

White Paper

Addressing Enterprise Cloud Priorities with Microsoft Azure

Sponsored by: Microsoft

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EXECUTIVE SUMMARY

Businesses today are facing disruptions in their markets and supply chains that are introducing challenges unlike any they have faced in the past. While IT has always served as a critical backbone to business operations, now more than ever, it is emerging as perhaps the most important enabler of business success. As organizations fundamentally recalibrate and reinvent fundamental operations, IT is becoming the driver of transformational change, and digitally transforming technologies, including cloud, mobile, and the Internet of Things (IoT), will play a key role in helping them adjust to today's new business realities. This new focus builds on the recent push to adopt digital transformation (DX). Adoption of cloud infrastructure services is an integral part of this transformation, and IDC anticipates that by 2025, 60% of enterprise IT infrastructure spending will be allocated to public cloud and that a quarter of enterprise IT applications will run on public cloud services.

While moving key business applications and services to the cloud can provide tremendous value, organizations must still choose cloud provider partners that best address their top priorities. As enterprises moving services to the cloud becomes mainstream, their needs are likely to be different from the needs of early cloud adopters. IDC research found that enterprises prefer to work with cloud providers that they can trust as well as providers that have a deep understanding of enterprises' business and technology needs.

Trust in their cloud provider is of critical importance to enterprises in this study. As cloud providers evolve and respond to different opportunities, enterprises want to ensure they aren't supporting a potential future competitor. When asked about threats, 75% of respondents feel it is very important that their cloud provider is not, nor will become, a direct competitor to their business. Organizations want to be confident that their cloud providers will not misuse data for their own business benefit and will protect customer data privacy. The implication is that enterprises have the greatest levels of trust in "pure-play" cloud providers whose sole focus is providing enterprise technology.

Enterprises also prefer cloud providers with experience in supporting businesses like theirs. They want to partner with cloud providers that understand industry-specific business needs and technology ecosystems. Businesses want to work with cloud vendors that help accelerate time to market for new applications while continuing to provide seamless support for existing applications. Cloud providers that support the full technology stack, and offer integration capabilities throughout that stack, are preferred.

IDC found security to be one of the top perceived benefits of an integrated cloud approach. 61% of respondents saw greater security as a benefit from using the same provider for both cloud and core enterprise technologies. Other benefits include higher business continuity and employee skill set transfer.

Enterprises run heterogeneous environments and require their cloud providers to run both Linux-based open source workloads and Microsoft workloads equally well. And as Microsoft customers move their .NET applications from on premises to the cloud, ease of migration and integration of existing .NET applications are important.

IDC found that Microsoft customers believe Microsoft Azure consistently supports their top cloud priorities. Microsoft customers perceive Microsoft to be a trusted partner, pointing to its enterprise experience and its tightly integrated technology solutions across applications stacks. Furthermore, most Microsoft Azure customers in this white paper are very satisfied with the different aspects of Microsoft Azure offerings, including support of their hybrid cloud environments, cloud security needs, and capability to run both Microsoft and non-Microsoft/Linux-based open source workloads equally well.

METHODOLOGY

This white paper is based on an IDC web-based survey of 824 IT decision makers and 8 IDC in-depth interviews with IT decision makers with responsibility for or influence over cloud purchases. Organizations are Microsoft customers that have adopted Microsoft Azure. Organizations are headquartered in the United States and represented a range of industries, with a primary emphasis on healthcare, financial services, telecommunications, insurance, publishing, and logistics. Respondents represented a broad range of organizational sizes, with the majority ranging from 1,000 to 10,000 employees. The survey and interviews were conducted in February 2020.

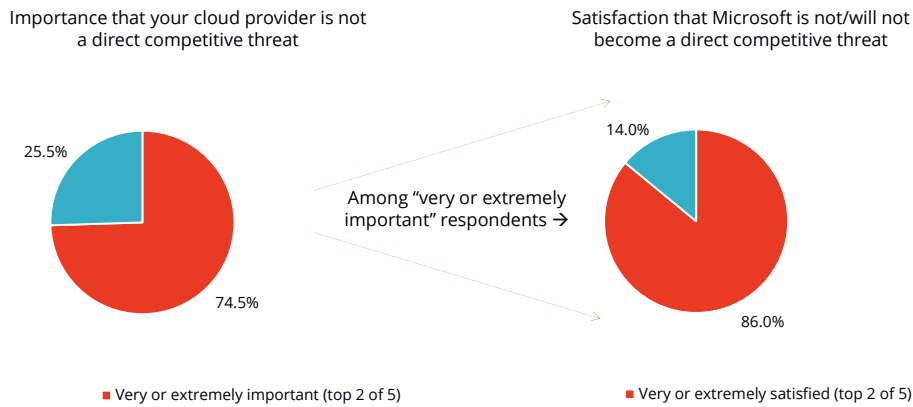
KEY FINDINGS

Enterprises Prefer Pure-Play Cloud Providers That Won't Compete with Them

Data is an increasingly important asset for businesses across all industries, and organizations are aware of the need to protect their data at all times. Enterprises prefer to partner with a cloud provider that they can trust to house their proprietary data, and three-quarters (75%) of respondents feel it is very important their cloud provider is not a direct competitive threat to their business. 86% of those who say it's very important believe Microsoft is not, nor will ever become, a direct competitive threat (see Figure 1).

