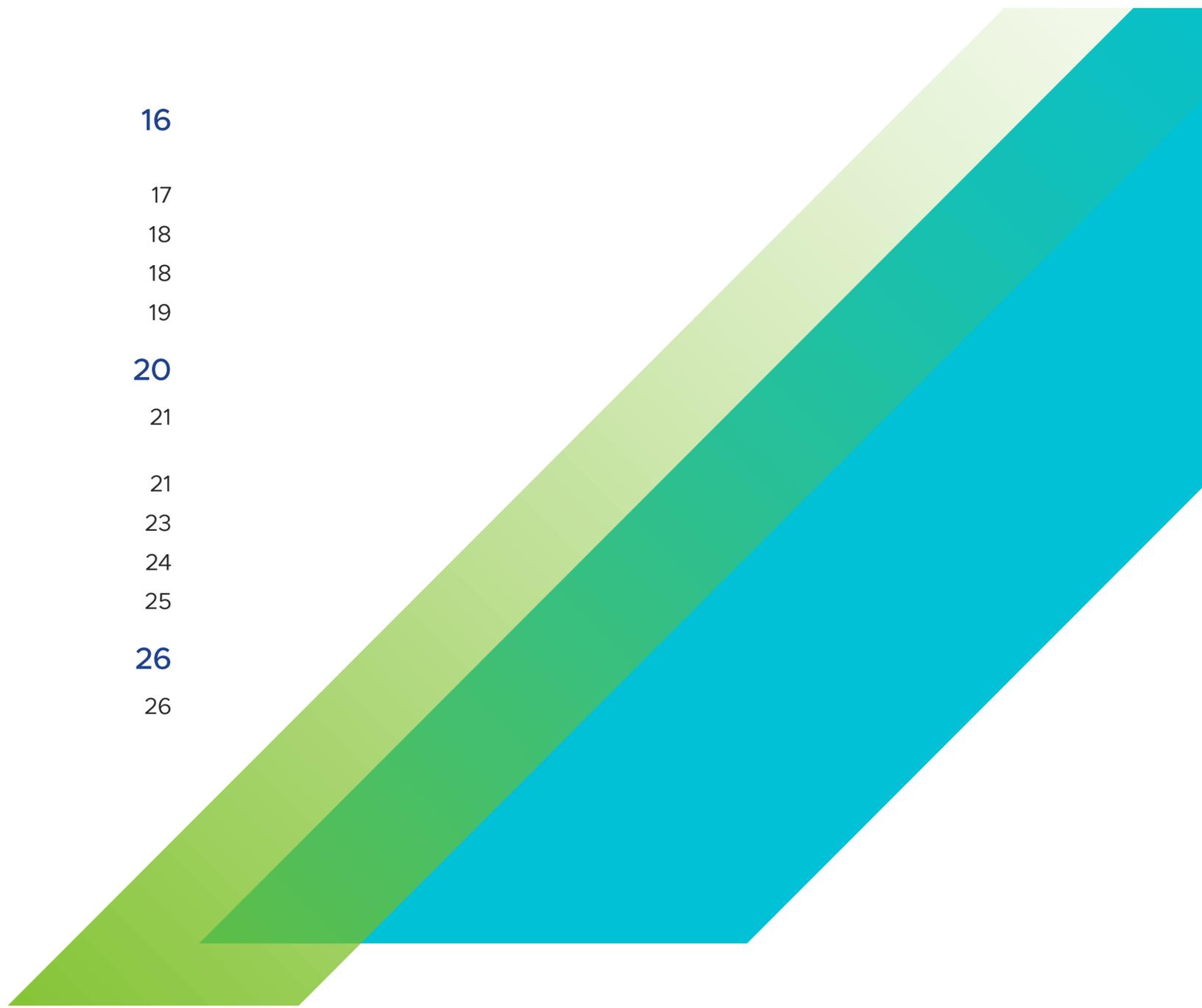# vmware®

Leading Transformation in a Rapidly Changing World

VMware IT Performance Annual Report 2023

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![vmware]

Executive Viewpoint

From the CIO

I sometimes wonder what it would be like to lead in times of calm and stability.

Wouldn't it be satisfying to commit to a strategy, then see it to completion along a straight line from start to finish? It's tough to imagine because it's not what the past three years—or arguably the past three decades—have afforded us. Leaders have become experts in pivoting and adapting to rapid changes: geopolitical unrest, macroeconomic uncertainty, supply chain interruption, skill shortages, and high-profile cybersecurity threats, not to mention the exciting changes brought about by emerging and transformative technologies.

As technology leaders, these are the cards we've been dealt. But I've always believed that success isn't determined by the cards you receive. It's about how you play them.

The theme of this year's IT Performance Annual Report is leading in a rapidly changing world. It's a reminder to all of us that moments of challenge are also often the greatest moments of opportunity.

When the world feels uncertain, we can root ourselves more deeply in our purpose and values. When a detour pops up, we get the chance to innovate and create as we find a new path.

By embracing rapid changes, we have the incredible opportunity for growth and learning, resulting in stronger, more resilient teams. The skills that got us where we are today are not the skills that will get us where we're going. Looking ahead, we're prioritizing investment in our people and in the skills of the future: multi-cloud architecture, developing and operating, AI/machine learning (ML), automation, privacy engineering, hybrid collaboration, and more.

While some, including myself, sometimes wish for a more peaceful life (or a better hand), I wouldn't trade the opportunity that comes from it. It's during these times that we learn what we're truly capable of.

I invite you to join us as we embrace change and welcome the opportunity it brings.

Jason Conyard
Chief Information Officer, VMware

Rapid global changes accelerate IT plans

Digital transformation can be defined as the incorporation of modern technologies into an organization's processes and strategies to achieve business goals, such as improving customer outcomes or operational agility. Examples include migrating applications to the cloud and automating company operations.

