HYBRID IT IS THE NEW NORMAL FOR IT INFRASTRUCTURE

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In this report, we'll analyze the many challenges that organizations face when it comes to building and managing a modern IT infrastructure. We'll also look at how some businesses are taking advantage of a hybrid cloud and on-premise approach, which comes with some significant benefits.

Not that long ago, talking about Hybrid IT as something most businesses would be doing would have seemed like a stretch.

For a while, the main way that organizations built their IT infrastructure was from an on-premise first model. Most servers and applications ran in the company data center, with only a few existing in a cloud or Software as a Service model.

Then, "everything in the public cloud" became the way that everyone expected IT to be done. You don't have to look too hard to find lots of prognostications saying that on-premise was dead and all you needed to run any business was an internet connection and a good cloud provider.

But a funny thing happened on the way to public cloud nirvana.

It turned out that, just as on-premise only wasn't the right model for modern organizations, many businesses were finding that it didn't make sense for everything to be in the public cloud. In fact, a combination of both on-premise and cloud could deliver the best value by providing the best of both models.

With hybrid IT, organizations can take advantage of the increased control, quicker access, and better security that comes with on-premise systems, while leveraging the improved agility, lower costs, and flexibility that the cloud provides. On top of all this, a hybrid IT infrastructure can be implemented quickly and with little complexity, which makes it a good fit for modern businesses that are looking to avoid the high costs and complexity that traditional approaches to IT can often bring.

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Hybrid IT refers to an IT infrastructure that includes multiple scenarios — i.e., virtualized servers, non-virtualized hardware; public cloud, private cloud, hosted services from multiple vendors — all to support an organization's workloads and portfolio of applications.
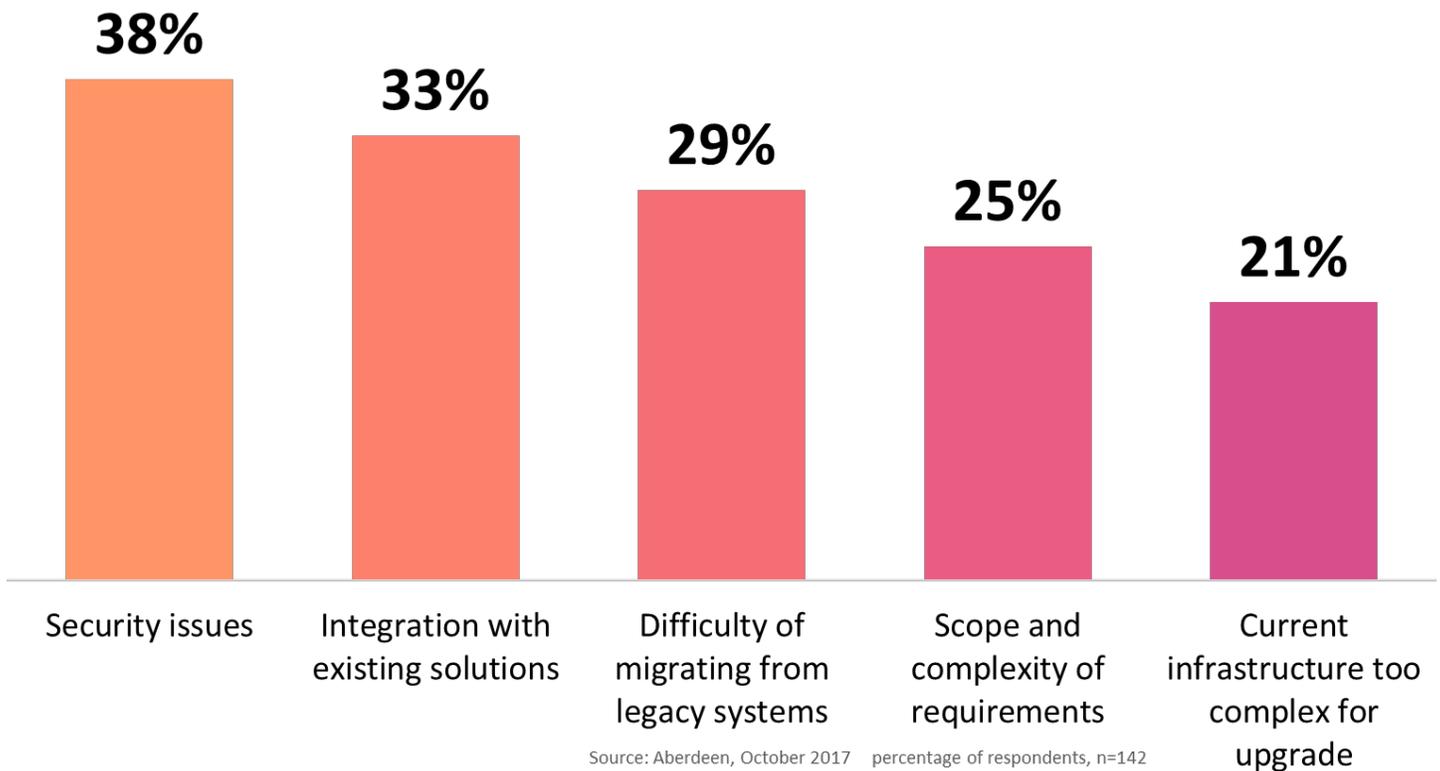
Why Hybrid IT is the Right Option When Choosing Between Cloud and On-Premise