FIGURE 1

Satisfaction Microsoft Is Not/Will Not Become a Direct Competitor



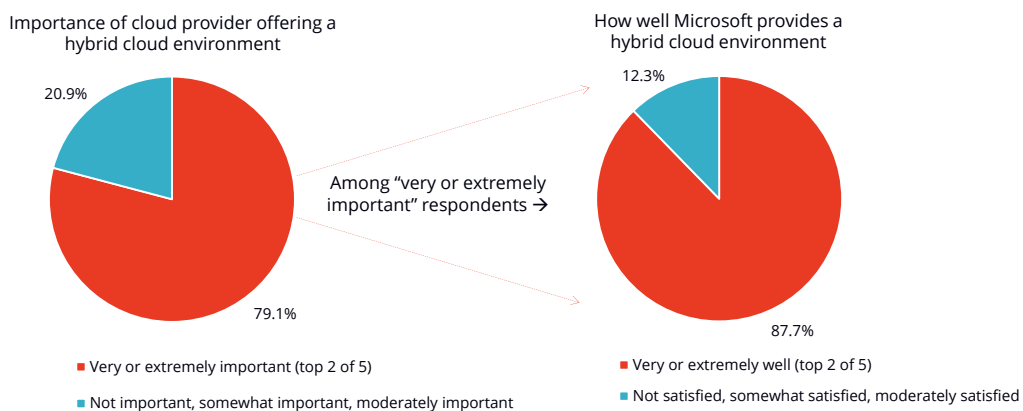
Source: IDC's *Microsoft Azure Study*, February 2020

Microsoft Azure Seen as a Full-Stack Cloud Provider

Enterprises maintain a number of technology environments, including cloud, multicloud, and legacy environments, and use them to run a complex set of software and applications. Organizations look to cloud providers with experience in supporting a full stack of cloud services that integrates well with their existing application ecosystem. 79% of respondents perceive it is very important that a cloud provider offers a hybrid cloud environment, and 88% of those who say it is very important respond that Microsoft supports their hybrid needs very or extremely well (see Figure 2).

FIGURE 2

How Well Microsoft Provides a Hybrid Cloud Environment

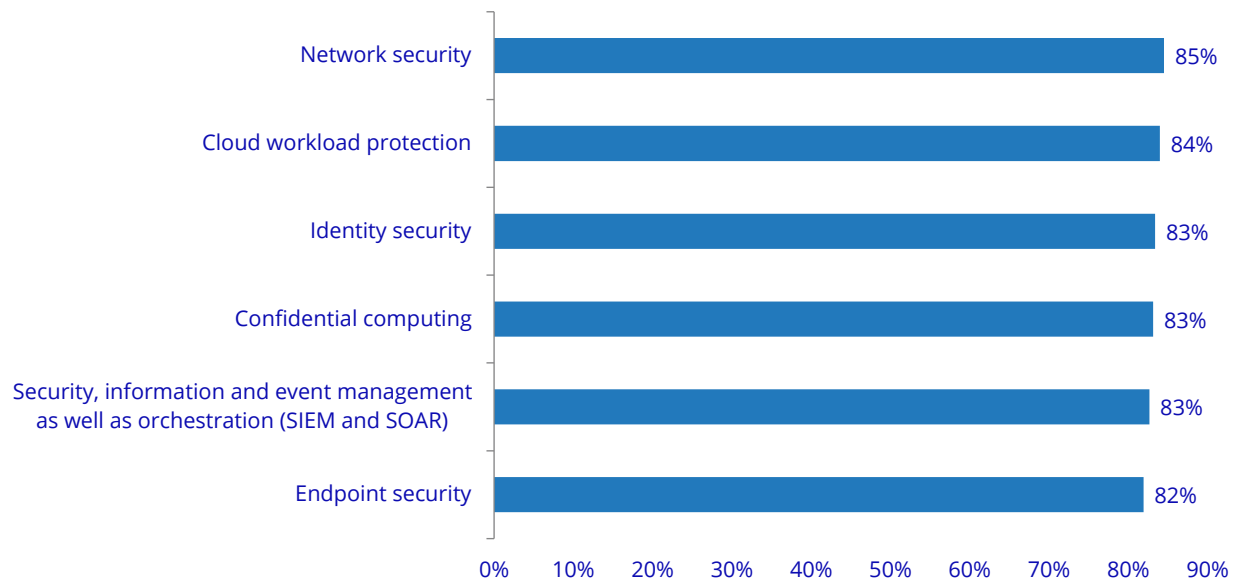


Source: IDC's *Microsoft Azure Study*, February 2020

A key benefit of using a cloud provider that provides native interoperability with their technology stack is the fact that this built-in integration is perceived to reduce security risks. The fact that all the parts of the stack are designed to work together was an important benefit to survey respondents, with 82-85% of respondents saying they believe Microsoft Azure meets their security-specific needs well or very well across a range of key cloud security technologies (see Figure 3). As a primary IT decision maker for a United States-based healthcare organization stated, "Offerings such as Azure Security Center are used every day to monitor our environment – the pre-integrated nature reduces overhead."

