vmware®

Three Ways to Make Cloud Your Business

A guide for I&O leaders building a future ready operating model to embrace new strategic responsibilities without compromising current activities

The Changing Role of I&O

Three Key Responsibilities
for I&O Leaders

Three Opportunities,
One Solution

Make Cloud Your Business with
vRealize Cloud Management

The Changing Role of I&O

The keeping-the-lights-on aspect of IT has never been considered particularly glamorous. Not long ago, whether IT infrastructure and operations (I&O) could or even should run as more than a cost center was debated. With software gaining in importance, IT teams began to separate: the innovation side and the predictable side. Fast-forward to today, and organizations of all sizes and types have never been more grateful for and dependent on their I&O leaders.

I&O teams are the ones on the frontlines of business continuity through IT reliability, stability and security in the face of tremendous change. In short, doing heroes' work to ensure digital resources support macro-economic realities and the disappearance of the traditional office. Now more than ever, I&O organizations must adopt future ready solutions to maximize existing IT investments and prepare for tomorrow, starting today.

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Suddenly, I&O professionals are working harder than ever to meet new and different demands:

- Burst capacity and flex infrastructure to keep operations humming

- Accelerate enterprise moves to new, multi-cloud environments while adding responsibilities for the application services platform

- Provide infrastructure and solutions to enable remote working

And more responsibilities are now regularly being added to their already long to-do lists as CEOs and board members look to I&O professionals to serve their organizations even more:

- Maximize the ROI on existing and new investments

- Manage hybrid and multi-cloud environments efficiently while reducing operating complexity and siloes

- Transform existing infrastructure to support modern, cloud-native apps in the digital world

- Minimize organizational impacts and the need to re-skill or retrain operators when adopting new tools and processes

How can your I&O leaders add these new strategic responsibilities without compromising current activities? This ebook offers insights and a path to making cloud your business by adopting an intelligent hybrid cloud management solution.

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How I&O Groups Have Become Organizations' Advantage

Organizations with world-class I&O functions in the cloud achieve critical performance advantages across services, agility, efficiency and scalability metrics, according to a recent McKinsey report.

World-Class I&O in the Cloud Drives Significant Benefits

▶ **Service**

- **75% reduction** in complexity

- Up to **50% improvement in reliability and availability**

- **Twice as good customer service** for product teams and engineers

▶ **Scalability**

- **Weekly replenishment of machines,** allowing product teams to scale and grow

- **Start small and grow with demand** to allow new sites to break even in less than one year

▶ **Efficiency**

- **Efficiency gain of up to 20%** within 18 months of deployment

- Continued focus on efficiency can **help achieve 5% to 10%** year-over-year reduction in overall costs

▶ **Speed**

- **Up to 50% faster** qualification of new technology

- About **four times faster** capacity deployment

SOURCE: McKinsey. "Transforming Infrastructure Operations for a Hybrid-Cloud World," October 2019.
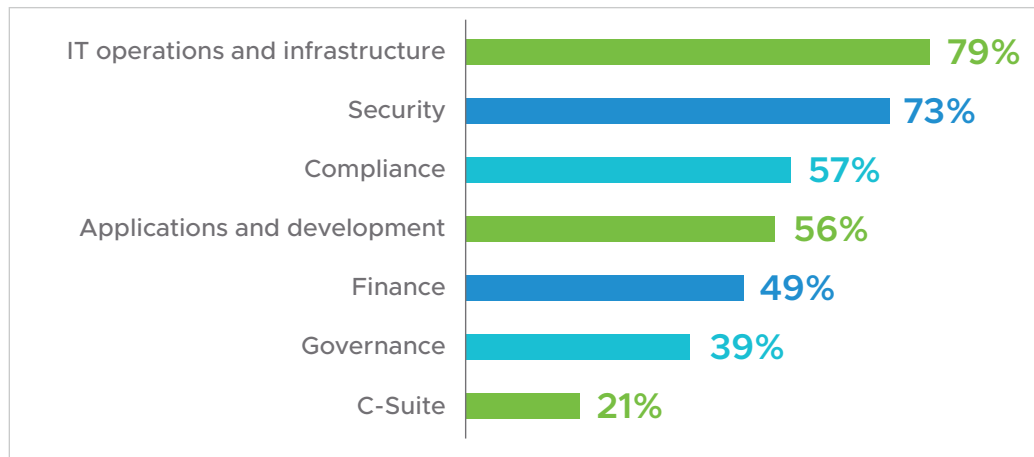
It's a time for I&O to embrace this perception-changing moment to think beyond compute, storage and networking to enabling innovation with consistent infrastructure and operations. It's also a time of professional and personal growth so you—and your organization— aren't left behind.