The idea of digital transformation came about as organizations around the world, forced into work-from-home scenarios, had dramatic proof of the value of digital technologies. Now, as leaders across the globe attempt to be resilient, new enterprise technology priorities are emerging. It turns out that future-ready organizations—possessing highly flexible technologies capable of fully supporting a distributed workforce—are best positioned to succeed.

Read our report to learn how VMware leads transformation in a rapidly changing world.

Keeping Pace
with the World

Keeping Pace with the World

Moving to multi-cloud can be chaotic

At some point, all organizations experience some sort of chaos, including VMware. We were scaling our operations to sustain a growing software portfolio as we embarked on transforming into a software-as-a-service (SaaS) and subscription-based company that empowers the ever-increasing number of VMware colleagues and partners.

Many would say it was much easier when we had a core set of technology solutions to manage in our data centers and most of our colleagues worked from a traditional office—but those days are gone. Now, apps are scattered across multiple clouds, and our colleagues are more likely to work from their backyard as they are from an office.

Factors driving digital transformation

Resiliency and business continuity

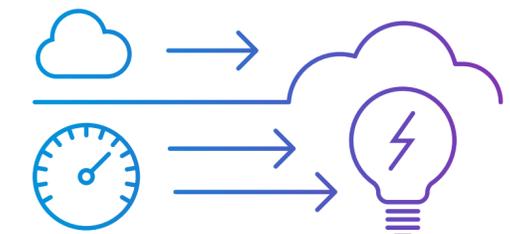**Rising customer expectations/ as-a-service economy**

Globalization and distributed workforce

Data as an asset to drive insight

New sources of value to drive revenue growth

Increased speed of innovation

VMware IT is at the heart of our digital transformation. This journey involves several challenges that led to our cloud chaos. These include:

- The adoption of a multi-cloud strategy to meet VMware business expansion and top-line growth expanded our technology footprint internally with applications deployed in our data centers and even more so externally as we leverage cloud-based services.
- Ensuring we build consistency across legacy environments and modern application platforms, which includes testing, staging and production, proves to be one of the most difficult. Maintaining consistency between disparate clouds has also been difficult.
- The container ecosystem evolves rapidly, and we take advantage of new open source projects to stay cloud-vendor agnostic. However, keeping up with open source changes is time consuming, and finding skilled resources to deploy and manage these solutions can be a barrier.
- The deployment of microservice applications required reimagining our security strategy. It is a shared responsibility between engineers, platform operations and security teams to understand container security needs are not the same as protecting monolithic apps running in VMs. This isn't a technological change—it's a cultural change.
- VMware IT infrastructure and engineering teams support two sides of the same coin: maintaining legacy three-tier applications while also managing new DevOps toolchains and cloud-based resources. This means traditional monitoring and logging but with new end-to-end observability of microservices and investments in automation and security. All of this requires a significant investment in skills and finding the right people.

- As remote is the new normal for VMware colleagues, they expect to have the same fast and stable access to our tools and applications to stay productive and engaged.
- A multi-cloud strategy offers more choices and flexibility but inherently has more platform complexity. Therefore, a robust IT governance model must be established to define the appropriate platform for each technology use case and solution (cost, availability, scalability, agility and data sovereignty). But this can be met with resistance, especially when working across different business groups.

VMware approached reining in this chaos by making the day-to-day services we provide to our colleagues and customers invisible and focusing on technology solutions that meet our business needs, provide a return on investments, and lead toward becoming cloud smart.

From cloud chaos to cloud smart

As we develop and refactor our workloads to be more cloud native, we must rethink how we host them. Our goal is to build a seamless platform stretching across our data centers and multiple cloud providers. As a result, VMware developers and business units can run their apps wherever needed, consuming infrastructure resources as a service. This lets our engineers take advantage of best-in-class cloud services and provides workload portability between clouds. That means the days of cloud lock-in will soon be a thing of the past.

To start, VMware IT built a modern application platform in our data center using the VMware Tanzu® portfolio of products, enabling VMware engineers to deliver software faster. The platform easily scales, provides the software tools necessary for a mature application supply chain, and reduces cost by enabling consistent, automated, development. We also empowered our teams by embracing a modern DevOps culture that encourages self-service and continuously delivers customer value with a rapid yet sustainable path to production.

The VMware Customer Connect™ portal is an example of an existing application that was refactored to be cloud native and leverages the VMware Tanzu modern application platform. Thousands of customers use VMware Customer Connect daily to manage VMware licensing, evaluate products, download software binaries, read documentation, and request support. We reimagined the portal by adopting agile development principles and leveraging microservices. These enhancements have resulted in the following:

- 99.95 percent improvement in service availability
- 40 percent improvement in response time
- 25 percent improvement in developer productivity, so we can build out more features and capabilities

By moving to agile development, VMware IT delivered more than 8,000 new features and capabilities in just one year, with a 50 percent reduction in delivery cost per feature—a meaningful impact to VMware colleagues, partners and customers.

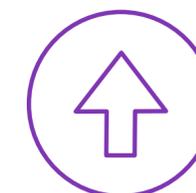**By rearchitecting the VMware Customer Connect application, VMware IT achieved impressive results**
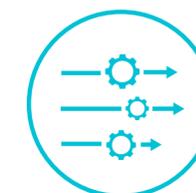
40%
Improvement in response time

25%
Improvement in developer productivity

99.95%
Improvement in service availability

But that was just the first step in our journey. VMware IT built a cloud-agnostic solution that enables extending our applications to a multi-cloud environment and increases our availability to 99.99 percent for business-critical applications. The project's first phase was recently completed, extending our platform from our data centers to AWS, leveraging the VMware Tanzu portfolio with native cloud resources. The next step is to build out the platform to Microsoft Azure and Google Cloud Platform.