FIGURE 3

Microsoft Azure Cloud Security – Rated Very Well



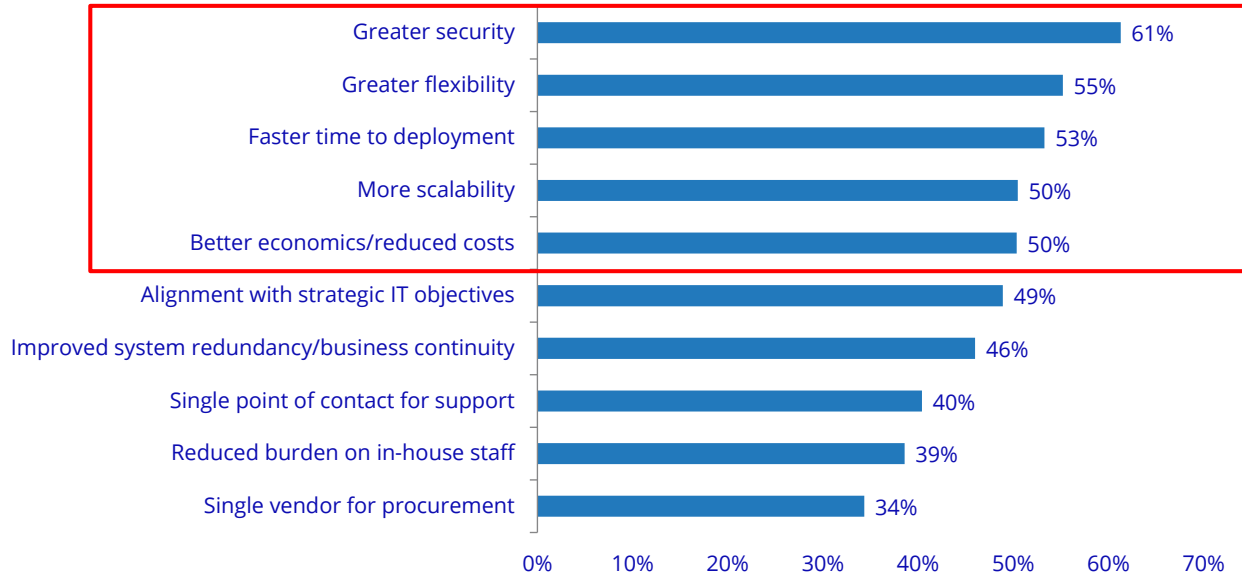
Source: IDC's *Microsoft Azure Study*, February 2020

Respondents Believe That Microsoft Workloads Run Best on Microsoft Azure and Microsoft Offers an Equally Competent Level of Support for Non-Microsoft/Linux-Based Open Source Workloads

As their push for digital transformation leads enterprises to expand their technology ecosystems, the complexity of supporting many different types of application workloads grows. Enterprises look to simplify their environments by using the same provider for both their cloud and their core enterprise technologies. The top benefits customers claim they get from using the same provider for both cloud and core enterprise technologies are greater security, greater flexibility, faster time to deployment, more scalability, and better economics/reduced costs (see Figure 4).

FIGURE 4

Benefits of Using Same Provider for Both Cloud Services and Core Enterprise Technologies

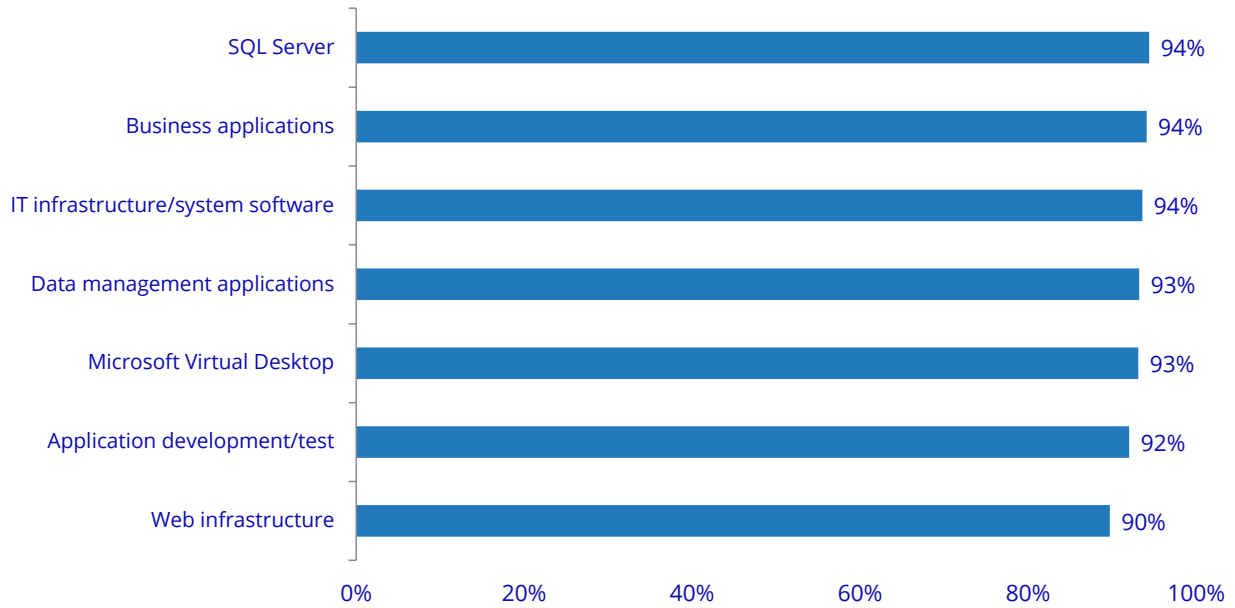


Source: IDC's *Microsoft Azure Study*, February 2020

Respondents are very satisfied with how well Microsoft Azure runs Microsoft and .NET workloads, including SQL Server and Windows Virtual Desktop (see Figure 5). As an IT decision maker for a major financial institution in the United States stated, "For .NET-native applications, moving to Azure by extension of the existing on-prem environment is a logical step. Having .NET apps on one common platform saves complexities, as opposed to running them on a variety of platforms."

