

IT'S A MULTI-CLOUD WORLD

EBOOK

THIS IS INNOVATION AT WORK



POWER YOUR WORKLOADS, CLOUDS, AND DEVICES WITH THE SHI-VMWARE PARTNERSHIP

SHI and VMware have teamed up to offer you state-of-the-art technologies with expert strategy, deployment, integration, implementation, and management. With our technical expertise and guidance, you can speed up your business growth and realize your full potential.





TABLE OF CONTENTS

- 01 WELCOME TO THE WORLD OF MULTICLOUD..... 4**
- 02 MULTI-CLOUD DRIVERS 6**
 - Avoiding provider lock-in
 - Shadow IT
 - Integrated higher-level services
 - Compliance
 - Resilience
- 03 KEY CHALLENGES 7**
 - Complexity
 - Single-use tools
 - Overhead to maintain compliance and common governance
 - Team capabilities and capacity
- 04 THE VMWARE SOLUTION 9**
 - Seem overwhelming? VMware can help.

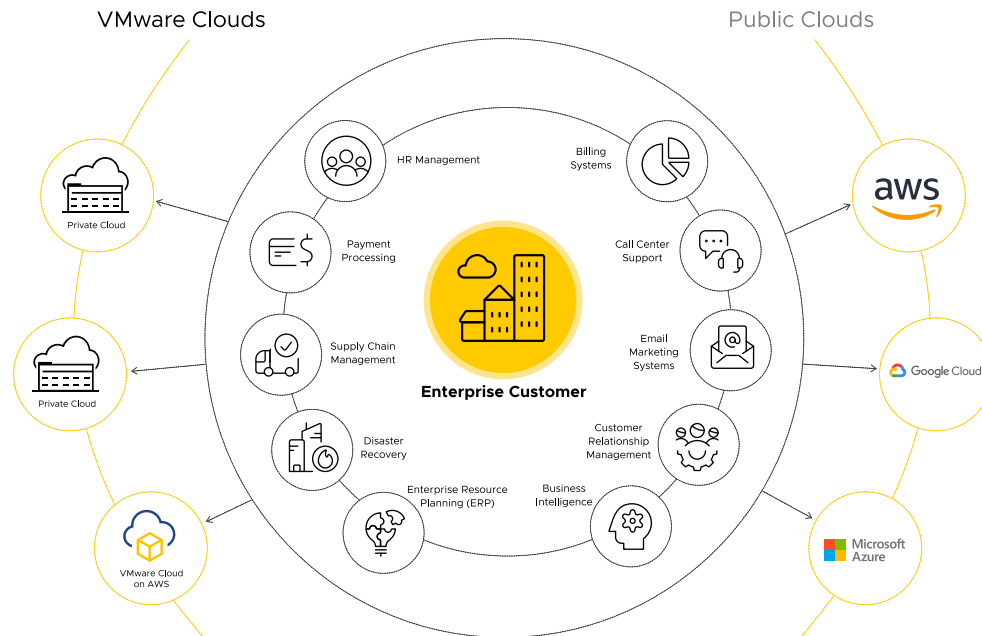
1

WELCOME TO THE WORLD OF MULTI-CLOUD

In the world as we used to know it – when Amazon sold books and Microsoft software came in a box stuffed full of floppy disks – enterprise applications typically ran in a central, on-premises data center.

Fast forward 25 years.

Today, application growth is unprecedented and enterprise applications run from a wide range of cloud endpoints - some public, some private, some via SaaS delivery, some managed by you, some managed by others, and the list goes on.



Did you know?

Multi-clouds always include more than one public cloud service, which often perform different functions. Multi-clouds do not have to include a private cloud component, but they can, in which case they can be both multi-cloud and hybrid cloud. Click [here](#) for more information on multi- vs. hybrid clouds.

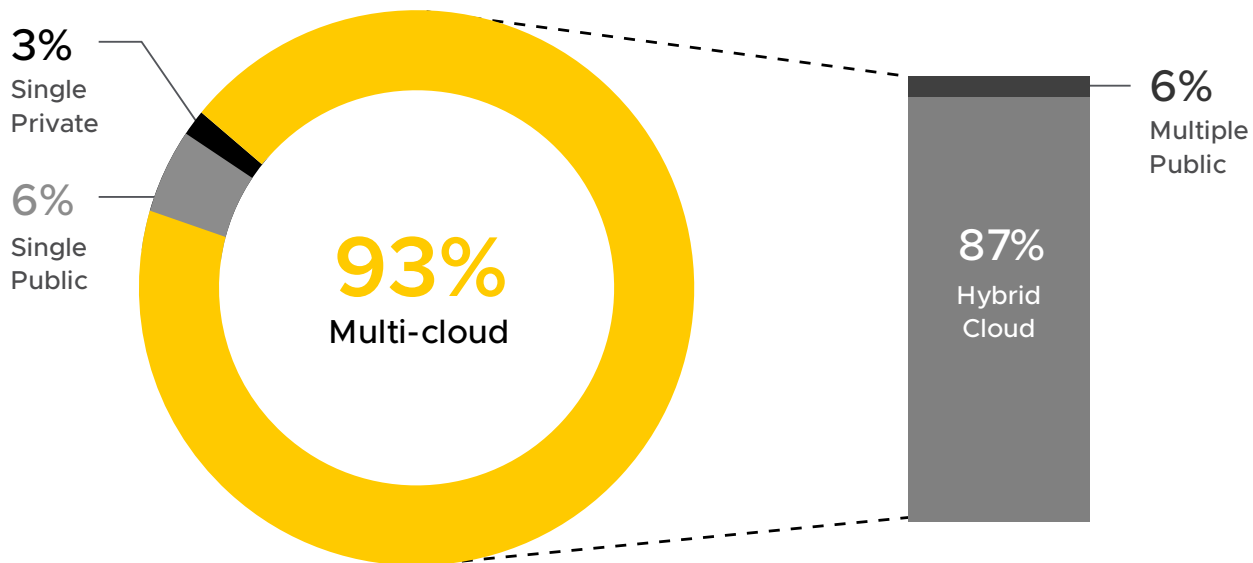
Currently, every industry trend report identifies multi-cloud as a key strategy for most large organizations.