This new environment allows us to implement a flexible and scalable modern application platform to meet our SaaS-based business priorities. The focus shifts to the app's requirements and where best to run and meet all those requirements—on-premises, hybrid cloud, or multi-cloud.

To ensure consistency across this cloud overlay, we use the VMware Aria™ portfolio of products and VMware Tanzu Mission Control™. This allows us to manage cost and optimize performance utilization, understand the best workload placement to meet the app's requirements, and guarantee consistent policies across any cloud. It gives us visibility into the complete array of VMware's IT assets, from multiple clouds to on-premises, and ensures we match the right application-driven infrastructure to the business outcome—taming the cloud chaos.

Adapting to new realities

VMware IT continues to lead during this unprecedented time of change. We continue to innovate how colleagues work and ensure the integrity of our products and solutions while delivering superior value to our customers.

Digital transformation requires all team members to embark on the journey together. It takes a willingness from everyone to continue to innovate new ways to connect people, processes, data, policies and systems.

We develop platforms that allow developers to build, run and manage mission-critical applications. We reduce costs by providing a consistent, automated development platform through technology optimization and deploying innovative solutions that ensure superior enterprise ecosystem security.

VMware success depends on all of us making wise business decisions. Organizations are only as strong as the investments they make into their teams. Our people-first mentality allows us to adapt and overcome the chaos through the performance of talented individuals. Together, VMware IT will continue to transform our business for years.

vmware®

"With our cloud-smart strategy, VMware is ready to conquer the complexity our customers face—empowering them to juggle VMs and containers, existing and new apps, data centers and clouds, and IT operations and developers. We give them the power to innovate faster with the confidence that their workloads will be resilient, more secure, and more cost efficient wherever they are deployed. Today, our customers play both offense and defense—accelerating their digital transformation (offense) while also optimizing costs and profitability (defense). VMware is best positioned to help them play offense and defense simultaneously."

Raghu Raghuram
Chief Executive Officer, VMware

Being Agile

Being Agile

Leading transformation efforts

VMware is in the middle of a business process transformation—from a perpetual-license model to both a subscription-based model for on-premises as well as SaaS. This drives digital transformation across all our major functions—products, go to market, and operations. This means that VMware IT now must deliver new digital capabilities to:

Build a world-class foundation platform on which we can sell our SaaS offerings to customers in the most effective way
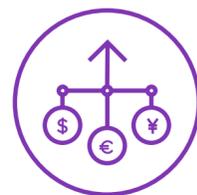
Enable seamless customer, partner and colleague experiences

Simplify commerce

Drive actionable insights through data

Delivering on these priorities requires many functions of the transformation be aligned and connected, starting with data and driving processes and systems. For instance, we made our processes nimbler and more frictionless, focusing on process engineering and process rationalization to make business operations more effective. We also reshaped policies by streamlining and standardizing them, covering areas such as renewals, sales compensation, and discounting to accelerate decision-making and support business growth.

Focusing on data

Data transformation goes beyond collecting and storing data as a single source of truth. It is about empowering our colleagues to operate with a data-driven mindset to produce actionable insights that can inform decision-making. With this data, we can create a baseline of where we stand today and drive progress toward specific business outcomes. An example of this is automating our reporting of monthly and annual recurring revenues (MRR/ARR) and churn to help us dynamically monitor our SaaS business growth.
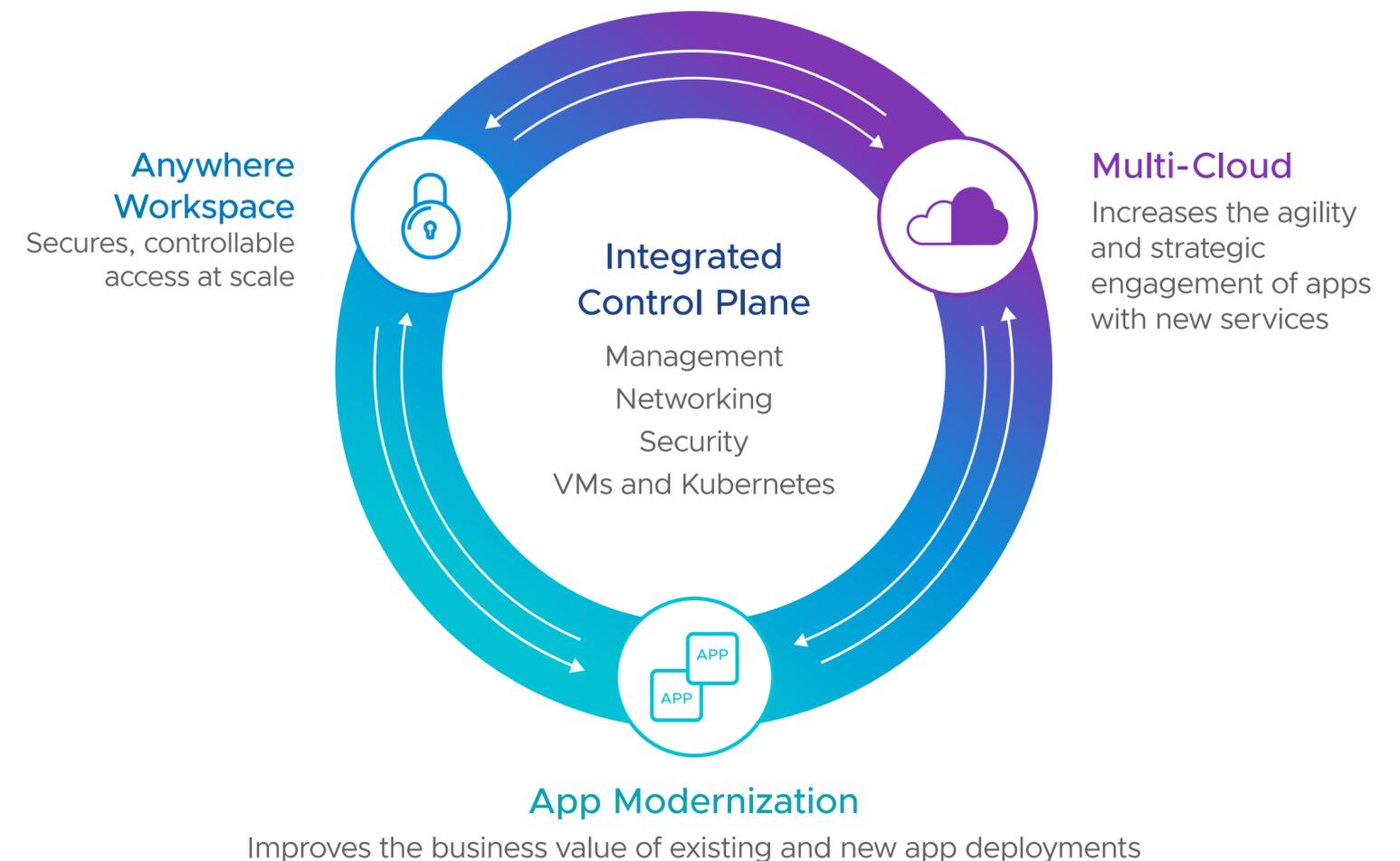
Systems are part of the equation