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Why Does a Cloud Management Solution Matter?

Organizations today strive for top-line growth and bottom-line improvement. To significantly elevate the top line, you need to innovate. This means building and providing digital services as fast as possible to meet line-of-business needs as well as overall corporate objectives. To boost the bottom line, your teams have to deliver above-market performance while being efficient and agile. Add these two goals together and look for the fastest way to achieve them, and you get cloud.

Recent surveys show I&O is rising in importance as the move to the cloud accelerates.

Which of the following roles in your organization are involved in the success of your public cloud infrastructure investment?

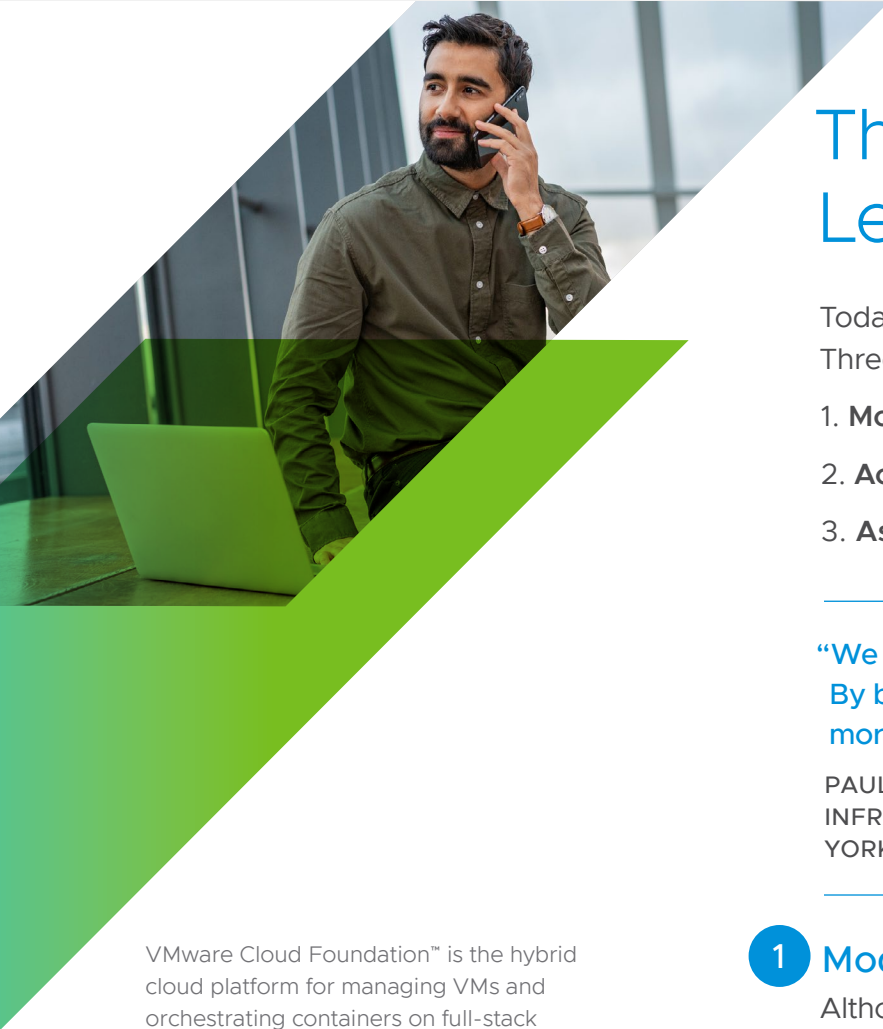| Role	Percentage
IT operations and infrastructure	79%
Security	73%
Compliance	57%
Applications and development	56%
Finance	49%
Governance	39%
C-Suite	21%

SOURCE: CloudCheckr. "The Cloud Infrastructure Report," 2020.

