

vmware®

CIO Priorities: Forcing Business to Evolve

VMware Market Insights Report, August 2021



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Foreword

Digital priorities continue to evolve

Following rapid change in the way we work due to COVID-19, long-term digital transformation goals have become immediate imperatives. Organizations have been forced to accelerate initiatives to continue to deliver their current products and services, and expand upon them for future growth. And although organizations have now had time to adjust to COVID-19-induced change, the need for transformation hasn't slowed down, it's only accelerating.

Between May and June 2021, we sought to learn what changes organizations are making, where they are investing, and what they are prioritizing. We surveyed 450 C-Suite and senior technology decision-makers from organizations around the globe with 1,000 or more employees.

What we learned was no surprise: Companies are laser-focused on supporting a hybrid workforce, prioritizing digital-first development, and building up cloud infrastructure while modernizing apps. And touching every area of their business is the need to keep all of their distributed processes secure.¹



Market forces

A changing workplace

As countries around the world have updated their COVID-19 restrictions, a new way of working has organically occurred. Pre-pandemic, a great deal of business was conducted face to face. On the flip side, during the most severe lockdowns of COVID-19, most non-essential business was conducted virtually.

Now, with restrictions loosening in some areas, CIOs are looking at a paradigm shift. The question on everyone's mind is: Will the way we work return to pre-COVID-19 standards with most people working on-premises? Or will employers continue to support a fully remote workforce? The answer is in between: Enter the anywhere workspace.

It's clear: Things are not going back to the way they were pre-COVID-19. So what does this new future look like?

92% plan to modify **physical space** and/or model for **in-person work**.

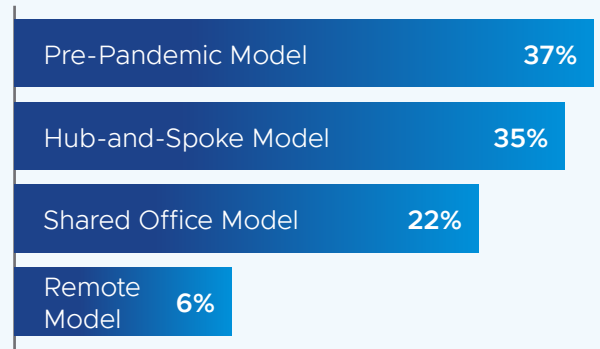
The vast majority of those we surveyed are undertaking some form of flexible working model. 37 percent of those surveyed said that they planned to return to a pre-pandemic model, with some adjustments to physical space. Meanwhile, 35 percent said they planned to use a hub-and-spoke model with similar offices across geographies, while 22 percent said they would adopt a shared office model with space for employees to use when needed. And only a small fraction, 6 percent, said they were planning to move to a fully decentralized or remote model.

The majority of respondents are, unsurprisingly, heavily invested in supporting remote work. On average, executives expect that about half (47 percent) of their workforce will be working from home three or more days per week, and 88 percent said that they planned to continue this new model for at least six months, with 51 percent saying they would for a year or more.

Furthermore, the majority (92 percent) of executives are empowering their employees with new remote workforce tools to improve processes and collaboration with customers.

One example of this is VMware customer Deutsche Telekom. At the start of the pandemic, the telecommunications company sent 180,000 of its employees home to work remotely. Because of transformational infrastructure they already had in place, they were able to supply their workforce with all the tools they needed to keep things running smoothly in only about a week. As a result of this quick pivot, Deutsche Telekom was able to avoid network outages for its customers.

The **vast majority** of those we surveyed are undertaking some form of **flexible working model**.



New workspace drivers and challenges

A distributed workforce presents both benefits and challenges. Respondents reported upsides including efficiency and being able to access skilled employees everywhere. They also cited employee preference and a reduction in cost.

The downsides represent the challenges of supporting in-office employees in addition to a remote workforce. On the one hand, organizations have to reduce the risk of COVID-19 transmission for those on premises. On the other hand, they must also secure remote users and endpoints, and maintain communication with both customers and employees when individuals can't be physically together.

Companies are investing heavily in infrastructure to support a hybrid workforce. The top areas of investment include extending infrastructure capabilities to support remote employees, and deploying edge infrastructure to distribute employee services. They're also devising new processes specifically for remote workers and building new applications designed to serve workers in this new model.