For many organizations, how to choose between cloud and on-premise is quite often based on the status of the company itself. Newer businesses and startups can easily make the decision to go completely to the public cloud.

After all, they don't have legacy systems or older software issues to consider. On the other hand, long-established businesses, who have already invested in on-premise systems, will typically decide to stay with these systems.

However, our research shows that a choose cloud or on-premise approach is not always the best way to handle the many complex IT challenges that organizations are facing these days. And when organizations force themselves to choose completely between on-premise and cloud, they could be making it harder to address modern IT challenges.

Figure 1: Top Challenges Driving Hybrid IT Adoption

38%	33%	29%	25%	21%
Security issues	Integration with existing solutions	Difficulty of migrating from legacy systems	Scope and complexity of requirements	Current infrastructure too complex for upgrade

Source: Aberdeen, October 2017   percentage of respondents, n=142
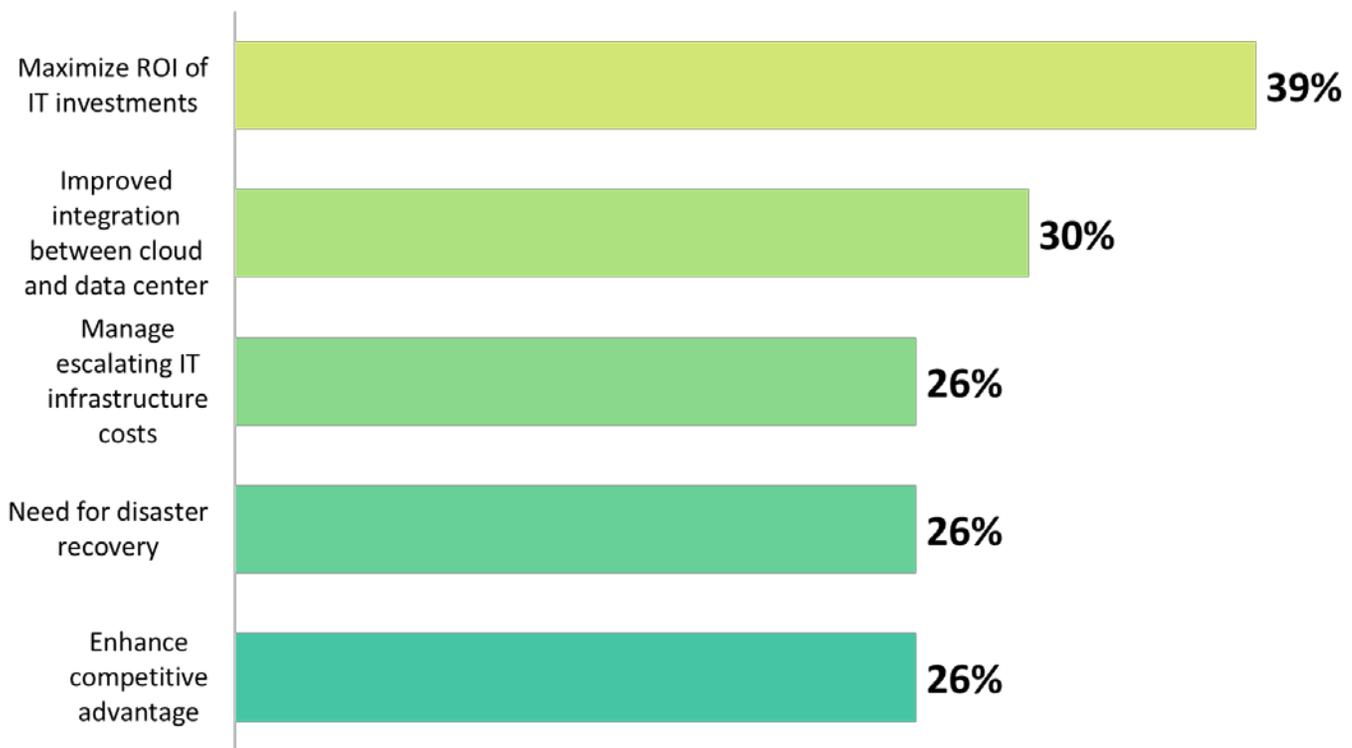
For the data in Figure 1, we analyzed our research to find businesses that had made the move to hybrid IT, and we asked about the challenges that drove them to make the move. It was no surprise that security is the number one issue.