We needed to build systems with new digital capabilities, and we wanted to accelerate the delivery with a laser focus on critical aspects such as resiliency, performance, security, privacy and compliance. As we deliver new digital capabilities incrementally, we must make operational capabilities more robust, such as moving from monitoring to observability and proactive issue resolution.

Continuing to drive the necessary SaaS mindset underpins all of this, which is critical. To do this, we focus on enabling our teams to move from a traditional product mindset to a SaaS mindset and how we change our ways of working in line with a SaaS mindset. Some examples include:

• Moving from a focus on domain-specific, big-feature releases using a waterfall methodology or with limited agile principles to end-to-end business capabilities cutting across domains in a unified manner using agile methodology across all impacted teams

• Moving from a predictable scope/estimate/time/budget to an iterative scope, with upfront business alignment and incremental business value realization

• Moving from an output-driven focus on project completion to an outcome-oriented focus on value

• Improving speed to market

• Delivering multiple products simultaneously

• Enabling a faster and multiple release cadence through effective continuous integration and continuous delivery (CI/CD), automation, and continuous learning

• Focusing on resiliency and performance to meet SaaS standards

How we help customers transform

Anywhere Workspace
Secures, controllable access at scale

Multi-Cloud
Increases the agility and strategic engagement of apps with new services

Integrated Control Plane
Management
Networking
Security
VMs and Kubernetes

App Modernization
Improves the business value of existing and new app deployments

To put it briefly, our strategy focuses on a connected journey across all transformational areas—data, process, policies, systems and people—to create new possibilities for our business, transform ourselves into more nimble innovators, find better ways of working, adopt inventive business models, and deliver new and engaging customer, partner and colleague experiences.

To do all this while we are transforming, we must improve the way we support our current business models and customers. While most of our revenues were still generated from our perpetual business in FY23, we expect this to change in the coming years as we continue our focus on transformation and stand up a platform where we can offer our products through our SaaS business model in an incremental way. We will drive this dual model and scale it up on both sides. Whatever processes we put together must scale to deliver multiple products. Maturing and transforming our methodologies will not happen overnight; we need to gradually improve to reach our target maturity level, but we need to reach that target state as quickly as possible.

At the end of the day, we achieve balance with high customer centricity and a thorough understanding of business impacts, and then planning very thoroughly and synchronizing our multiple priorities and executing on them with the right methodology.

Building a SaaS-first mindset

The key to any transformation is for cross-functional teams to come together with goals and priorities aligned, and plan and execute together as one integrated team. This is the reason why we have an organizational-level goal to adapt our mindset to operate as One VMware. Another key is to focus on customers, censurability and collaboration. Whatever the activity, we will put customers in the center. Whatever we build, we will make it consumable by customers quickly and easily. Collaboration is equally important; cross-functional teams must work as one integrated team to achieve customer success and business values.

"Companies struggle to be agile when markets change. The cost of labor goes up. A pandemic hits. A competitor launches an incredible new product. If you wait until you must make a big move, you're way too late. Agility is the foundation of every elite organization: A company can only thrive through rapid change with systems already in place."

Mike Hayes
Chief Operating
Officer, VMware

## Using advanced data management to accelerate business decisions

VMware has historically used decentralized data management practices that operate in independent silos across the organization. This led to inaccurate use of data, duplicated efforts, and the inability to answer business questions in a timely manner. As a result, many challenges involving the VMware business and customer use of data emerged, including:

• Highly manual processes that negatively impact scalability and speed

• The inability to convert business needs to consumable data capabilities

• Poorly defined data quality standards across the organization

• The proliferation of analytic tools and dashboards

• Decision-making based on ML is now the de facto standard for a variety of tasks, from adding product features to nurturing the buyer's journey

• A culture of lack of experimentation showcased the impact of analytics and ML solutions

VMware is moving to a more federated data management model to enable consistent use of data best practices and empower data operations through intentional communication and coordination. VMware Enterprise Data Governance will develop and oversee enterprise data practices with bottom-up input from data leaders across the organization. The strategy ensures our data and analytics priorities follow a common and repeatable methodology by defining how we leverage data and analytics for various solutions. This enables efficient and effective use of data and analytics across the organization, making data an essential component of our digital transformation journey.