Top benefits of new workplace strategy



- 81%** Efficiency
- 63%** Accessing skilled employees anywhere
- 63%** Employee preference
- 58%** Cost

Top challenges of new office model



- 47%** Reducing COVID-19 transmission risk
- 42%** Maintaining high levels of customer service
- 41%** Securing remote users and endpoints
- 41%** Maintaining collaboration and communication

Market forces

The impact of digital-first

With a whole new post-COVID-19 world, a growing number of organizations are investing in digital-first initiatives. Among those polled, 80 percent of technology executives report that they have increased investment in new digital-first experiences since the start of the pandemic.

There were a variety of compelling reasons cited. One of the top reasons was the need to move an in-person engagement to virtual. With unpredictable COVID-19 shutdowns, companies have relied on digital experiences to operate on even the most basic level. But organizations are also finding that it isn't just about maintaining the status quo, with 61 percent using digital-first technology to create an entirely new revenue stream.

Real-world perspective

“...when you have a crisis, customers do not want to come back to the office to hand you trade documents because of social distancing rules. So, within a couple of weeks, we've implemented an application to enable customers to submit their documents digitally.

We've been able to move very quickly and nimbly because of our processes and the infrastructure we've put in place.”

Jimmy Ng, CIO, Group Head T&O at DBS Bank

61% of respondents are investing in **digital-first technology** to create a net-new revenue stream.

Our survey showed that investing in digital first paid off. More than 50 percent of respondents said that investment increased satisfaction and engagement with their employees. And more than 59 percent said that investment increased satisfaction and engagement with customers.



Market forces

Multi-cloud app strategies diverge

As the distributed workforce has taken shape, distributed infrastructure has also increased. The majority of those surveyed are relying on a multi-cloud infrastructure, with only 13 percent reporting that they only use one cloud provider.

But although the majority of respondents are using multiple cloud providers, some are expanding to additional providers, while others are consolidating. Just more than half expect to concentrate their apps with fewer cloud providers while the rest are diversifying their apps to more cloud platforms. Both those who are concentrating and those that are diversifying expressed similar needs: security, control and consistency.

The backbone of any multi-cloud strategy is the glue that holds it all together: a hybrid cloud platform with the built-in flexibility to run on as many (or as little) clouds as necessary.

Concentrating vs. diversifying

58% Total **concentrating** or **moving** in that direction

41% Total **diversifying** or **moving** in that direction

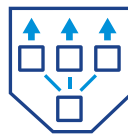


Reasons to consolidate:

53% Security and control

46% Ease of use

41% Lower costs



Reasons to diversify:

54% Ability to select from a broader range of cloud services

54% Security and control

49% Meeting the needs of diverse business unit requirements

Market forces

Transformation accelerates

When it comes to transformation, most respondents were on the same page. The need to modernize apps and infrastructure, and invest in the skilled labor to do that, was key. Nearly all executives, 93 percent, said they were expanding investment in digital skills development to manage new digital services across their organization. And the broad majority of executives, 92 percent, have committed their organization to apply modern software design, development and deployment processes.

Modernization is the key to transformation

“App modernization is key to delivering new services and great experiences—to employees and customers alike.”

Jason Conyard, Chief Information Officer, VMware

The key drivers for transformation were split evenly between internal and external goals, reflecting a holistic view of modernization. Some of the top internal objectives include improving existing IT capabilities, operational efficiency and employee experience. External goals focused on improving the customer experience, supporting innovation and improving customer acquisition.

And once again, timelines were greatly reduced due to COVID-19, with organizations speeding up implementation.

80% of digital transformation initiatives have **accelerated** since the start of COVID-19.



It's one thing to set a goal of accelerating change, but how have companies been achieving that? Respondents said their top actions have been securing the proper resources for new technologies, third-party help and talent, plus leveraging automated technology pipelines for rich data analytics and keeping the change process lean and focused on reducing risk.