However, we find that the number two challenge is focused on getting all of their IT infrastructure to work together, which wouldn't be such a major challenge if businesses were sticking just to on-premise or cloud. These organizations are looking to get the most out of their existing IT infrastructure while adding on public cloud capabilities.

Emphasizing the importance of making on-premise and cloud work together, we find that it is not only a challenge, but also one of the top pressures that are driving hybrid IT businesses to improve their infrastructures. In Figure 2 below, we asked these organizations what the top pressures were that pushed them to adopt hybrid IT.

Figure 2: Top Pressures Driving Hybrid IT Adoption

Pressure	Percentage
Maximize ROI of IT investments	39%
Improved integration between cloud and data center	30%
Manage escalating IT infrastructure costs	26%
Need for disaster recovery	26%
Enhance competitive advantage	26%

Source Aberdeen, October 2017 percentage of respondents, n=141

Given the costs and demands of modern IT investments, it's not a surprise that maximizing the ROI of these cloud investments is at the top of the list.

And the high ranking of integration between cloud and on-premise shows the vital importance that organizations put on having effective on-premise and cloud systems that not only operate well on their own, but can work together to make each other better.

Since disaster recovery is often one of the first instances of hybrid infrastructure that many businesses implement, its high ranking isn't unexpected. Given that a strong hybrid infrastructure can increase agility and innovation, the need to gain an advantage over competitors makes sense as a key criterion.

With the previous data on challenges and selection criteria in mind, it becomes increasingly clear why a hybrid approach is vital. With hybrid IT, businesses have the increased security and performance that comes with their on-premise systems, while leveraging the cloud's ability to deploy applications quickly, keep infrastructure costs down, and scale capacity as needed.