FIGURE 5

Microsoft Applications That Microsoft Azure Runs Very Well

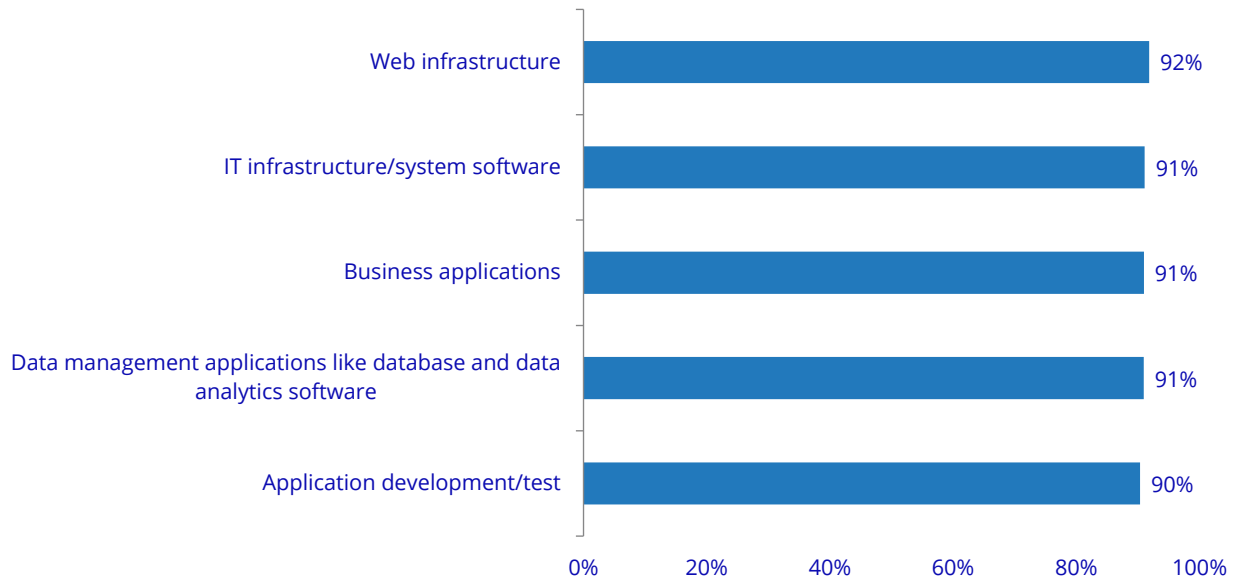


Source: IDC's *Microsoft Azure Study*, February 2020

Businesses also look to run non-Microsoft/Linux-based open source workloads in Microsoft Azure. 94% of respondents run some form of non-Microsoft workloads on Azure. Respondents believe that Microsoft Azure is a good home for these non-Microsoft workloads, with anywhere from 90% to 92% of them saying that Azure runs the workload very or extremely well, depending on the workload (see Figure 6).

FIGURE 6

Non-Microsoft Applications That Microsoft Azure Runs Very Well



Source: IDC's *Microsoft Azure Study*, February 2020

ENTERPRISES PREFER TO PARTNER WITH PURE-PLAY TECHNOLOGY PROVIDERS

Enterprises view their cloud providers as strategic technology partners, and trust in that partnership is of critical importance. Enterprises look for pure-play technology providers that don't bring potential conflicts of interest. They want to be confident that their cloud providers will not become a direct competitor, will not misuse data for their own business benefit, and will protect customer data privacy.

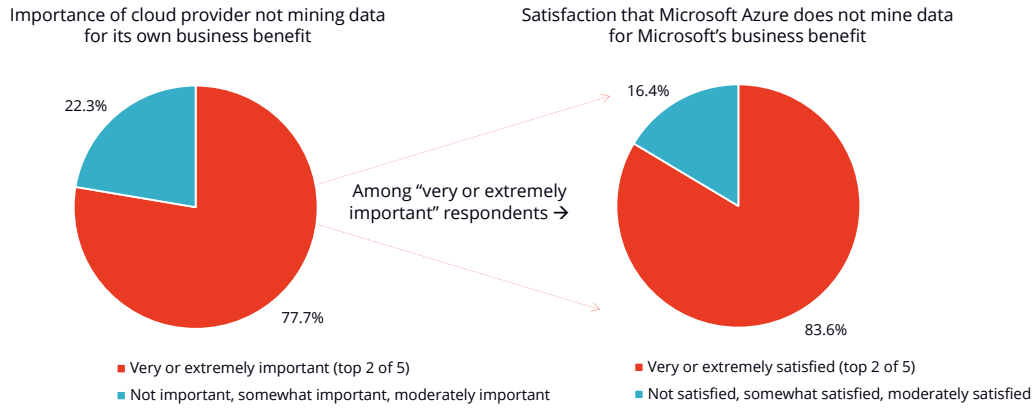
In our survey and in-depth interviews, Microsoft customers report that they are satisfied that Microsoft does not pose a conflict of interest to their business. This perceived trust makes it easy for those customers to partner and scale with Microsoft Azure.

An ITDM at a major financial services company in the United States stated, "This (trust that Microsoft does not pose a conflict to business interests) is a true differentiator."

As proprietary data is stored and used within cloud environments, enterprises must be clear on how their cloud provider has access to and uses their data. 78% of respondents view their cloud provider not mining data for its own business benefit as very important. Of those who say it is very important, 84% trust Microsoft will not misuse their data (see Figure 7).