Actions to achieve faster change



- 61%** Secure the proper resources for new technologies, third-party help and talent
- 59%** Leverage automated technology pipelines for rich data analytics
- 56%** Keep the change process lean, focused on reducing risk
- 42%** Identify executive sponsorship
- 42%** Minimize additional stakeholders and approval requirements
- 30%** Less collaboration time

An accelerated timeline doesn't come without risks, however. Organizations reported downsides including increased security risk, quality issues and increased costs. But along the way, organizations reported becoming more agile.

5 activities that are becoming more agile*



Increasing use of DevOps methodologies



Moving applications to the **cloud/** **deploying SaaS**



Adding **new digital capabilities** to existing products and services



Creating a **digital business model**

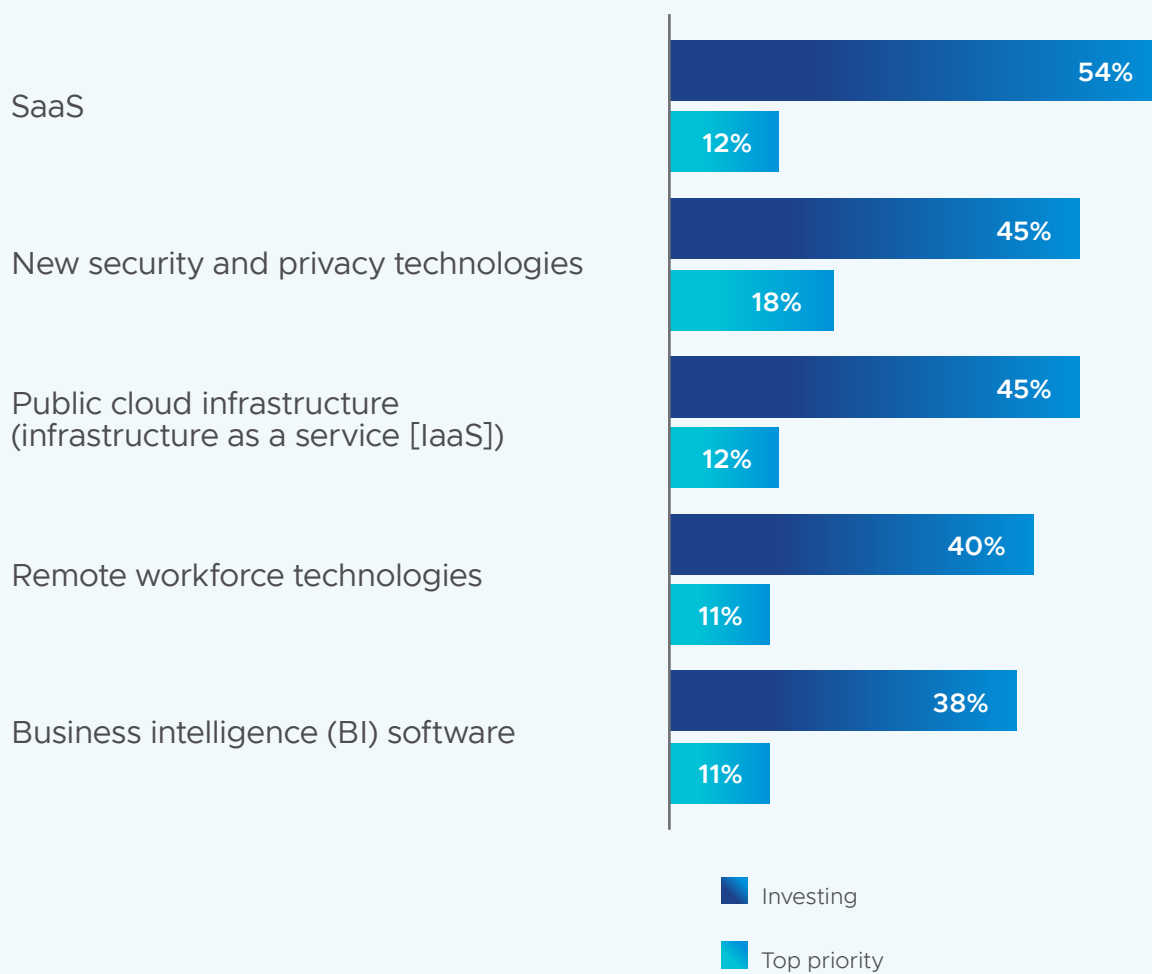


Training employees and executives to **improve digital skills**

*Compared to before the pandemic

Companies are putting capital behind their digital transformation goals. They're investing in software as a service (SaaS) to power distributed infrastructure and prioritizing new security and privacy technologies to protect distributed data. They're spending on public cloud infrastructure and supporting their remote workforce with new technologies to make business operate smoothly. Meanwhile, the companies we polled are also looking to the future, with the top emerging investments including 5G, AI and the Internet of Things.