You can truly make cloud your business with an intelligent hybrid cloud management solution.

- Accelerate innovation with quick and easy access to services
- Gain efficiency by improving visibility and automation
- Improve control and mitigate risk through unified operations and governance

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Three Key Responsibilities for I&O Leaders—Some Old, Some New

Today's I&O leaders have to accept new responsibilities while managing the old ones. Three of the top responsibilities today include:

1. **Modernizing IT** from its current state: an existing—but still challenging—responsibility

2. **Accelerating cloud evolution:** part of I&O's traditional terrain, yet of increasing importance

3. **Assuring developer productivity:** brand new territory to explore

"We needed to bring everything together to help us move forward in a more agile way. By being better able to understand our virtual estate, we can start to be smarter and more efficient."

PAUL BAYLEY, SENIOR
INFRASTRUCTURE ENGINEER
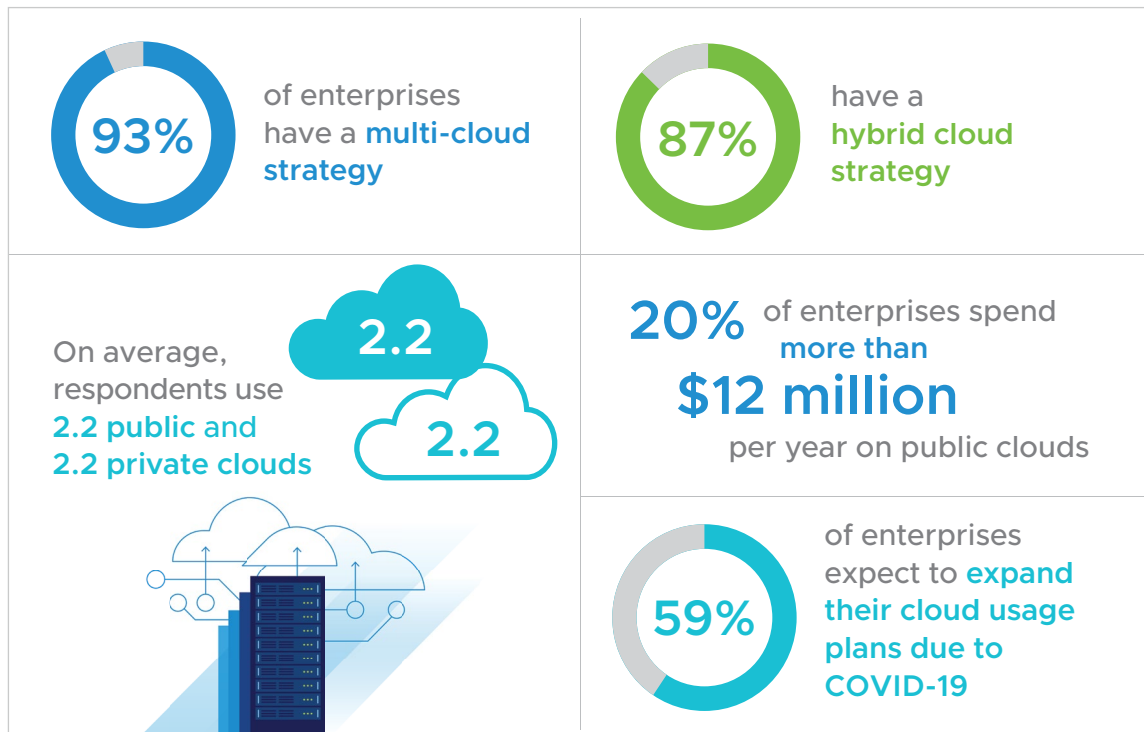YORKSHIRE WATER

① Modernize IT

Although I&O leaders have been mandated to modernize IT for some time, a modern IT environment means something quite different than even two years ago. Beyond keeping compute, storage, and networking refreshed and current with industry standards, it now means considering those traditionally hardware-based IT components in software as hyperconverged infrastructure (HCI). It also includes deploying hybrid and multi-cloud environments as well as embracing emerging technologies, and ensuring all components are managed with a consistent, intelligent hybrid cloud platform.