FIGURE 7

Satisfaction That Microsoft Azure Does Not Mine Data for Microsoft's Business Benefit

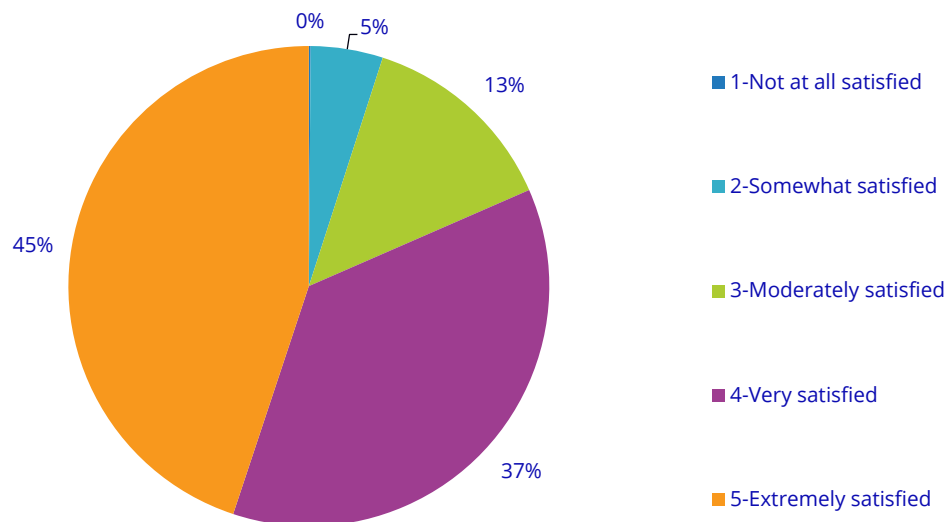


Source: IDC's *Microsoft Azure Study*, February 2020

Customer data privacy is also of utmost importance to enterprises. Cloud vendors are expected to have data privacy policies that define and enforce safeguards against data privacy violations. 82% of respondents are very or extremely satisfied that Microsoft Azure's privacy policy provides adequate data privacy (see Figure 8).

FIGURE 8

Satisfaction with Microsoft Azure's Privacy Policy



Source: IDC's *Microsoft Azure Study*, February 2020

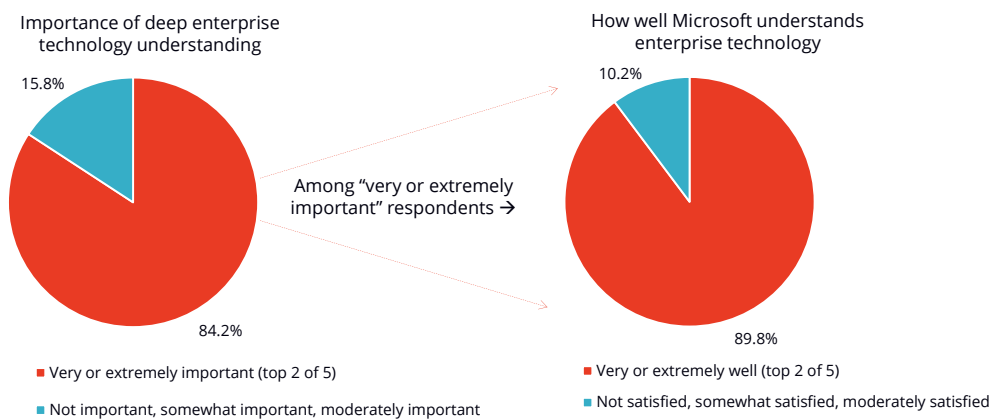
RESPONDENTS BELIEVE FULL-STACK CLOUD PROVIDERS DELIVER DIFFERENTIATED VALUE FOR CRITICAL BUSINESS NEEDS

As organizations move their solutions to the cloud, enterprises look to cloud providers with experience in supporting businesses like theirs. They expect cloud providers to address security, compliance requirements, and employee skill set considerations across their expanding application ecosystem. The vast majority of businesses surveyed believe it is very important that their cloud provider understands both the technology and the industry-specific context of the environment in which those businesses operate. This support of critical business needs becomes a differentiator for cloud providers.

84% of respondents believe it is very important for their cloud provider to have a deep understanding of enterprise technology. Of those respondents who say it's very important, 90% feel Microsoft understands the needs of enterprise customers very well (see Figure 9).

FIGURE 9

How Well Microsoft Understands Enterprise Technology

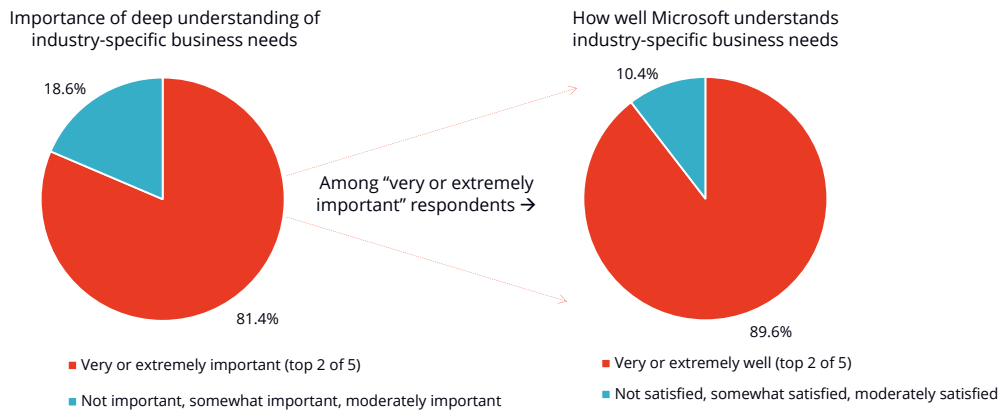


Source: IDC's *Microsoft Azure Study*, February 2020

Enterprises also look to the use of that technology to address relevant business requirements for their industry. 81% of respondents believe it is very important for their cloud provider to have a deep understanding of their industry-specific business needs. Of those respondents who say it's very important, 90% feel Microsoft understands the business needs of their industry (see Figure 10).