Teams incorporate seven foundational building blocks when focusing on this new strategy. They provide VMware with a simplified and structured path to the target state and are implemented across all business units and corporate functions, including:

• Policy, standards and data asset governance

• Reliable foundational data

• Data asset management

• Simplified data environment

• Data asset curation

• Streamlined, leveraged and productized analytics and insights

• Innovation and a digital workforce using AI and ML
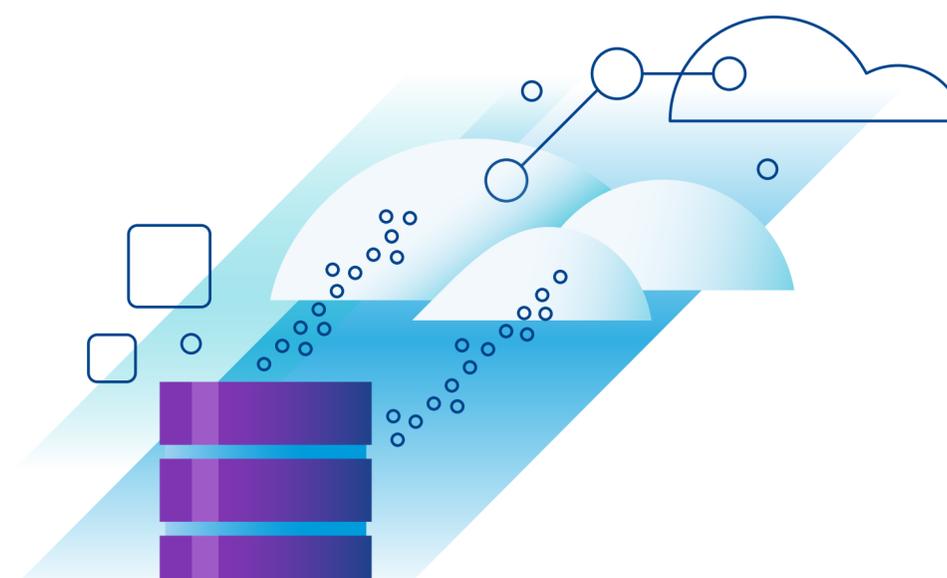
Business **not** as usual

This paradigm shift translates well to business decisions as VMware pivots to a SaaS and subscription model. Now, we can deliver transformational products such as curated data sets, robotics process automation, and a data marketplace where customers can use self-service search and access.
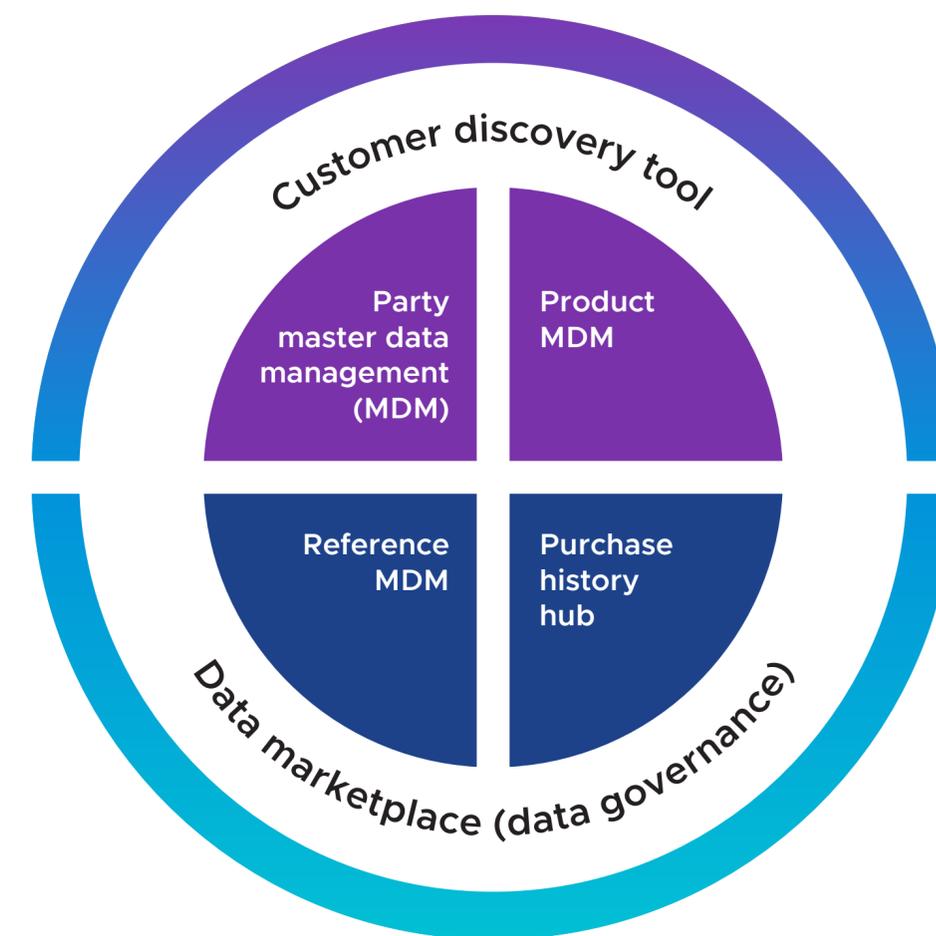
Speaking of data

The data that runs through VMware is like oil in a machine. If it's bad, the machine breaks. In our case, if the data is bad, business decisions might be determined using incomplete or false information, and ultimately people are unable to do their jobs.

Enter VMware Unified Data, our new next-generation data foundation. It is designed to provide a single, centralized source of consistent, accurate and complete customer and partner data for the entire company—data that powers 18 of our core commerce systems. It also enables a seamless transition to a SaaS business model as well as an ideal commerce experience across real-time markets (RTMs).