VMware Cloud Foundation™ is the hybrid cloud platform for managing VMs and orchestrating containers on full-stack hyperconverged infrastructure technology.

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Public Cloud Adoption Continues to Accelerate

In fact, I&O professionals are not evolving infrastructure these days as much as they are completely reimagining it. The goal: for the organization to operate its private clouds like public ones.

93% of enterprises have a **multi-cloud strategy**

87% have a **hybrid cloud strategy**

On average, respondents use **2.2 public** and **2.2 private clouds**

2.2

2.2

20% of enterprises spend **more than** **$12 million** per year on public clouds

59% of enterprises expect to **expand their cloud usage plans due to COVID-19**

SOURCE: Flexera. "Cloud Computing Trends: 2020 State of the Cloud Report." May 21, 2020.

How to Modernize IT

The path to successfully operating a private cloud like a public cloud includes building a software-defined data center (SDDC), on a platform such as VMware Cloud Foundation, that delivers virtualized compute, storage and networking and these essential cloud management capabilities:

- **Speed service delivery and reduce errors** — Enable self-service provisioning, automated performance, and responsive capacity management, simplifying operations and lowering costs.

- **Reduce downtime** — Predict, prevent, and troubleshoot across multiple clouds with app-aware monitoring and intelligent remediation.

- **Continuously optimize app performance** — Use artificial intelligence (AI)-driven automated workload optimization and placement capabilities to keep your infrastructure reliably available.

- **Improve efficiency and speed time to value** — Streamline operations by automating capacity and cost management as well as provide optimization recommendations, cost visibility, and guided onboarding for faster decision making.

- **Manage risk** — Leverage integrated configuration and compliance controls to help you mitigate the risk of not meeting increasing regulatory burdens.

- **Speed provisioning** — Enable programmable provisioning and enforce consistent infrastructure with Infrastructure as Code.

- **Dynamically self-tune infrastructure** — Use the latest advances in AI and ML to optimize configured KPIs for the virtual infrastructure.

However, depending on private cloud alone is no longer the best option for organizations. Increasingly, I&O leaders must move infrastructure to the public cloud to sustain competitiveness and agility in a changed world.

Improved IT efficiency at insurer Gilai provides the freedom to "anticipate future needs of the agencies we support" which matters because the job of CIO is changing. The focus is less on the technology and more on the end-user: "We have to make IT understandable, to remove the complexity."

SANDRO LENSI, CIO
GILAI

(read more)

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2 Accelerate Cloud Evolution

The pandemic proved the worth of cloud more effectively than all the pilot initiatives and ROI analyses that organizations had tried in the past. Today, the question isn't whether to move to the cloud. It's how fast you can get it done, and how many different clouds you need. For the second core responsibility—again, a familiar one—I&O leaders need to accelerate their move to the cloud while achieving maximum ROI.

70% of organizations are actively engaged in cloud migration, and roughly half of companies (56%) are planning to migrate more than half of their application estate to cloud.

SOURCE: Management Insight Technologies, commissioned by VMware.
"The State of Application Modernization and Hybrid Cloud Computing." February 2020.

But how? A single cloud delivery solution with consistent infrastructure and consistent operations across all environments is a best practices approach. It also helps standardize automation and robust governance.

How to Accelerate Cloud Evolution

The benefits of accelerating hybrid and public cloud adoption with the right cloud management solution are many:

- **Gain unified visibility** — You have complete visibility across all critical apps, no matter where they live.

