency. [Learn more.](#)

Research methodology and demographics

To gather data for this report, Enterprise Strategy Group conducted a comprehensive online survey of 532 web-based interviews with senior executives responsible for their organizations' public cloud technology investments. The survey was fielded between May 23, 2024 and June 15, 2024. The margin of error for this sample size is +/- 4 percentage points at the 95% confidence level. All respondents were provided an incentive to complete the survey in the form of cash awards and/or cash equivalents. Note: Totals in figures and tables throughout this report may not add up to 100% due to rounding.

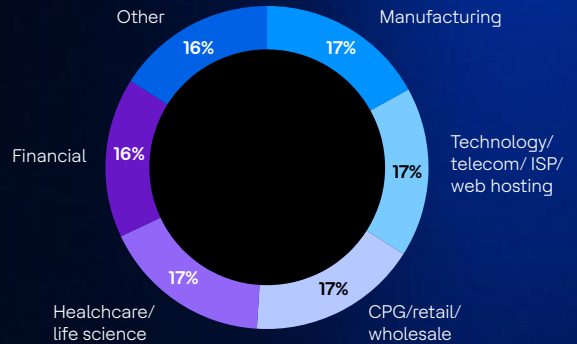
The following figures detail the demographics and firmographics of the respondent base.

Figure 16. Respondents by Seniority



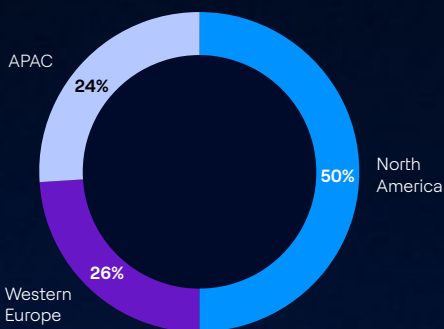
Source: Enterprise Strategy Group, a division of TechTarget, Inc

Figure 17. Respondents by Industry



Source: Enterprise Strategy Group, a division of TechTarget, Inc

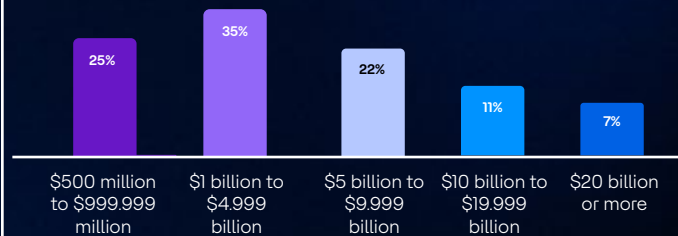
Figure 15. Respondents by Region



Source: Enterprise Strategy Group, a division of TechTarget, Inc.

Figure 18. Respondents by Company Size (Annual Revenue)

Which of the following best describes your organization's multi-cloud environment three years ago? How does that compare to today? (Percent of respondents)



HCLTech
Supercharging Progress™

www.hcltech.com