FROST & SULLIVAN

MODERNIZING YOUR DATA CENTER WITHOUT DISRUPTION

Five Considerations for IT Decision-Makers

FROST & SULLIVAN EBOOK

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INTRODUCTION

If enterprise IT decision-makers could design the ideal data center, what would it look like? Flexible, for sure. Efficient—in terms of space and power utilization. Lower cost, with attractive return on investment. High feature-functionality? To a point. Cloud-enabled, yes—although they may not need all the functionality now.

But most IT leaders are not interested in adopting technology for technology's sake; nor do they plan to eliminate proven architectures, such as reliable blade servers, for alternative technologies. Instead, they want to refresh their existing infrastructure with more flexible, functional versions.

To better understand the needs of IT buyers as they prepare to compete in the digital era, Frost & Sullivan turned to the enterprises themselves. We looked at the results of our own annual survey of IT decision-makers, as well as independent research sponsored by HPE. We also spoke with providers and our own clients.

In this report, we reveal key considerations that are important to businesses as they revamp their data center infrastructure, and show how the HPE Synergy platform meets enterprise needs for an optimal infrastructure platform.

> Most IT Leaders want to **REFRESH THEIR EXISTING INFRASTRUCTURE** with more flexible, functional versions

FIVE CONSIDERATIONS FOR DATA CENTER MODERNIZATION

As they lead their companies into the digital future, IT leaders are making infrastructure investments that balance short-term needs and longer-term opportunities. Here is valuable input from IT leaders that can help shape your modernization efforts.

1

The enterprise data center is and will continue to be an important part of your digital transformation strategy

2

Improving your data center doesn't require replacing your infrastructure architecture

3

Your data center should provide more value, with less effort

4

The private data center should deliver public cloud flexibility

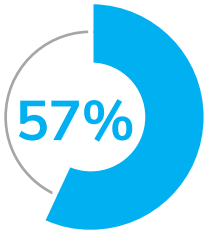
5

The data center should facilitate a pathway to the future

Sources: 2019 Frost & Sullivan Global Survey of IT decision-makers; 2018 HPE primary research of IT infrastructure buyers

1 THE ENTERPRISE DATA CENTER IS AND WILL CONTINUE TO BE AN IMPORTANT PART OF YOUR DIGITAL TRANSFORMATION STRATEGY

Even with the popularity of the public cloud, the enterprise data center isn't going away. In fact, the growing adoption of architectures for latency-sensitive workloads, such as edge compute and Internet of Things, has placed renewed emphasis on premises-based infrastructure. Businesses are looking for a simple migration path to the hybrid environment of the future, in which on-premises infrastructure can seamlessly integrate with public cloud.



of IT decision-makers say their budget for data center infrastructure will increase in 2019

Top reasons for **deploying workloads on-premises**, rather than public cloud

Security risks

Challenges migrating workloads

Greater flexibility/customization available with premises deployments

> "TWO OR THREE YEARS AGO, WE THOUGHT 'YEAH, CLOUD. [PUBLIC] CLOUD IS GOOD.' THEN WE SAW THE COSTS…WE SAID, 'HEY, IT'S NOT THAT GREAT.'
>
> —IT decision-maker

48% of businesses worldwide have "repatriated" a workload from the public cloud to the premises data center, and another **37%** are considering doing so.

Sources: 2019 Frost & Sullivan Global Survey of IT decision-makers; 2018 HPE primary research of IT infrastructure buyers

2 IMPROVING YOUR DATA CENTER DOESN'T REQUIRE REPLACING YOUR INFRASTRUCTURE ARCHITECTURE

To IT leaders, modernizing the data center means introducing flexibility and functionality. As they move along their modernization journey, they see no need to do a "rip-and-replace" of data center hardware and software. Nor will they necessarily jump into the latest deployment models and architectures, such as private cloud or software-defined data center, although they want the flexibility to explore those options in future.

As they refresh and expand the data center, replacing "like for like" equipment (with similar functionality and capacity) is no longer adequate.

Instead, they expect next-generation infrastructure to be more flexible, scalable, and easier to integrate, maintain, and manage than previous generations.