How to Effectively Leverage On-Premise and the Cloud

Throughout this report, we've argued that the best option for businesses trying to choose between on-premise and cloud infrastructures is to choose both — a hybrid IT approach.
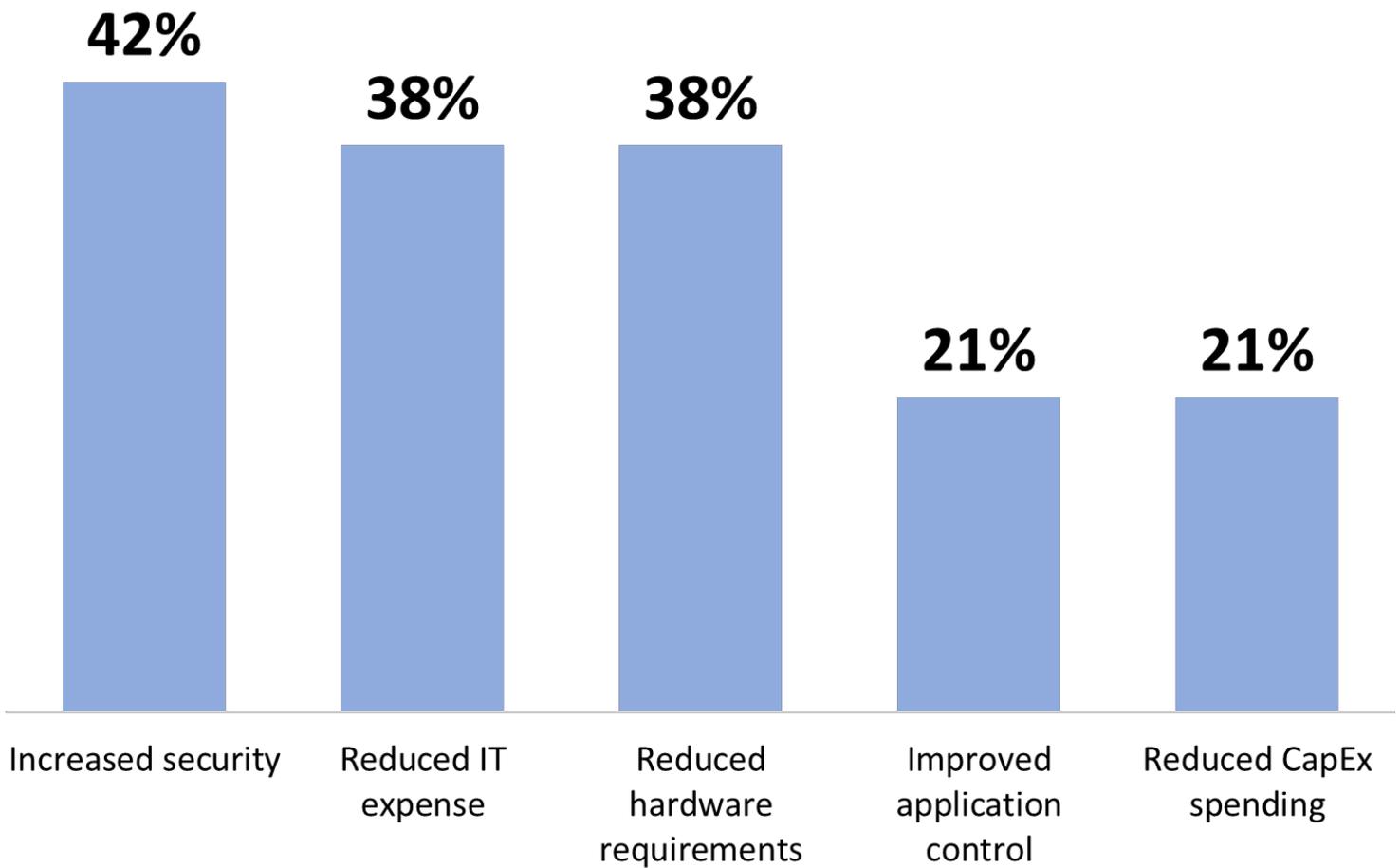
Does a hybrid IT approach mean that an organization must compromise and make sacrifices? Does it mean that instead of getting one infrastructure at its best, a business is getting two systems that are less than they could be?

Our research shows that the opposite is true. Organizations that take a hybrid IT approach gain many benefits from both cloud and on-premise that allow them to have a high-performing IT infrastructure.

To understand these benefits, we researched businesses that have taken a hybrid IT approach, using on-premise servers and systems designed to work well with cloud-based technologies. And we then asked for the top benefits they had gained through their embrace of hybrid IT.

