

# **DON'T LET COMMON CLOUD MANAGEMENT CHALLENGES DERAIL YOUR DIGITAL TRANSFORMATION**

FROST & SULLIVAN EXECUTIVE BRIEF  
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## CONTENTS

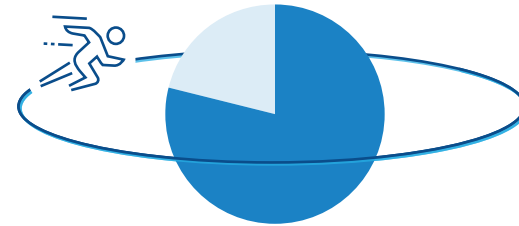
- 3** Introduction
- 4** Meeting Business Goals with Hybrid IT
- 5** Challenge 1: Too Many Unintegrated Infrastructures and Tools
- 6** Challenge 2: Complexity of Application or Service Portability
- 7** Challenge 3: Business Continuity Challenges
- 8** Challenge 4: Failing to Consider Total Cost of Ownership
- 9** Challenge 5: Insufficient In-House Expertise
- 10** Business Benefits of an Effective Hybrid Environment
- 11** What Do You Need in a Managed Platform Provider?
- 12** The Last Word



## INTRODUCTION

Ensuring the infrastructure is secure and reliable can take more time and resources than your business can spare, and can take focus away from revenue-producing activities.

In this brief, we will look at the challenges of integrating and managing a hybrid cloud environment on your own. We will offer solutions to help you simplify the development and deployment of applications in hybrid cloud that integrates infrastructure and development tools. Finally, we will discuss how a managed services partner is the right choice for your business to accelerate time-to-market, lower operation costs, and improve resiliency.



# 79%

of global business and IT leaders said  
using IT to improve business  
process efficiency and quality  
is a key strategic goal for their company\*

\* The Frost & Sullivan 2020 Cloud User Survey was completed in August 2020 and questioned global business and IT leaders about their perceptions and usage of cloud computing.

Source: Frost & Sullivan

## MEETING BUSINESS GOALS WITH HYBRID IT

To compete in the volatile digital economy, businesses have set aggressive goals, such as delivering products and services to market quickly, improving customer service, and introducing business agility.

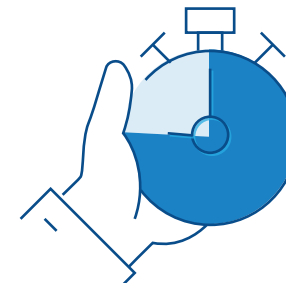
And they must do it all in a secure, reliable, and cost-effective way. To support their digital goals, they must continually create and upgrade services that deliver high functionality and reliability. This requires a modern, hybrid IT environment that integrates numerous infrastructures and services to enable development of any service—with any feature that integrates technologies such as artificial intelligence (AI) or mobility—the business needs.

But, creating the right environment to support your business goals can be a challenge. In the following pages, we look at five common challenges, and how using a managed cloud management platform can help you avoid them.



# 78%

of global IT leaders said they wanted to **improve their customers' experience**



# 76%

of global IT leaders want to **deliver applications and services faster**

## CHALLENGE 1: TOO MANY UNINTEGRATED INFRASTRUCTURES AND TOOLS

For too many IT departments, using multiple platforms to manage a wide variety of infrastructures, services and tools is status quo.

Perhaps you've inherited a platform from another business unit or an acquired entity. Or your developers may each prefer a different cloud-based toolset. Or you may have settled on the tools packaged with each cloud or IT service. The result is that integrating these into a cohesive, secure, and reliable environment can be difficult.

As you decide how best to move forward with your IT infrastructure journey, you should consider what services your developers require—both today, and in the future. A platform that integrates services and microservices will provide a foundation for your developers' efforts, allowing them to focus on creating business value.

You also need an environment that can easily support new infrastructures, virtualization platforms, or features that your developers may want to use, like Kubernetes or other container platforms, mobility services, or analytics and AI. By implementing a hybrid environment, you can enable your developers with the tools they need today, on a platform that can easily support new services, tools, and features in order to harness new technologies quickly for the future.



# 72%

of global IT leaders said they want to improve employee productivity



# 69%

of global IT leaders want to improve the business' ability to shift direction quickly



# 60%

of global IT leaders struggle to manage multiple cloud or platform vendors with consistency

Source: Frost & Sullivan.

## CHALLENGE 2: COMPLEXITY OF APPLICATION OR SERVICE PORTABILITY

### Many organizations struggle to modernize and optimize applications for a cloud-based, digital world.

Businesses need to be prepared to move applications from the data center to the cloud, or from one cloud to another. For your developers, this can mean significant re-coding and refactoring of applications to make them operational in a different environment. Without the latest technologies, it can be difficult to develop once and deploy within multiple environments.