> WE JUST PURCHASED SOME NEW BLADE ENCLOSURES, AND WE'RE HAVING LOTS OF ISSUES WITH THE SYSTEMS NOT BEING ABLE TO GIVE US BETTER CAPACITY.
>
> —IT decision-maker

> WE WENT THROUGH A LOT OF HEARTACHE [WITH A RECENT REFRESH] AND WE DIDN'T NEED THAT.
>
> —IT decision-maker

1 say their modernized data center should support **increased application availability** — 80%

2 say they want their investments to better position themselves to **adopt future technologies** — 76%

3 say the data center must **support business agility** — 75%

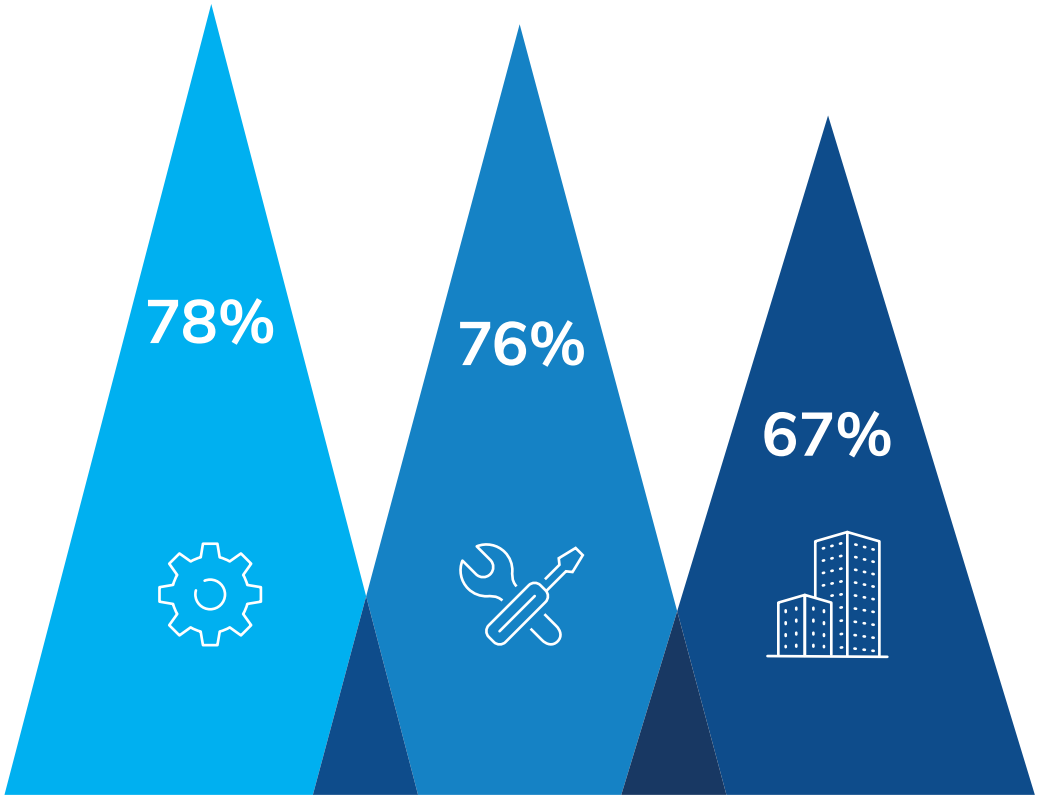
4 say they require **consistent application performance** — 65%

Sources: 2019 Frost & Sullivan Global Survey of IT decision-makers; 2018 HPE primary research of IT infrastructure buyers

3 YOUR DATA CENTER SHOULD PROVIDE MORE VALUE, WITH LESS EFFORT

Upgrading infrastructure shouldn't add to the management burden. When it comes to replacing or refreshing their data center infrastructure, IT leaders want next-generation solutions that introduce efficiency and functionality. But they're wary of solutions that come with a steep learning curve. Nor are they willing to devote specialized technical resources to handle custom integration and ongoing maintenance and management tasks.

> **"WHAT SENIOR MANAGEMENT REALLY WANTS IS NOT TO HAVE TO HIRE WHOLE BUNCH OF NETWORK AND SERVER ENGINEERS."**
>
> —IT decision-maker



78% want to minimize the hassle of integrating multi-vendor solutions

76% want to reduce hardware/software maintenance activities

67% say that, with an efficient infrastructure, the premises data center can deliver a better ROI than cloud

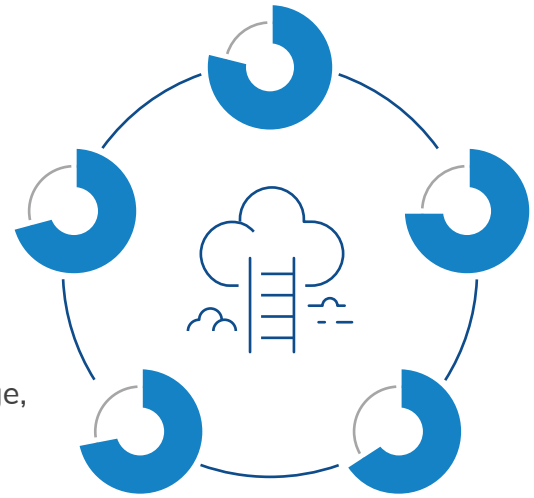
Sources: 2019 Frost & Sullivan Global Survey of IT decision-makers; 2018 HPE primary research of IT infrastructure buyers