- **Consistently deploy applications to any endpoint** — Cloud-agnostic provisioning means you can have as many clouds from as many vendors as you need.

- **Choose the most cost-effective deployment environment** — You get to decide what works for your organization across private and public clouds.

- **Confidently migrate applications** — You enjoy a full view of component dependencies, network requirements, and your security posture so migrating applications is simpler.

- **Ensure ongoing compliance** — You can be confident that your security policies are being followed by having total network visibility across multiple clouds and branches.

Indeed, the more cloud-agnostic the solution, the better the experience. A proven, cloud management solution provides intelligence and consistency to help with all of this. With the use of a leading cloud management solution, you can address this second responsibility with great confidence of success.

But as if you didn't have enough to think about, you're now facing a third responsibility. And it's a new one for I&O. You must become true partners with both developers and the business so you can ensure that developers can be fully productive. Yes, developer productivity now falls into I&O's responsibilities.

"From an internal perspective, we've benefitted from a standardized platform, simplified processes, and improved automation. It makes the management of the cloud more efficient, all thanks to the VMware Suite of products."

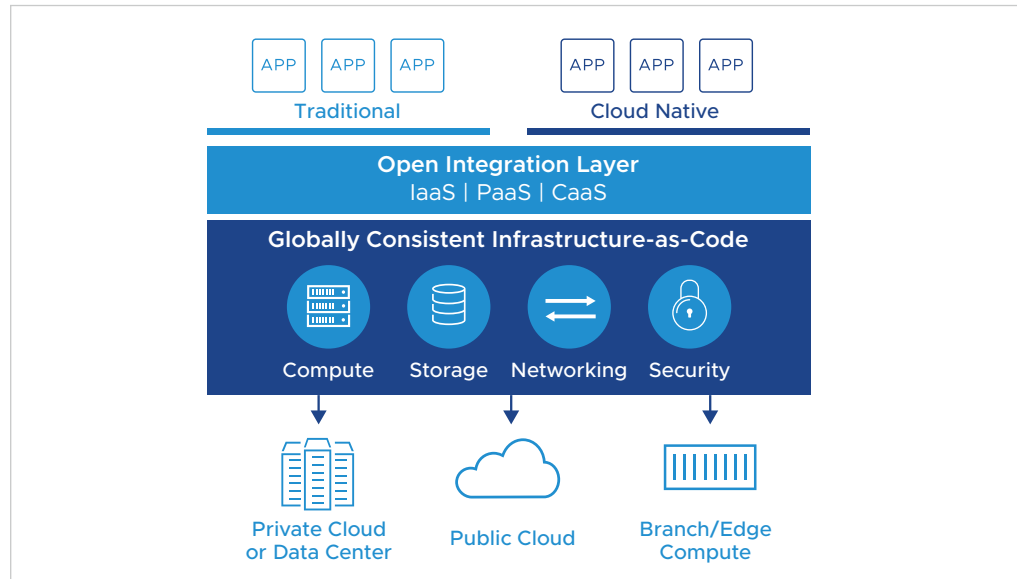MARCO HOCHSTRASSER, HEAD OF CLOUD PLATFORM DEVELOPMENT SWISSCOM

(read more)

3 Assure Developer Productivity

How much does I&O have to do with the productivity of the development team? Considering its increasing dependency on rapid prototyping and code delivery, plenty.

Closer partnership with developers means providing the right development environment to support modern app-development paradigms. These include creating containerized workloads and using microservices to build cloud-native apps under the umbrella of fast-moving DevOps and Agile principles. This all requires a whole new suite of IT management solutions for your I&O team.

Traditional: APP APP APP

Cloud Native: APP APP APP

Open Integration Layer
IaaS | PaaS | CaaS

Globally Consistent Infrastructure-as-Code

Compute · Storage · Networking · Security

Private Cloud or Data Center · Public Cloud · Branch/Edge Compute

How to Assure Developer Productivity

Key cloud delivery solution capabilities for accelerating the delivery of developer-ready infrastructure help I&O organizations to:

- **Streamline the developer experience** — Speed time to deployment with Infrastructure as Code. As you may know, Infrastructure as Code is a way to enable developers to automatically provision and manage the application technology stack with software, rather than having to manually configure every hardware device and operating system individually. Infrastructure as Code dramatically cuts deployment time.