FIGURE 10

How Well Microsoft Understands Industry-Specific Needs

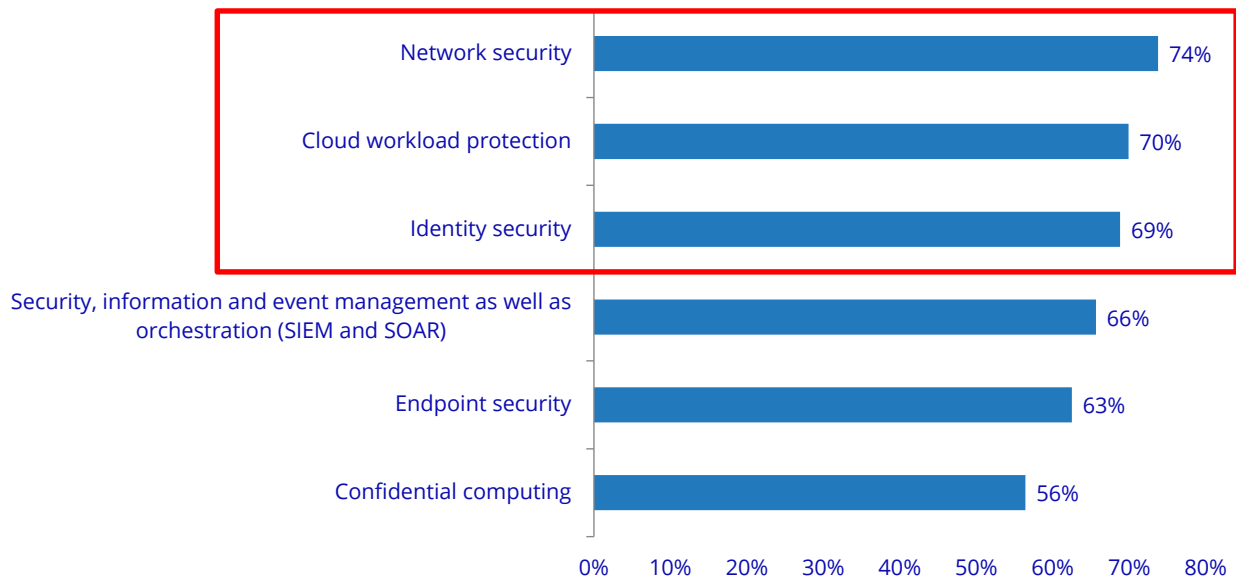


Source: IDC's *Microsoft Azure Study*, February 2020

As application ecosystems migrate to the cloud, the perimeter that enterprises must protect also expands and fundamentally changes. Organizations expect cloud providers to provide a broad range of security solutions to help reduce their risk. IDC's interview and survey found that greater security is the biggest value associated with providing a pre-integrated full stack. Customers choose Microsoft Azure at least in part because of security offerings that are consistent across cloud and on-premises environments. The top cloud security technologies that enterprises expect their cloud vendor to offer are network security, cloud workload protection, and identity security (see Figure 11).