To achieve this level of portability, most companies look to a container-based environment, where containerized applications can be deployed or migrated across a variety of environments, as needed to access new services, enhance security or reliability, or optimize cost.

Containers themselves can be a challenge to deploy and manage; most require a variety of components to be individually configured for them to operate successfully. Each master and worker node requires multiple components to operate. Integrating each component for each container can be difficult.

Many vendors now offer container platforms that make deployment easier, but even these can take time to implement and applications still need to be “containerized” and re-coded.

You need a platform that is easy and quick to set up, ensuring that you can quickly make a move to a more modern, container environment. In addition, a platform that is quick and easy to set up and supported by domain experts will ensure a fast move to a modern container-based environment for seamless portability.



# 61%

of global IT leaders state  
deploying applications and  
services across multiple IT  
environments is a challenge



# 59%

of global IT leaders said  
migrating apps or data from  
the premises to the public  
cloud is a significant challenge

Source: Frost & Sullivan.

## CHALLENGE 3: BUSINESS CONTINUITY CHALLENGES

**A typical hybrid cloud environment can be difficult to protect and make resilient in a coordinated way.**

Creating consistent backup, retention and failover policies for each individual environment is often a manual process, and can be time consuming to manage both the actual backups, and the restoration of applications and data.

You need a platform that can automate the backup and recovery process, while setting and implementing the same retention policies across multiple environments. This way, you can be sure your backups and failovers can efficiently support your business continuity plan well within the constraints of your budget and resources.



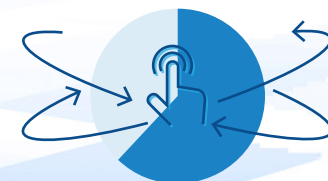
**69%**

of global IT leaders seek  
automated replication of data



**63%**

of global IT leaders said  
implementing resiliency/  
backup plans for apps  
and data is a challenge



**62%**

of global IT leaders seek  
push-button  
failover initiation

## CHALLENGE 4: FAILING TO CONSIDER TOTAL COST OF OWNERSHIP

Another major consideration for any IT department is the total cost to implement a robust solution that can support your developers both today, and into the future.

Many IT leaders have “sticker shock” after their forays into the public cloud. What is often touted as a less expensive alternative to the data centers is actually more expensive, when all of the needed components are deployed. Often, trying to put together all of the necessary platforms, software suites, and services required to create a comprehensive environment costs more to create individually than to purchase something purpose-built for your organization.

The right platform reduces costs to develop and deploy applications. It also provides visibility into the hybrid infrastructure to enable continual optimization of applications.



# 68%

of global IT leaders cited  
“managing costs”  
as a crucial or very important challenge that stopped  
or significantly hindered their cloud initiative



# 61%

of global IT leaders cited  
“gaining or retaining support from  
business leaders and stakeholders”  
as a crucial or very important challenge

Source: Frost & Sullivan.

## CHALLENGE 5: INSUFFICIENT IN-HOUSE EXPERTISE

**For most businesses, choosing an IT platform is about more than just the platform itself; it's about the digital transformation initiatives that the platform will support.** It's

about driving value from new services and applications that could not be created on old legacy systems, but are only available through a hybrid platform that supports multiple clouds and services that can be integrated together.

Choosing the right platform can be a difficult decision, and knowing how to make the best choice for today while future-proofing your investment requires in-house experts for many technology domains.

With a trusted partner to manage the platform on an ongoing basis, you can be sure you can optimize and secure your IT with the help of the right expertise. The result is a high level of application delivery that positively impacts customer experience.



**37%**

of global IT leaders have used a **third-party provider for assistance with optimizing costs**



**35%**

of global IT leaders have used a **third-party provider for assistance with managing infrastructure and applications on an ongoing basis**



**34%**

of global IT leaders have used a **third-party provider for performing customized application development or integrations**

# BUSINESS BENEFITS OF AN EFFECTIVE HYBRID ENVIRONMENT

The ongoing pandemic has highlighted for many organizations the necessity of running business operations on a flexible, hybrid technology foundation. Here are five benefits to implementing a hybrid cloud environment:

1

## IMPROVE BUSINESS AGILITY

Choosing an open source platform ensures that you can move your applications and data to any infrastructure—cloud or virtualized—whenever your business goals or application requires it. Open source more easily enables portability than most proprietary software.

CITED AS A BENEFIT BY BUSINESS AND IT LEADERS



76%

2

## IMPROVE SPEED TO MARKET

Open source software allows your team to bring new products and services to market faster. Developers can quickly and easily download and get to work on new applications and services faster than when using proprietary, licensed software.



76%

3

## IMPROVE BUSINESS PROCESS EFFICIENCY AND QUALITY

The right hybrid cloud platform allows you to move workloads and associated data between different infrastructures to improve application performance and streamline business processes. You need a platform that supports the container technology that allows applications to be ported across a variety of environments.