- **Match developers' agility and ability to scale quickly** — Incorporate best practices from the DevOps world into traditional I&O processes with a cloud delivery solution. That way, your infrastructure will be agile and always aligned with the rapid-fire pace of your modern DevOps team.

- **Provide developer platform services** — Provide the tools to assure availability and high performance with embedded Kubernetes so developers can easily automate and manage containerized apps.

- **Maintain control and visibility over VM- and container-based infrastructure** — Assure developer productivity with policy-based optimization of costs, tiers, location, availability, security, compliance, and service level agreements (SLAs) with an intelligent cloud delivery solution.

By providing an engine of enablement, you can ensure developers do what they're good at—building code—without worrying about where the infrastructure is coming from, whether on premises or cloud. They can simply code to Kubernetes APIs or continuous integration and continuous delivery (CI/CD) principles while I&O teams easily take care of the rest.
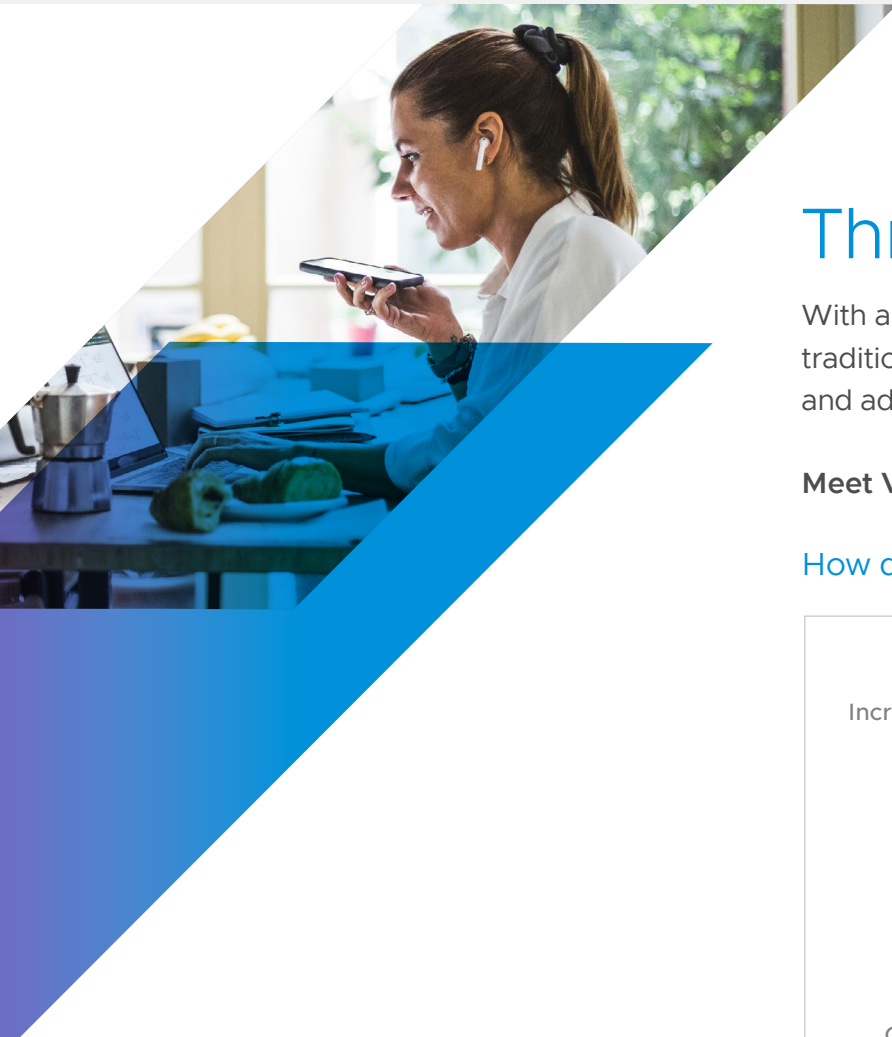
"Through VMware vRealize Automation, Ceridian can adopt an Infrastructure-as-Code operational model that helps us to ultimately deliver new software releases to market faster."