FIGURE 11

Cloud Security Technologies Enterprises Expect Cloud Vendors to Provide

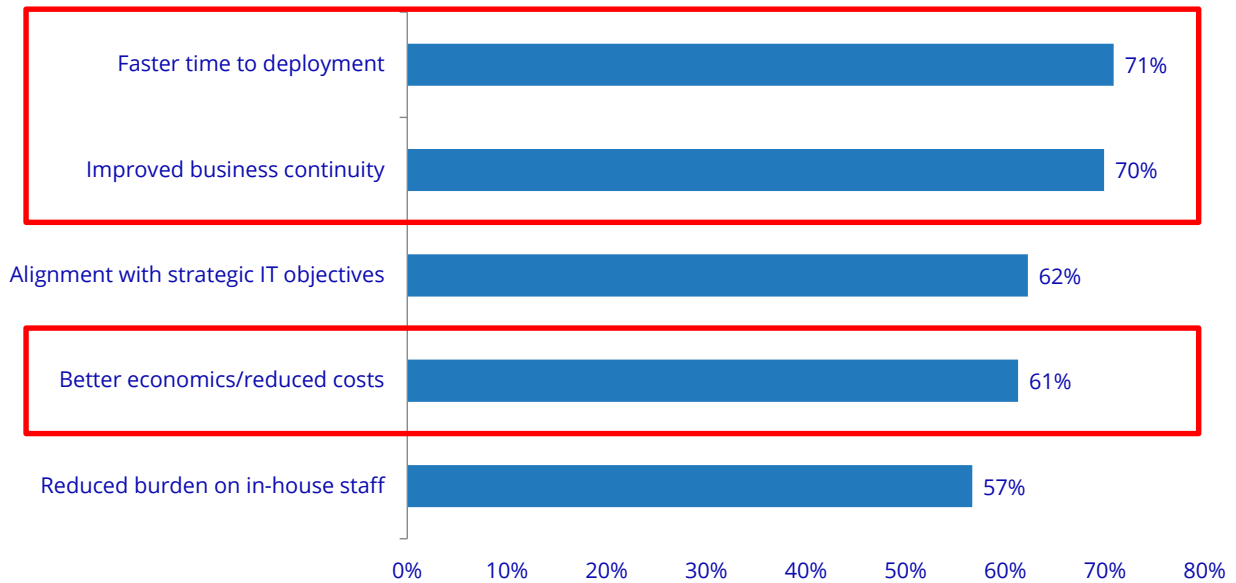


Source: IDC's *Microsoft Azure Study*, February 2020

In today's complex environments, the ability for an organization to successfully transition from on-premises environments to the cloud is also contingent on the skill sets of its employees. Cloud providers that make it possible for employees to use the same or similar skills as they already use in existing/legacy environments help ease the transition to cloud and realize time to market and financial rewards. The top benefits of transferability of employee skill sets from on premises to the cloud are faster deployment, better business continuity, and reduced costs (see Figure 12).

FIGURE 12

Benefits of Employee Skill Set Transferability

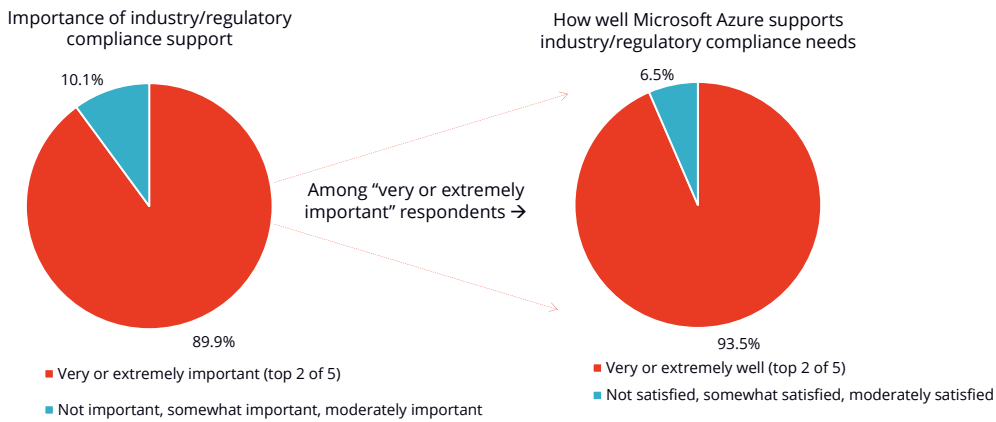


Source: IDC's *Microsoft Azure Study*, February 2020

Enterprises must maintain compliance with industry-specific and regulatory requirements. It is critical that full-stack technology providers support compliance issues across a broad range of industries. 90% of respondents feel it is very important for their cloud provider to support their specific industry/regulatory compliance. Of those respondents who say it's very important, 94% are very satisfied with Microsoft Azure's ability to meet their compliance needs (see Figure 13).

FIGURE 13

How Well Microsoft Azure Supports Industry/Regulatory Compliance Needs



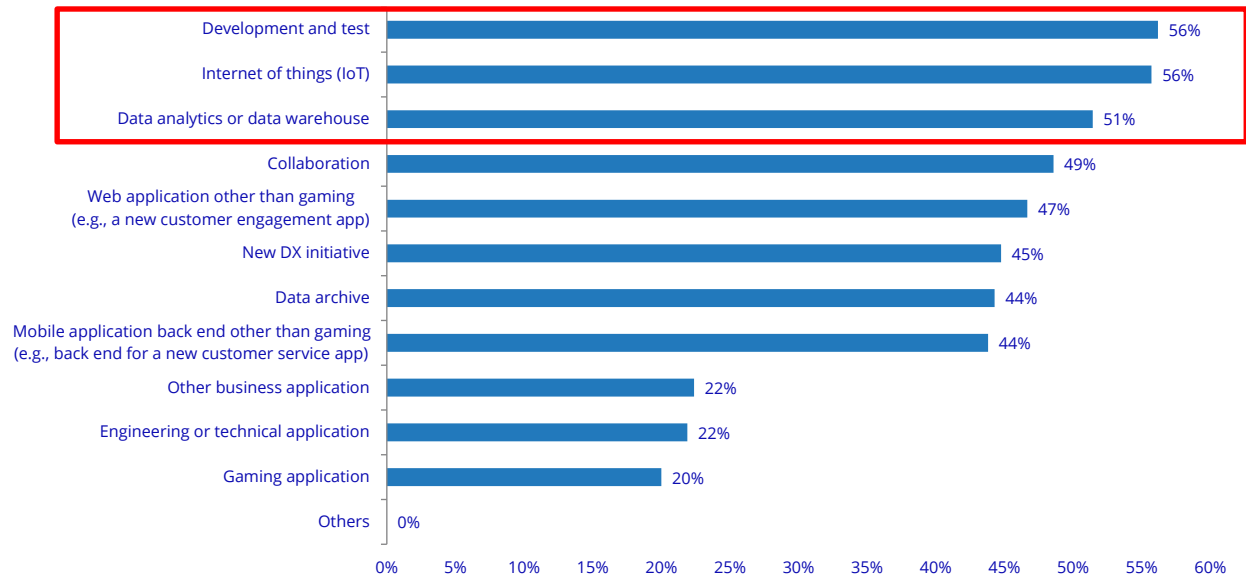
Source: IDC's *Microsoft Azure Study*, February 2020

RESPONDENTS SEE AZURE AS A NATIVE DESTINATION FOR MICROSOFT WORKLOADS AND .NET APPLICATIONS

Microsoft customers prefer cloud services that integrate well with their existing application ecosystem, including their .NET applications. They trust that an integrated Microsoft application stack on Microsoft Azure will work well together. Respondents ran an average of over seven .NET applications across both cloud and on-premises environments, with 57% of those .NET applications running in the cloud. These enterprises run varying types of .NET applications in the cloud, led by development/testing, Internet of Things, and data analytics/warehousing (see Figure 14).