Top 5 investments for digital transformation, 2021



Conclusion

As the initial urgency of COVID-19-related change transitions to a completely new paradigm that is here to stay, most companies are focused on supporting a secure, distributed workforce and infrastructure, as well as modernizing and investing in digital-first initiatives. It's clear that it's not enough for companies to simply react to current market challenges; they must be constantly expanding on their digital transformation.

Real-world perspective

“Everybody’s focusing on COVID-19, everybody’s focusing on trying to survive in these difficult environments, and I know how difficult it is.

But we should never forget the big purpose of staying connected, of international partnerships, of the cultural exchange across the globe. It’s always about getting things done at the end of the day. Not talking but doing.”

Tim Höttges, CEO, Deutsche Telekom



The VMware vision

Delivering multi-cloud services for all apps

VMware has a unique vision for the cloud market. We believe cloud is less about where you run apps, and more about how you deliver business innovation.

With this in mind, multi-cloud shifts from a source of complexity to a source of strategic advantage, where apps are built and deployed faster than ever, and new capabilities continuously added. It's an environment in which organizations have the freedom to deploy apps anywhere across a distributed cloud, and the ability to move apps freely to the best cloud—all built on a secure, resilient foundation where all apps are protected, anywhere.

To deliver on this vision, VMware brings to market a solution built uniquely for today's distributed, multi-cloud world. VMware Cloud delivers multi-cloud services that span the data center, edge and any cloud, including native cloud services. Optimized for both traditional and modern apps, VMware Cloud™ creates a single platform for all apps in any environment. And it unifies all environments with consistent operations and security, delivering the enterprise reliability, resiliency and governance organizations need, while significantly reducing total cost of ownership.

Why VMware Cloud?

37% increase in **developer productivity**, for a faster path to app modernization²

Fast cloud migrations, reducing the time from years to months²

82% increase in software to production through optimized **DevSecOps**²

59% lower TCO, with the added benefit of enterprise security production²

Proven enterprise capabilities to handle your needs



85 million production workloads



15 million total app workloads in the cloud



Unique multi-cloud strategy



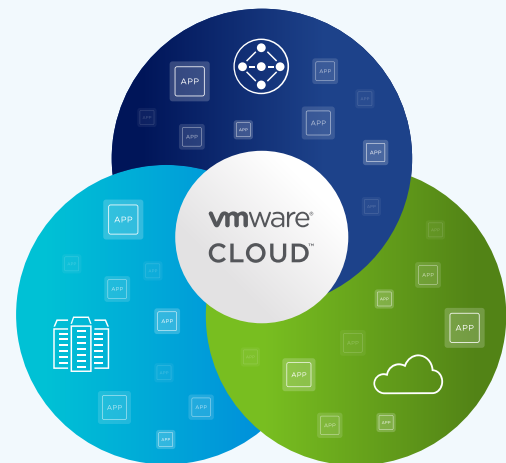
Powerful distributed **management, security** and **operations** solutions



4,300 VMware cloud providers building public clouds using VMware technology

VMware Cloud

Delivering multi-cloud services that span the data center, edge and any cloud



References

1. VMware. "Executive Pulse." June 2021.
2. VMware. "The Counterintuitively Fastest Path to App Modernization." Kit Colbert. October 2020

Research methodology

VMware Executive Pulse, June 2021

The VMware Executive Pulse Q2 study was fielded between May 2021 and June 2021. The study is fielded each quarter by Qualtrics. This online survey includes 450 C-Suite and C-1 senior technology decision-maker respondents in Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, India, Italy, Japan, Mexico, Russia, Singapore, Spain, Sweden, The Netherlands, the UK and the U.S. from organizations with 1,000 or more employees.