As the data in Figure 3 below shows, these hybrid IT organizations achieve many benefits through their use of a hybrid IT infrastructure.

Figure 3: Getting to the Top with a Hybrid IT Approach

42%	38%	38%	21%	21%
Increased security	Reduced IT expense	Reduced hardware requirements	Improved application control	Reduced CapEx spending

Source: Aberdeen, October 2017   percentage of respondents, n=140

Despite still-common yet erroneous beliefs that cloud computing is less secure than on-premise, businesses deploying hybrid IT report note increased security as the number one benefit gained. By taking advantage of the strengths of cloud and their internal data centers, these businesses have both increased reliability and improved control.

Tied for the number two benefit are two very similar gains. Hybrid IT organizations report both lower IT expenses and reduced hardware requirements. As the use of cloud lets them reduce their need for traditional hardware, the flexibility of a hybrid approach also allows them to keep their public cloud costs under control as well. Related to these benefits, hybrid IT businesses also report reductions in capital expenditures.

And since agility is one of the main reasons businesses turn to the cloud and hybrid IT, it's also welcome to see that hybrid IT businesses report increased application control. With a hybrid approach, businesses are able to deploy applications wherever it makes the most sense.

Key Takeaways

Organizations utilizing a hybrid IT approach that combines cloud-based systems with an on-premise infrastructure gain a number of key benefits. But to get to this hybrid IT environment, they need to follow some best practices.

Throughout this report we've said that the right choice between on-premise and cloud is to choose both. But to get the most out of this hybrid IT approach, organizations must enable well-designed systems with high performance, reliability, and the ability to scale.

To get to a strong hybrid IT infrastructure, businesses should:

- ▶ **Know your cloud requirements**. Many businesses think that implementing public cloud is as simple as choosing a cloud provider. But leaders in IT infrastructure know that it requires more upfront work in understanding what needs to be in the cloud and what should run on-premise. By working to understand which services and applications should run on the public cloud, organizations will have a more effective hybrid IT infrastructure.

- ▶ **Understand your current technology needs**. You can't grow and improve a system that you don't fully understand. For businesses to get the most out of a move to hybrid IT, they need to have full visibility into all of their servers, processes, and applications — both on physical devices and in the cloud.

- ▶ **Build a hybrid-ready infrastructure**. While we've shown the benefits of a hybrid IT approach, getting to these benefits will be impossible if an organization's on-premise systems are out-of-date, overwhelmed, and poorly managed. Businesses that succeed with hybrid IT ensure that their on-premise base is up-to-date, high performing, and ready to meet the challenges of modern IT.

- ▶ **Integrate your cloud and on-premise systems.** Ability to use cloud and on-premise systems together is both a top challenge and a top selection criteria for the IT staff at many organizations.

By utilizing both cloud and on-premise, these businesses will be able to get the most out of both platforms and increase the ability of their technology initiatives.

▶ **Build an infrastructure ready for the technologies of tomorrow**. Organizations need to be ready for emerging technologies continually coming onto the scene — they will bring both new opportunities and increased IT complexities. With an agile and flexible hybrid infrastructure, businesses can reduce the complexity of these technologies and increase their ability to utilize them to gain competitive advantages.

It isn't about doing the cool new thing. Hybrid IT is the way that businesses are building and optimizing IT systems and infrastructures today. If your organization isn't leveraging hybrid IT, it doesn't mean you aren't on the cutting edge, it means you're behind the curve.

Businesses can meet all of their IT infrastructure needs by taking a hybrid IT approach that gives them all of the performance and direct control capabilities of on-premise, integrated with the scalability and flexibility of the cloud.

It's time to embrace the new normal, and look to build a hybrid IT infrastructure.

Related Research

The Cloud Takes Over Network Management; October 2017

How Internet Traffic Steering Is Shaping The Hybrid Cloud Edge; June 2017

The Software Defined Data Center: Get The Most Out Of Today's Infrastructure; June 2017

Building A Data Center To Meet The Challenges Of Today's Technologies; March 2017

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