79%

4

## ENABLE INNOVATION

An open platform makes it easy to integrate next-generation technologies – such as AI and machine learning (ML) – into your applications, allowing you to continually innovate and offer end users functionality not always available with legacy, licensed software.



74%

5

## MANAGE COSTS

Legacy technologies or piecemeal solutions often require the use of multiple management platforms. Streamlining on an open stack platform allows you to reduce and centralize management tools, and extend policies to all environments, resulting in reduced time, effort and cost.



69%

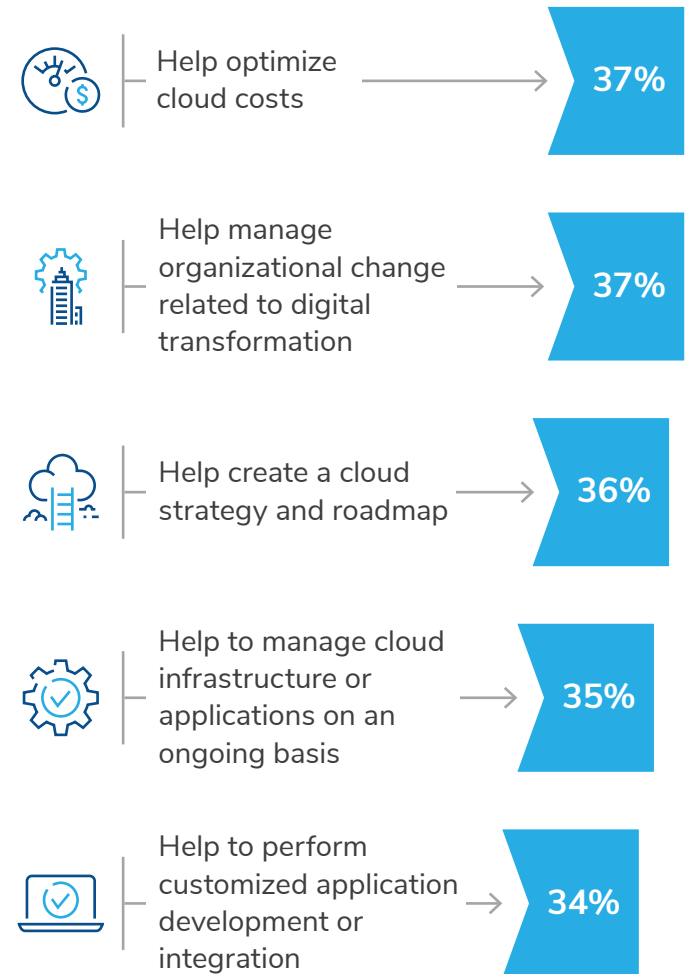
## WHAT DO YOU NEED IN A MANAGED PLATFORM PROVIDER?

Adapting to new technologies in a strategic, thoughtful way can be harder than it seems, and many businesses just don't have the expertise in-house to deploy hybrid environments successfully. Augmenting your in-house team with a trusted, third-party advisor—one that has experience in creating cloud strategy and roadmaps, and systems and processes to deploy hybrid clouds seamlessly and successfully—is your best bet.

When evaluating managed platform services, what should you look for? Here are key elements to consider when you make your selection for the right provider:

1. **Support all major public cloud providers, as well as premises-based environments, using open-source solutions like Red Hat OpenShift.** This allows applications to be developed with microservices, making it easy to integrate next-generation capabilities into your applications.
2. **Support multiple virtualization options: different hypervisors, containers, Kubernetes.** This enables your team to develop software using the platforms and protocols that are most familiar and most beneficial for the app being developed.
3. **Support a wide variety of dev/ops services, APIs, and micro-services.** This gives your team greater capability to integrate advanced capabilities like mobility, AI, and machine learning into their applications.
4. **Offer service integrations for services specific to your industry, as well as for common business application suites like SAP, Oracle, Workday, or Salesforce.** By integrating with popular software suites, you can better leverage data across different applications.
5. **Operate with integrated security and compliance governance,** and hold certifications in all major industry or national regulations, such as GDPR, HIPPA, and Centre for Internet Security benchmarks.

### WHAT GLOBAL IT LEADERS SEEK IN A MANAGED SERVICES PARTNER



Source: Frost & Sullivan.

## THE LAST WORD

Organizations like yours rely on cloud platforms and software stacks to digitally transform your business. The right solution can help your developers maintain a sharp focus on development and service creation, without having to worry about the environment that supports their work. While some enterprises choose to integrate such an environment on their own, many find that the time, expertise, and associated expenses required to build, optimize and maintain such an environment may be more extensive than they have available in-house.

The right managed services provider offers pre-integrated, open source, managed platforms that make the developer's life easy. These strategic vendors are offering hybrid cloud platforms with quick deployment and applications integrated by industry, which can be consumed on a subscription basis. The right provider can offer your business significant expertise to augment your in-house staff and provide the right platform to suit your organization's needs, often at a better price point than to build the environment on your own.

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