4 THE PRIVATE DATA CENTER SHOULD DELIVER PUBLIC CLOUD FLEXIBILITY

To support a dynamic business, IT leaders want all the benefits of the public cloud in their private data center. That means access to a flexible resource pool that can be configured and allocated easily and in real time. It means scalable, on-demand capacity, with automated functionality and management simplicity. It means interfaces that allow easy integration across vendors and deployment models.

> **"PUBLIC CLOUD SERVICES LIKE GOOGLE CLOUD PLATFORM OR AWS HAVE INFINITE RESOURCES. [I WANT TO] BRING THAT INTO THE PRIVATE SITUATION, INTO AN ON-PREMISES DATA CENTER.**
>
> —IT decision-maker

79% say the cloud model enables them to deliver services and apps faster



71% prefer a single pane of glass to manage all their compute, storage, and network resources

75% say the cloud supports market responsiveness

72% have or are in the process of deploying a hybrid cloud, integrating data center and cloud resources

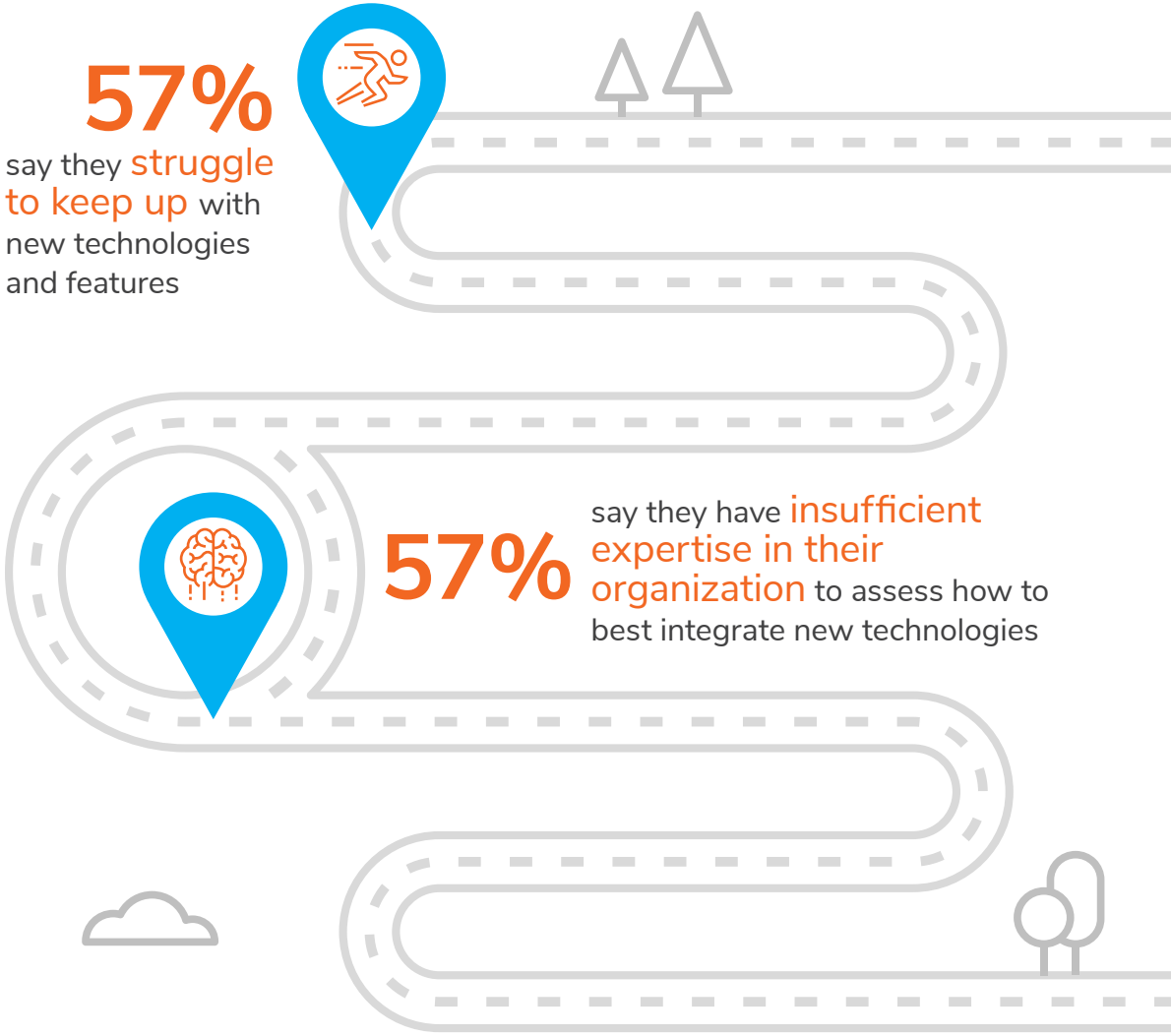
66% want easy integration with other solutions and environments, via API