Benefits of a well-oiled machine

- Provides a single, consistent customer definition
- Addresses more than 100 critical data issues that impede commerce business
- Removes account proliferation and erroneous records
- Embeds unique customer IDs throughout sales motions
- Enables more consistent account management and customer visibility due to centralized hierarchy management
- Enables more powerful analytics with better data

Customer discovery tool

Party master data management (MDM)

Product MDM

Reference MDM

Purchase history hub

Data marketplace (data governance)

How data management works

The VMware data party master (names, addresses, etc.) is an integral part of VMware Unified Data that delivers two transformational, foundational improvements to our existing master data:

- It provides a significant increase in the quality and cleanliness of customer and partner master data (deduplication, standardized and corrected data fields). A new set of master data was rebuilt from scratch, directly from source systems using new tools and industry best practices.

- It reorganized and enriched customer and partner data to make it easy to access and use. Every customer has a unique record and identifier, and all hierarchies were rebuilt.

Several new capabilities were introduced on this foundation:

- Golden party record – A unique, cleansed, standardized, validated and enriched party record

- Unique identifier – A unique customer ID across the commerce process and customer journey

- Customer segmentation – Centralized and rule-driven customer segmentation

- Data enrichment – Real-time enrichment and attribution

- Multihierarchy – A comprehensive view of corporate relationships and the ability to define our own

- Industry verticals – Accurate and centralized industry classifications for an end customer

Enabling VMware customers to be future ready

Products and services

- Designed a specific set of solution offerings for workforce, cloud and apps

- Transitioned major engineering processes to accelerate innovation delivery

- Ensured security is built in across our products

- Increased our investments in multi-cloud solutions to maximize flexibility

- Created professional service offerings to enable our customers to respond, adapt and accelerate

Support and customer success

- Created new models for collaboration, escalation and resolution at a global scale

- Focused on providing proactive support by detecting issues before they occur, improving resolution time

- Expanded customer success services to better manage cloud costs and resources

- Increased investment in digital platforms (VMware Customer Connect)

- Delivered more self-help resources (VMware Customer Connect Knowledge™, product documentation, compatibility guides)

Focusing on People

Focusing on People

Accelerating a colleagues-first, customers-always strategy

The global pandemic—combined with remote working and a variety of other factors—ushered in a new enterprise era that revolves around the digital employee experience (DEX). By employing a DEX mindset, companies can realize a variety of advantages that attract the best talent—and offer a superior work life once onboarded—regardless of location.

An April 2022 Forester Consulting survey, "Optimizing Digital Employee Experience For Anywhere Work," found that[1]:

- Companies that invest in DEX are proven to be four times more profitable than those that don't.

- Companies that use advanced experience analytics via DEX are 7.3 times more likely to engage and retain high-performance employees.

- Organizations that positively resolve employee experience challenges with analytics can improve efficiency by up to 15 percent and increase profitability by 25 percent.

- Companies in the top quadrant on employee experience deliver 66 percent more digital workspace capacity to their employees than companies in the bottom quadrant.

44%
Improved reliability and redundancy

43%
Enhanced employee productivity

41%
Improved onboarding for remote employees

40%
Simplified management over employee endpoints

40%
Cost savings from license consolidation

38%
Reduction of attack surface

38%
Faster root-cause analysis and remediation

37%
Improved ability to capture more employee feedback

34%
Better insight into devices

Perceived benefits of implementing DEX based on an April 2022 Forrester Consulting survey of 537 IT decision-makers around the world. Percentages represent how many respondents ranked that issue as important to DEX.

1. A commissioned study conducted by Forrester Consulting on behalf of VMware. "Optimizing Digital Employee Experience For Anywhere Work." April 2022.

Prioritizing DEX

VMware made DEX a priority across the company, and that means our teams transform how work gets done. The DEX initiatives were developed out of necessity as VMware wanted to continue attracting and retaining the best global workforce.

Like any multinational enterprise, VMware colleagues access multiple systems and tools every day to accomplish their required tasks. Unfortunately, the traditional approaches to meeting such ever-growing and ever-changing demands result in unwanted friction. Colleagues have disjointed experiences with various applications, which negatively impacts productivity and overall morale.

The VMware version of DEX incorporates a holistic solution for onsite, remote and hybrid workers that enhances IT efficiency, speeds issue remediation, and substantially enhances the overall user experience. By aggregating, correlating and analyzing data from multiple internal and external sources, our teams can add intelligence that drives the VMware Anywhere Workspace. This translates to advanced dashboards and reports that help stakeholders truly understand individual and collective colleague digital workspaces.

Other benefits include colleague self-service apps and remote remediation. Now, IT can focus on mission-critical initiatives instead of labor-intensive support tasks. And colleagues enjoy better control over their work environment and can resolve many technical issues on their own. As with other DEX initiatives, this makes the enterprise agile and competitive. More importantly, it creates a positive work experience that can be duplicated anywhere, anytime, on any device.

Absolute security

None of this would be possible without reimagining what it means to be safe and secure in an era of remote workers, ever-changing apps, and different devices. That's why every aspect of our DEX infrastructure is interwoven with a comprehensive security program. It starts with Zero Trust concepts in which every app and transaction are micro-segmented to ensure the entire VMware ecosystem is protected at all endpoints, globally. But our obsession with security doesn't stop there. We developed a Beyond Zero Trust program that introduces a structured and powerful way of fulfilling security objectives. Instead of many decentralized projects under divergent interests, a centralized approach is implemented that involves all requisite stakeholders—including upper management. In this way, security is treated as a singular goal with a unified approach to its implementation.

> "We can't just look at digital transformation from a scale and systems perspective and forget the people component. You cannot discount the human element of that transaction. If you want that value to be fully realized, people need to be at the center."

