



Answers to Five Common Questions IT Decision-Makers Have About Hybrid Cloud

#### E-BOOK

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## Businesses Are Embracing Hybrid Cloud. Are You?

2021 is set to be the year of hybrid cloud. In fact, Forbes has even listed it as one of the top 10 digital transformation trends of the year, declaring it the "winning enterprise architecture."<sup>1</sup> A multiple cloud approach does provide greater choice and greater flexibility – two major benefits at a time when agility and adaptability have never been more important. But this approach comes with greater operational complexity.

So if your business is on the fence about hybrid cloud, here are answers to some of the top questions many IT decision-makers will be asking this year.

# Why Choose Hybrid Cloud?

The application landscape is moving on from a monolithic architecture towards next-gen applications running on microservices. It's all about fast delivery of applications and services to stay competitive in the market. This change will give businesses the agility and flexibility to quickly launch innovative new digital services.

Faster application development is more important than ever. Why? Consider the following example: Last year, the U.K. government announced it would be launching a Bounce Back Loan Scheme (BBLS) to help out small businesses during the pandemic. The banking sector was put under immense pressure to turn around this offering in an incredibly short amount of time. In a scenario like that, having a legacy monolithic application architecture is your worst nightmare. As some banks discovered, operating in a hybrid-cloud environment would have made this a lot easier.

A hybrid cloud platform enables your in-house development team to create microservices that can be used to roll out next-gen applications and services, as well as combine applications with microservices from public cloud providers. Microservices act like LEGO blocks, enabling greater agility and flexibility when developing new products or services. A hybrid cloud platform lets you create microservices that can be used to roll out next-gen applications and services.

<sup>&</sup>lt;sup>1</sup> Top 10 Digital Transformation Trends For 2021, Daniel Newman, Forbes.com

Hybrid cloud solutions are starting to become more mainstream.

### How Is the Hybrid Cloud Market Developing?

For many companies, the last five years have been all about testing containerized applications and running proofs of concept. But now, hybrid cloud solutions are starting to become more mainstream and are being adopted in enterprise data centers around the world. In fact, industry analysts have predicted that within the next year, a growing number of global organizations will be running containerized applications in production.

However, there remains some concern about operational complexity in areas, such as security, monitoring, data management and networking. This issue must be addressed before public cloud services can be used with next-gen applications created by internal development teams.



## How Can Public Cloud Be Used To Add Value?

If your business is peaking for a couple of hours, it can be expanded by replicating or spinning-up new microservices, on premises or off premises. On top of that, you can create an application that incorporates a public cloud service of your choice.

For example, imagine you have a voice recording file that you need to turn into data for a compliance officer. You could use a transcription service from a public cloud provider to translate that recording into cleartext, which can then be added to the metadata of the file, enabling an internal search function. That saves you from having to spend time developing a similar service yourself.

Many companies are already adopting this approach, combining private and public cloud services to accelerate the development of new applications and services. As a result, these companies have an edge over competitors. And this approach also moves businesses forward in their move towards <u>modernizing the digital core</u>.

### Modernize Your Digital Core To Modernize Your Business

Tactical, one-off modernization efforts fail to deliver the desired benefits.

Planning a strategic road map for modernization—for distributed cloud, data center infrastructure, data platforms and applications—is the best way to align investments and achieve the outcomes you want.

View infographic.

Containers are highly portable and have less dependency on the operating system and underlying hardware platform.

## How Can Containers Be Used With Hybrid Cloud?

Hybrid cloud is playing an increasingly important role for companies looking into application modernization. This modernization involves taking existing, monolithic legacy applications and breaking them up or rewriting them to run on different independent microservices.

Each of these microservices can run in their own container environment, which is beneficial because containers are highly portable and have less dependency on the operating system and underlying hardware platform. This approach incurs less overhead than traditional bare-metal hardware or virtual hardware.



Eventually, you'll get more out of your hardware investments and be able to move your microservices workload in and out of public cloud as you choose. Hybrid cloud will also help bring your operations team closer to your development team, enabling new services to be updated and implemented faster in a practice called DevOps.

## Why Are Workloads Repatriated and Do They End Up in Private Hybrid Cloud?

It's worth noting that moving workloads in and out of cloud does come at a price, and not all workloads should be moved into a public cloud provider. Thirty-eight percent of virtual machine (VM) and storage workloads are repatriation ready as they're often too costly, lack reliability, exhibit performance issues, or have limited flexibility. As an example, public cloud providers have frozen Moore's Law and kept the storage prices at 2015 levels, whereas the infrastructure vendors have continued to lower prices every year.

Many companies undergoing application modernization projects right now are unsure about which hybrid cloud platform to host their applications on and how to securely orchestrate containers in a hybrid IT environment. Kubernetes has become the de facto platform for container orchestration, providing increased speed from development to deployment and increased efficiency. The vendor you're using for your hybrid-cloud software will usually offer a solution themselves, but it's important to consider what <u>other solutions</u> are out there on the market to help you to better manage costs, security and portability. You must make the right choice for your business.





## Weigh Hybrid Cloud Benefits and Challenges, Take Time To Choose the Right Vendor

A private hybrid cloud can undoubtedly support businesses in delivering agility and adaptability, and driving digital innovation at a high speed. But it's important to optimize both IT operations and IT costs, while balancing governance and security risk. Choosing the right partner to guide you in your journey is vital. At Hitachi, we take a holistic approach to cloud modernization and draw from 25+ years of cloud consulting expertise and 700+ cloud migrations. Our experts will guide you on your cloud journey so that you can make smart modernization decisions and build your cloud your way.

To learn how we can help you navigate the complexity of hybrid cloud and make the best choices for your organization as you modernize your digital core, contact your Hitachi Vantara representative or visit our <u>Modernize the Digital Core webpage</u>.

### We Are Hitachi Vantara

We guide our customers from what's now to what's next by solving their digital challenges. Working alongside each customer, we apply our unmatched industrial and digital capabilities to their data and applications to benefit both business and society.

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