Team Needs Will Dictate the Future of Multi-Cloud Skillsets

The impact of cloud native trends as told by 2,100 technology decision-makers







Preface

Throughout the year, VMware Research and Insights partners with independent research institutions to interview thousands of IT executives, practitioners and developers on the most urgent technology issues facing enterprises today. This brief summarizes the views of over 2,100 technology decision-makers surveyed between March and June 2022 on the impact of application and cloud workload decisions on their business.

The enterprise IT forecast: Multi-cloud becomes the norm

Over the past 2 years, some trends that we once thought of as outliers are starting to emerge as the reality for most large organizations.



In early 2021, 73 percent of technology decision-makers in organizations with 5,000+ employees reported that their organization builds, manages or runs their applications across two or more public cloud providers.1

The same study in May 2022 revealed that the number of enterprises that leverage two or more public clouds has grown to 87 percent.2

More organizations diversify their application deployments



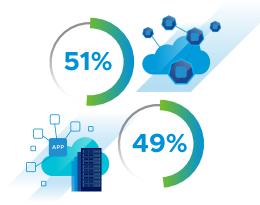
In 2021, 75 percent of organizations deployed applications across private cloud, public cloud, edge and colocation environments.3

Today, 80 percent deploy apps across all four of the major environment types.4

Modern applications overtake traditional



Developer teams report that the share of applications adhering to modern frameworks (applications architected as a collection of smaller services or microservices, often delivered via container) is now greater than apps with traditional frameworks.



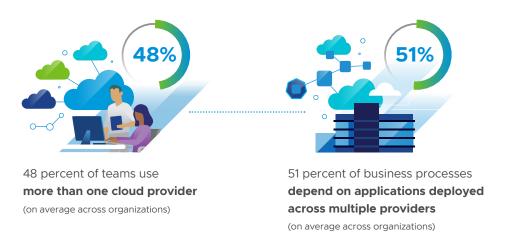
In 2022, 51 percent of apps are modern and 49 percent are traditional.5

The rise in these trends can be attributed to persistent waves of market uncertainty across the globe. Over half (62 percent) of executive IT leaders in our interviews agree that "2022 so far is just as unpredictable for our business as 2020." The market swings push IT leaders to embrace a flexible approach with infrastructure investments that are designed to adapt. More than three-quarters (77 percent) of executive IT leaders agree that they "struggle with scaling applications to meet changing levels of demand."6



Diverse teams need a diversity of cloud options

Another trend that surfaced this quarter is the emergence of multi-cloud at the team and business process level. Enterprise IT teams have been using multiple public cloud providers due to geographic requirements or acquisitions for a while, but now there is evidence that specific teams and line-of-business use cases are driving the adoption of multiple cloud platforms.⁶



On average, 38 percent of IT project budgets are funded from outside the IT department.⁷ Although this practice can make it more complicated for IT, it provides the line of business team more flexibility.

Organization-wide cloud strategies are also not exclusively controlled by IT departments. In fact, close to half (46 percent) of enterprise IT leaders report that "central IT and lines of business co-own the (cloud) strategy." The teams outside of IT that are most likely to influence cloud strategy are finance, customer engagement, and research and development.



Complexity across the organization requires new IT expertise

As more teams have more IT options available, IT practitioners (admins, operators, engineers and managers) report that their organization's multi-cloud strategy aims to build a culture of diversification.⁹ This means:

- Providing availability in key geographic locations
- · Aligning the needs of individual applications to specific cloud provider capabilities
- Meeting the diverse needs and requests of all users, teams and business units

Expanding platform options can also pose new security risks. A large percentage (88 percent) of enterprise executives agree that their organization is "expanding its disaster recovery and risk mitigation policies to govern [their] overall cloud strategy in 2022." Over half (63 percent) expect that their application environments will be the target of a breach in 2022.6