Sources: 2019 Frost & Sullivan Global Survey of IT decision-makers; 2018 HPE primary research of IT infrastructure buyers

5 THE DATA CENTER SHOULD FACILITATE A PATHWAY TO THE FUTURE

Each business approaches its data center modernization journey at its own pace. Some companies actively pursue the latest features and architectures; others take a more measured approach. But nearly all IT leaders prefer infrastructure solutions that are flexible enough to support each company's needs. For technology-forward firms, the data center infrastructure should offer next-generation features and functionality, without adding complexity. For companies that are earlier in their transformation, the infrastructure should offer immediate value, while defining a clear and simple path to modern configurations (such as private cloud and software-defined data center).

57% say they struggle to keep up with new technologies and features



57% say they have insufficient expertise in their organization to assess how to best integrate new technologies

> "TOO MANY BUZZWORDS. KEEP IT SIMPLE AND EXPLAIN WHAT THE PRODUCT DOES AND HOW IT CAN SIMPLIFY DATA CENTER MANAGEMENT."
>
> —IT decision-maker

Sources: 2019 Frost & Sullivan Global Survey of IT decision-makers; 2018 HPE primary research of IT infrastructure buyers

AS A FOUNDATION TO YOUR FLEXIBLE, RESILIENT DATA CENTER, CONSIDER "COMPOSABLE" ARCHITECTURE

While businesses may not be familiar with the term "composable," they support the concept: an infrastructure platform that delivers a scalable, flexible pool of resources.

In composable infrastructure, compute, storage, and networking resources are abstracted from their physical appliances, and managed via a software platform. Composable infrastructure makes data center resources as readily available, scalable, and efficient as public cloud services, and is the foundation for private and hybrid cloud solutions.

Of great interest to IT leaders is that the right composable solution fits within your current blade server architecture. For example, with HPE Synergy—the first platform architected for composability—enterprises can run their composable infrastructure in the same environment and manage it through a common management solution (HPE OneView). This delivers flexibility and efficiency to the data center.

> **"I THINK THE CONCEPT [OF COMPOSABLE] IS TO BRING THE BENEFITS OF THAT UNLIMITED RESOURCE POOL, AND THE FLEXIBILITY FOR DIFFERENT PARTS OF THAT RESOURCE POOL INTO WHATEVER IT WAS THAT YOU WANTED TO ACHIEVE.**
>
> —IT decision-maker

Sources: 2019 Frost & Sullivan Global Survey of IT decision-makers; 2018 HPE primary research of IT infrastructure buyers

ABOUT HPE SYNERGY

For many enteprises, the modern data center begins with HPE Synergy composable bladed infrastructure, powered by Intel Xeon processors. The solution meets you wherever you are in your cloud journey, serving both as a modern replacement for blade servers and a foundation for private cloud. With HPE Synergy powered by Intel Xeon processors, enterprises can easily and safely implement a private cloud based on modern composable infrastructure.

Top benefits of the HPE Synergy composable platform cited by enterprise IT decision-makers include:

- **One platform can meet your current and future business needs**, running any application, traditional and cloud-native.
- As-needed resource allocation **reduces overprovisioning of infrastructure**, improving cost-efficiency and ROI.
- Automation and software-defined control **reduces time spent on provisioning and maintenance**.
- Because infrastructure is fully integrated with the sophisticated HPE OneView management platform, **deployments are simple and rapid**.
- Simple, frictionless updates mean it's **easier to keep the data center running optimally,** without business disruption.
- Intel Xeon processors deliver cloud computing, real-time analytics, and big data insights, while **improving data center efficiency and reliability**.

For more information visit HPE Synergy.

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