Jason Conyard
CIO, VMware

We're human, after all

The question then arises: How does this directly impact DEX? Imagine having to spend five minutes proving your identity every time you made a credit card purchase, especially online. You would be tempted to either thwart the security measures or avoid using the credit card altogether. The same type of scenario also holds true for corporate workers. Colleagues who have negative experiences with security measures (passwords, endless login procedures) are less productive and make the enterprise more vulnerable to threat actors. After all, it is human nature to find the path of least resistance, even if that path means avoiding using an app altogether or keeping passwords in an easily discovered location.

VMware Zero Trust and Beyond Zero Trust security initiatives are driven by the reality of human psychology. This means all enterprise protection measures are essentially invisible, similar to when you buy something online with a credit card. VMware colleagues no longer need to remember an endless string of passwords or go through other onerous security procedures simply to access their apps. Security works the way they want it to work—without interference. That results in a tremendous boost in productivity as they are up and running with any given app—regardless of device or location—each time they log in. Yet every transaction is analyzed and micro-segmented behind the scenes, ensuring threat actors are always denied access.

With the shift to Zero Trust, VMware colleagues no longer need VPN. We are actively removing it from our devices, further reducing our network exposure risk.

Preparation is key to building our digital future

	Our preparation strategy	What we did
Experience	• Seamless colleague experience • Investment around building a connected experience	• Stronger connections among the distributed workforce • Rich conferencing and collaboration experiences • Out-of-the-box experience for laptop provisioning
Infrastructure	• End-to-end networking experience • Focus on resiliency, security and usability	• Global managed devices for nearly 40,000 colleagues • Frequent network failover testing • Extra VPN capacity allocated • VPN distributed worldwide; no single point of failure
Security	• Early architectural decisions with strong security hygiene • Pervasive thinking of any device, any place	• Endpoint security (Zero Trust) • Multifactor authentication via certificates • Passwords eliminated, creating a seamless security experience

Continuing the Transformation

Continuing the Transformation

The multi-cloud struggle is real

Cloud chaos is the category that 70 percent of nearly 6,000 recently surveyed organizations around the world fall into according to the November 2022 Multi-Cloud Maturity Index research report by Vanson Bourne commissioned by VMware.[2] Organizations in cloud chaos miss out on key multi-cloud revenue, profitability, and data monetization benefits that deliver competitive advantage. They are also unable to enjoy important multi-cloud data sovereignty and data security advantages that keep customers and colleagues loyal.

There's a better approach to multi-cloud adoption, yet few enterprise journeys have reached the tipping point—where the strategic advantages of multi-cloud outweigh well-documented complexities. Just 19 percent, or one in five, of organizations surveyed can be categorized as mature in their approach to multi-cloud, or cloud smart.[2] Fundamentally, cloud smart means taking an architected and planned approach to digital transformation and multi-cloud.

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2. Vanson Bourne commissioned by VMware. "The Multi-Cloud Maturity Index." November 2022.

Becoming cloud smart delivers strategic advantages

Important criteria separate cloud-smart organizations from those experiencing cloud chaos. These include:

- Application innovation
- Application resiliency
- Cloud security
- Data management
- Culture and teams
- Visibility and cloud spend

As VMware continues to grow and thrive, VMware IT remains committed to implementing emerging technologies that make possible what was once impossible. We are here to provide our colleagues and customers with the necessary tools to perform their work seamlessly and responsively. From checking emails to connecting and collaborating with associates around the globe, VMware IT works tirelessly to redefine how business gets done in the digital landscape and has found new and effective ways to work and devoted significant resources to implementing and supporting those changes, which include:

- Creating a uniquely secure foundation for virtual and physical environments at VMware. This enables an unobtrusive experience regardless of user, device, location or app—one that can instantly and seamlessly adapt to any business environment, no matter how disruptive or unexpected.

- Reinventing our services and processes to provide solutions that have significantly improved how work gets done. The result is greater control, reliability and overall productivity while improving application performance and quality.

- Delivering a modern application platform to build, run and manage our legacy and custom-built applications. This platform enables VMware IT developers to streamline their application supply chain with modern-day DevOps principles, improving customer experience, boosting productivity, and increasing availability.

- Simplifying, standardizing and automating SaaS business processes, policies and systems by implementing SaaS and subscription commerce, a holistic offer-to-cash ecosystem supporting the VMware transition to SaaS and subscription.

- Helping companies accelerate their multi-cloud goals through freedom of cloud choice, agility and cost-efficiency with VMware Cloud Universal™.

- Providing a centralized source of consistent, accurate, and complete customer and partner data for the whole company with VMware Unified Data, powering 18 of our core commerce systems, including Salesforce, SAP and Oracle.

- Simplifying and streamlining the deal management process with Configure Price Quote (CPQ), while improving the quality of deals and increasing scale.

- Enabling a unified route to market to connect and bring together multiple partner routes to market for effective scale, acceleration, activation and monetization of the indirect selling motion in VMware.

- Making it easier for customers to do business with VMware via self-service and modernized experiences with digital customer experience engineering. Simplifying employee experiences enables colleagues to drive adoption, proactively manage renewal risks, and provide value-driven customer experiences.

- Using the subscription revenue database, which reports 65.7 percent of total VMware overall subscription revenue by onboarding VMware products, such as the VMware Aria Suite™ (formerly VMware vRealize® Suite), VMware Aria Operations™ for Networks (formerly VMware vRealize Network Insight™), VMware NSX®, VMware Carbon Black®, VMware Tanzu®, VMware Tanzu Application Service™, VMware Tanzu Kubernetes Grid™, and VMware Tanzu Mission Control™.