To close the gaps, IT practitioners need to evolve their current skillsets for the modern, diversified systems growing in complexity. Executive IT leaders identified the top-five skills that they are investing in to upskill their infrastructure and operations team.⁶

- 1. CI/CD for operations
- 2. Backup, recovery and resilience of protected data across platforms
- 3. Managed cloud database services and optimized administration
- 4. Application performance monitoring
- 5. Cloud cost management and optimization

Training the next generation of IT practitioners

Even as the challenges of more platforms, clouds, application types and environments seem to compound, IT leaders can seize this opportunity to grow their talent in the prioritized areas. With talent shortages impacting most industries today, current employees can double down on the modern skillsets and technologies that can deliver value to more teams across their organization.

IT teams already on this journey are seeing an impact on their bottom line. IT leaders who are prioritizing skill gaps, currently using VMware, and pursuing multi-cloud operations report the following KPI improvements (on average):10

26 percent less IT labor time spent on infrastructure

23 percent less downtime of tier-one applications

-26%

26 percent less total cost of operating infrastructure

23 percent fewer security incidents

25 percent less time and effort to provision compute resources (virtual machines, containers and so on)



22 percent faster time to migrate workloads between public clouds and data center

Ready to expand your team's skills for the future? Visit vmware.com/learning to get started.



Methodology and endnotes

The VMware FY23 H1 Benchmark study was fielded on behalf of VMware by Management Insight Technologies between March and May 2022. The custom research was conducted in North America (Canada and United States), Western Europe (France, Germany and United Kingdom) and Asia Pacific (Australia, China, India, Japan and New Zealand) using a combination of web and phone interview.

Responses were collected from 1,700 IT leaders and developers who specialize in decision-making for application workloads and infrastructure deployments. The sample targeted 10 percent SMB (2–999 employees), 30 percent commercial (1,000–4,999 employees) and 60 percent enterprise (5,000+ employees).

The VMware Executive Pulse Q2 study was fielded between May and June 2022. The quarterly study is fielded by Qualtrics.

Custom research was conducted in the Americas (Argentina, Brazil, Canada, Mexico and the United States), Europe (Belgium, France, Germany, Italy, the Netherlands, Russia, Spain, Sweden and the United Kingdom) and Asia Pacific (Australia, China, India, Japan and Singapore) using web-based surveys.

Responses were collected from 456 C-Suite and senior technology decision-maker respondents involved in app and infrastructure platform decisions, with a balance of VMware and non-VMware customers. The sample targeted 49 percent commercial (1,000–4,999 employees) and 51 percent large enterprise (5,000+ employees).

- 1. VMware FY22 H2 Benchmark. March 2021. (N=557 enterprise [5,000+ employee] technology decision-makers.)
- 2. VMware FY23 H1 Benchmark. May 2022. (N=1080 Enterprise [5,000+ employee] technology decision-makers.)
- 3. VMware FY22 H2 Benchmark. August 2021. (N=1178 technology decision-makers.)
- 4. VMware FY23 H1 Benchmark. May 2022. (N=1,765 technology decision-makers.)
- 5. VMware FY23 H1 Benchmark. May 2022. (N=353 developer technology decision-makers.)
- 6. VMware FY23 Q2 Executive Pulse. June 2022. (N=456 enterprise technology executives.)
- 7. VMware FY23 H1 Benchmark. May 2022. (N=1,754 technology decision-makers.)
- 8. VMware FY23 H1 Benchmark. May 2022. (N=1,449 technology decision-makers.)
- VMware FY23 H1 Benchmark. May 2022. (N=725 IT practitioners—admins, ops, engineers and managers—leveraging multiple public cloud providers.)
- 10. VMware FY23 H1 Benchmark. May 2022. (N=51 technology decision-makers pursuing multi-cloud operations initiatives using VMware currently who are focused on skills gaps as a key challenge and citing benefits from recent multi-cloud operations initiatives. Average improvement levels shown per segment.)