WARREN PERLMAN, CIO CERIDIAN

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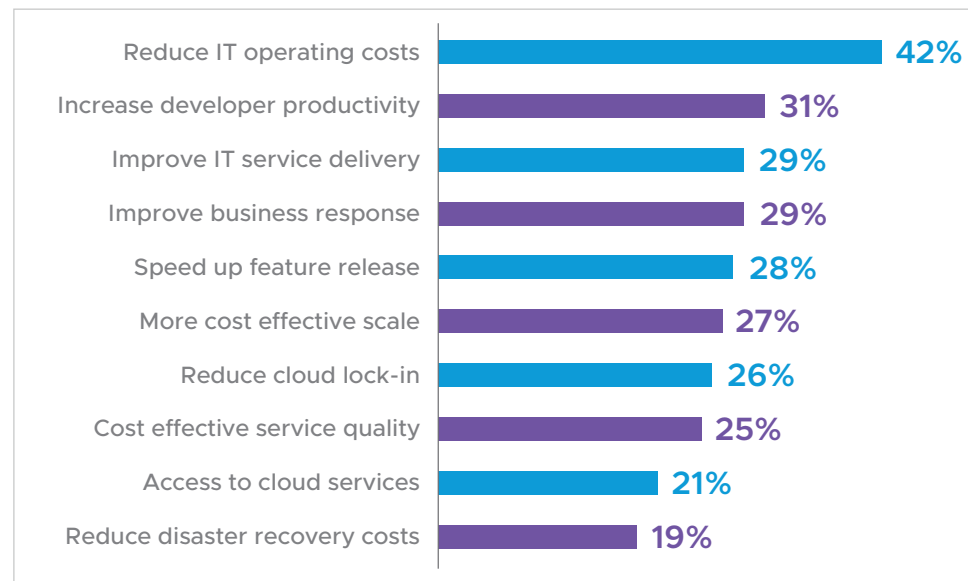
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With an intelligent hybrid cloud management solution, I&O leaders can deliver on traditional goals—modernizing infrastructure while accelerating cloud adoption— and address their new responsibility of managing modern development environments.

Meet VMware Cloud Foundation with VMware vRealize® Cloud Management.

How does a single operating model help?

Reduce IT operating costs	42%
Increase developer productivity	31%
Improve IT service delivery	29%
Improve business response	29%
Speed up feature release	28%
More cost effective scale	27%
Reduce cloud lock-in	26%
Cost effective service quality	25%
Access to cloud services	21%
Reduce disaster recovery costs	19%

SOURCE: Management Insight Technologies, commissioned by VMware. "The State of Application Modernization and Hybrid Cloud Computing." February 2020.

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What is VMware vRealize Cloud Management?

VMware vRealize Cloud Management is the intelligent hybrid cloud management solution empowering you to successfully take on all three responsibilities simultaneously. Consistently deploy and operate your apps, infrastructure, and platform services, from the data center to the cloud to the edge. You can accelerate innovation with quick and easy access to services, gain efficiency by improving visibility and automation, and improve control and mitigate risk through unified operations and governance. This helps you modernize IT, promote cloud evolution, and assure developer productivity.