But this operating model brings with it a wide range of new challenges that must be addressed by IT leaders if this application delivery model is going to prove sustainable.

Let's take a look at a few examples of what might motivate a company to choose a multi-cloud environment – and some of the challenges they can face along the way.

Type of Hybrid Cloud Strategy

% of enterprise respondents with hybrid strategy



2

MULTI-CLOUD DRIVERS

Avoiding Provider Lock-In

The desire to avoid becoming locked into a specific public cloud provider's proprietary services and pricing model often drives organizations to look at how they can diversify their use of cloud environments. This motivation is also present when it comes to considerations about where to build cloud native services based on containers, microservices, and Kubernetes. While these technologies are based on open sourced components and designed to be portable, they are also being implemented by public cloud providers in ways that try to make their platform "sticky."

Shadow IT

Another key driver of multi-cloud use is shadow IT, where technology is being adopted by business units independently of any governance from a central team concerned with the needs of the overall enterprise.

Integrated Higher-Level Services

Different preferences exist among business units for higher-level cloud services that will integrate with existing applications and accomplish specific tasks in areas such as Machine Learning, Artificial Intelligence, or Internet of Things. This, in turn, results in an organization needing to use multiple cloud providers to meet the combined needs of all business units.

WHY ARE ORGANIZATIONS ADOPTING A HYBRID CLOUD STRATEGY?



Vendor Lock-in



Shadow IT



Integrated Higher-Level Services



Compliance



Resilience

Compliance

Compliance requirements, such as the European Union's GDPR, will often require customer data to be held in specific regions. The implementation of this requirement often leads to a multi-cloud use scenario where data is hosted in locations that satisfy GDPR requirements while application code is hosted elsewhere.

Resilience

Application resilience and the protection from outages offered by not having everything running in one location – or even one public cloud – also leads to multi-cloud use.

3

KEY CHALLENGES

Complexity

Each public cloud has a unique interaction model with different ways for end users to authenticate and then consume, request, or modify a service or application. Each cloud also comes with a unique set of API surfaces. For most businesses this becomes a balancing act of weighing up the benefits of adopting multi-cloud technologies versus the burden of supporting them.

Single-Use Tools

These challenges are exacerbated by a lack of comprehensive multi-cloud tooling, meaning that most of the management tools used by cloud operational teams are provided by the public cloud provider that is hosting the application. While these tools work well for a single public cloud endpoint, they typically cannot address operational use cases that run across multiple public clouds.



Overhead to Maintain Compliance and Common Governance

Another key challenge for organizations who consume multiple public clouds is the operational overhead associated with maintaining common governance, security and compliance models across this complex multi-cloud environment. This is such an important aspect of running a modern business, many organizations are realizing that they would like a single, more unified approach to meet the need for these often legally required controls.

Team Capabilities and Capacity

Maintaining skill sets in the fast-changing world of cloud, and the ability to train teams to operate multiple public clouds, puts a lot of pressure on teams. In addition to this, simply onboarding a new team member and getting them up to speed on the diverse sets of required skills takes longer, is harder, and adds significant risk to the day-to-day operations each time a cloud is added to the mix.



4

THE VMWARE SOLUTION

Seem overwhelming? VMware can help.

VMware is committed to creating a public cloud experience that is simply about consumption and aims to make cloud complexity invisible to you, the customer, giving you more time to focus on your core business.

Leveraging VMware across cloud environments can reduce your operational burden by moving to an on-demand, self-service model while maintaining continuity with your existing tools, processes and skill sets. At the same time, you can still take advantage of native cloud services to supercharge your application portfolio, integrating emerging technologies such as AI, ML or IoT into existing or new applications.

For help architecting a future state that accelerates your application modernization efforts, engage your local VMware team or one of the many thousands of partners that support VMware technologies. Working side by side with you, we can help architect an approach to application modernization that provides your organization with the best combination of choice, flexibility, and operational simplicity.



The multi-cloud future is here to stay.
Let SHI + VMware help you navigate it with ease

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