- Making VMware an easier, simpler place to do business with technology optimization. This resulted in more than $6.5 million cost savings for VMware in 2022 and simpler processes by retiring apps, migrating nontechnical support flows, and using VMware Aria Operations for Applications (formerly VMware Tanzu Observability™ by Wavefront) to enable better traceability of microservices.

Important criteria separate cloud-smart organizations from those experiencing cloud chaos

- Application innovation
- Visibility and cloud spend
- Cloud security
- Data management
- Culture and team
- Application resiliency
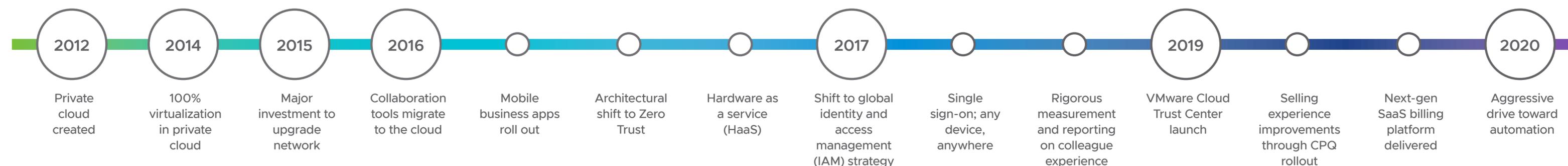- Scalability

vmware®

Where we've been

The past few years saw rapid changes in society and business become the norm. Technology also saw a fair share of rapid changes, such as the move toward multi-cloud, which presents huge promise to businesses and individuals.

Against this backdrop, VMware IT continues to innovate in technology to win the multi-cloud enterprise with VMware Cross-Cloud™ services. The key is digital transformation—the incorporation of modern technologies into an organization's processes or strategies to achieve business goals.

Our next phase of digital transformation is multi-cloud—the distributed, heterogeneous world of applications and users across public clouds, data centers, and edge that customers use to power their business.

The adoption of multi-cloud is a true journey—an act of moving from one place to another as well as a long, sometimes painful, process of enterprise change and development. Organizations eager to gain the competitive and economic advantages of multiple clouds can also realize spikes in complexity, cost and security concerns. That's the beginning of cloud chaos.

Key milestones in our digital transformation journey

2012	2014	2015	2016				2017			2019			2020
Private cloud created	100% virtualization in private cloud	Major investment to upgrade network	Collaboration tools migrate to the cloud	Mobile business apps roll out	Architectural shift to Zero Trust	Hardware as a service (HaaS)	Shift to global identity and access management (IAM) strategy	Single sign-on; any device, anywhere	Rigorous measurement and reporting on colleague experience	VMware Cloud Trust Center launch	Selling experience improvements through CPQ rollout	Next-gen SaaS billing platform delivered	Aggressive drive toward automation

Where we're going

VMware IT is at the forefront of a significant reinvention by modernizing our business and customer-facing applications, both on-premises and in the public cloud. VMware IT understands the importance of reconciling the operational need to become more agile while ensuring there is no impact on business.

But reinvention isn't easy. It takes leadership, vision, perseverance and a significant dose of courage.

Over the past year, we identified several areas to focus on to continue transforming and achieve the maturity and scale we want in the most effective manner. We are taking several steps to balance transformation across all areas:

- Working in an integrated manner – To deliver end-to-end business capabilities, there are different engineering teams across several different domains that need to plan and work in an integrated manner, deliver together, and deliver as frequently as they can so that business can consume end-to-end business capabilities, and we can achieve incremental business value realization.

- Delivering more frequently – If we improve how frequently teams can deliver, we can mature the DevOps and CI/CD of every tech stack involved to improve overall developer productivity. Then developers can truly focus on building the business changes and rest assured that CI/CD tasks are fully automated.

- Working simultaneously – We can't transform sequentially—we can't build a foundation platform then build partner experiences, then build master data management systems, and so on. Because of this, we need a mechanism where we can simultaneously work on several transformation areas or products at the same time and tightly manage their interdependencies. So, we are exploring adopting best practices from a scaled agile framework to proactively plan and manage interdependencies between products and progress without much rework or technical debt.

- Improving operational capabilities – While we deliver rich business capabilities, we also need to focus on improving and maturing our operational capabilities to better serve our customers by focusing on security, compliance and upgradability—all balanced with new feature delivery.

IT lessons learned

- A seat at the table – Technology products are essential for innovation, but we need to make certain there is a return on investments. We must approach these investments with a business mindset. IT is no longer just a supporting member; technology leaders are critical for driving innovative solutions and new opportunities. Our company's success depends on us making wise business decisions.

- People-first mindset – Organizations are only as strong as the investments made in its teams. By having a people-first mentality, unlocking each team's potential, and removing roadblocks, we can harness their skills and abilities to transform our business.

With a comprehensive portfolio of multi-cloud solutions and services, including VMware Tanzu, VMware Cloud™, VMware Aria, and VMware Anywhere Workspace solutions, VMware empowers organizations to successfully navigate their multi-cloud journeys and become cloud smart.

VMware on VMware

As first adopters of VMware technology, our global IT subject matter experts (SMEs) are uniquely positioned to provide feedback to research and development (R&D) and share stories with customers on our operational experience, including the benefits and challenges of using VMware products globally at scale. We partner with the field and sales organizations to share our wealth of knowledge and best practices with customers via Zoom webinars, 1:1 customer meetings, and small-group roundtable discussions.

IT professionals respect the credibility and experience of their peers, our SMEs, who already use the products and services they plan to buy and implement. This gives customers more confidence to use our products, overcome concerns about getting started, and better understand how to implement them. We publish key findings on our microsite under Resources; in our blogs, SoundCloud, Twitter and YouTube channels; as well as in presentations for customer and industry events.

Learn more about VMware IT and our work

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