Organizations trust vRealize Cloud Management, the industry leader ranked by IDC,[1] that offers the most comprehensive capabilities for programable automation based on DevOps practices and self-driving operations based on AI, uniquely available both on-premises and as software as a service (SaaS).
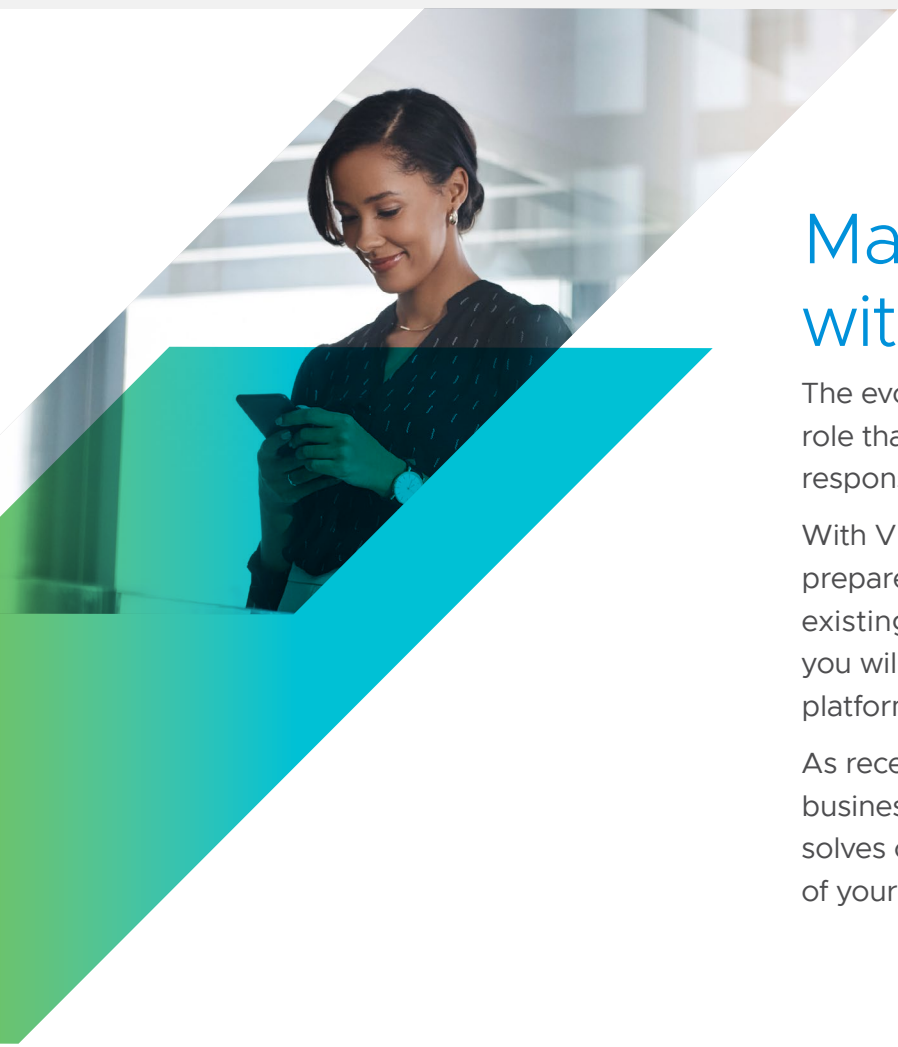
I&O leaders use vRealize Cloud Management to successfully fulfill IT modernization, cloud evolution, and developer productivity responsibilities.

Because vRealize Cloud Management is available as a suite on-premises and as SaaS, you get to both move faster to cloud and keep your on-premises environment in production as a safety net.

Make Cloud Your Business with vRealize Cloud Management

The evolving role for I&O within the enterprise is a more visible and critical role that is requiring your I&O team to take on more, and more complex, responsibilities.

With VMware Cloud Foundation and vRealize Cloud Management, you'll be well prepared to take on these increasing responsibilities while maximizing ROI on existing and new IT investments. Moreover, as you'll be expected to do more, you will confidently be able to extend your purview to offer a new, modern platform to your developers.

As recent events have shown, cloud truly delivers. It's time to make cloud your business, with intelligent hybrid cloud management platform from VMware that solves critical business challenges while spotlighting the immense capabilities of your I&O team.

Take the Next Step

Learn more online about how vRealize Cloud Management enables your I&O team to meet increasingly complex business challenges:

VREALIZE CLOUD MANAGEMENT

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