FIGURE 14

Types of .NET Applications Run in the Cloud

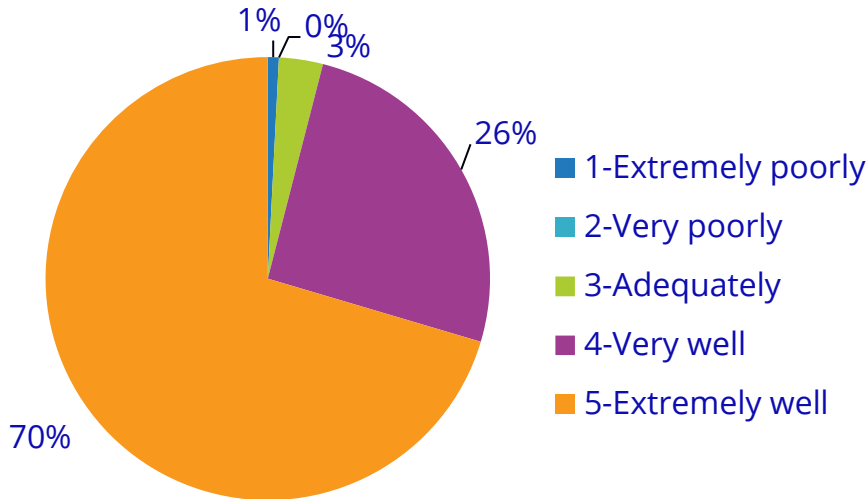


Source: IDC's *Microsoft Azure Study*, February 2020

.NET is an integral platform component to software road maps at respondent organizations. Through interviews with Microsoft customers, .NET customers consistently highlighted how their long-term road map of software development was built around .NET for the foreseeable future – both on Microsoft and on non-Microsoft OS platforms. 94% of respondents feel Microsoft supports their .NET needs very well. In addition, among users with over 50% of their .NET applications on Microsoft Azure, that satisfaction is even higher, increasing to 96% (see Figure 15).

FIGURE 15

How Well Microsoft Azure Runs .NET Application Workloads – Users with 50%+ .NET Applications in the Cloud

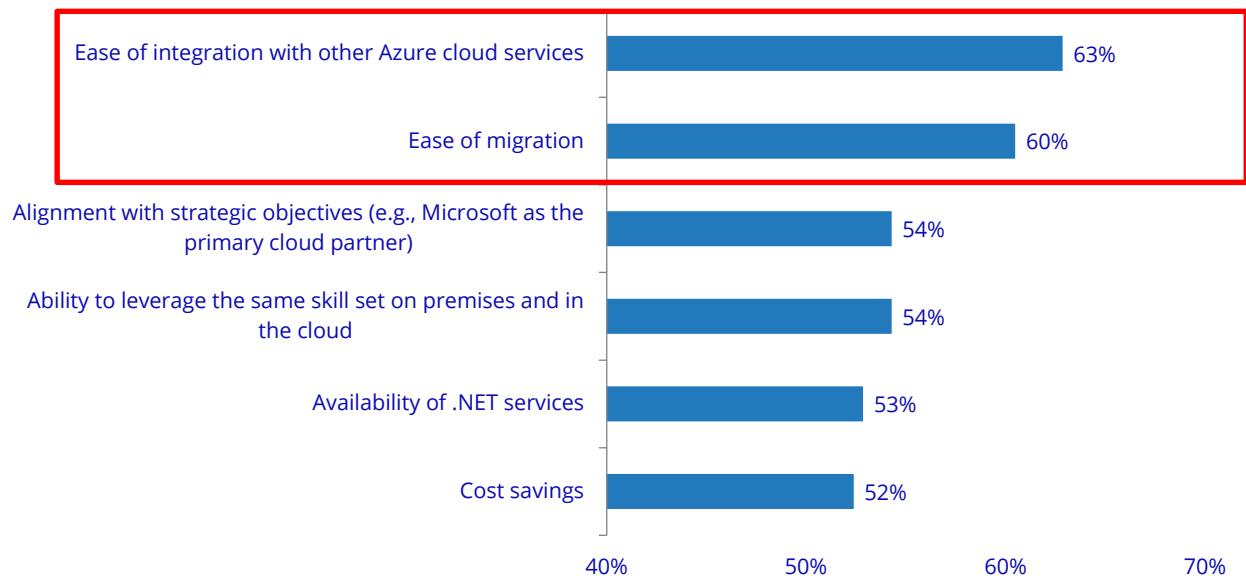


Source: IDC's *Microsoft Azure Study*, February 2020

Microsoft customers consider many criteria when deciding on a cloud vendor to host their .NET applications. The top reasons why these businesses chose Microsoft Azure were ease of integration and ease of migration (see Figure 16).

FIGURE 16

Reasons to Choose Microsoft Azure to Run .NET Applications

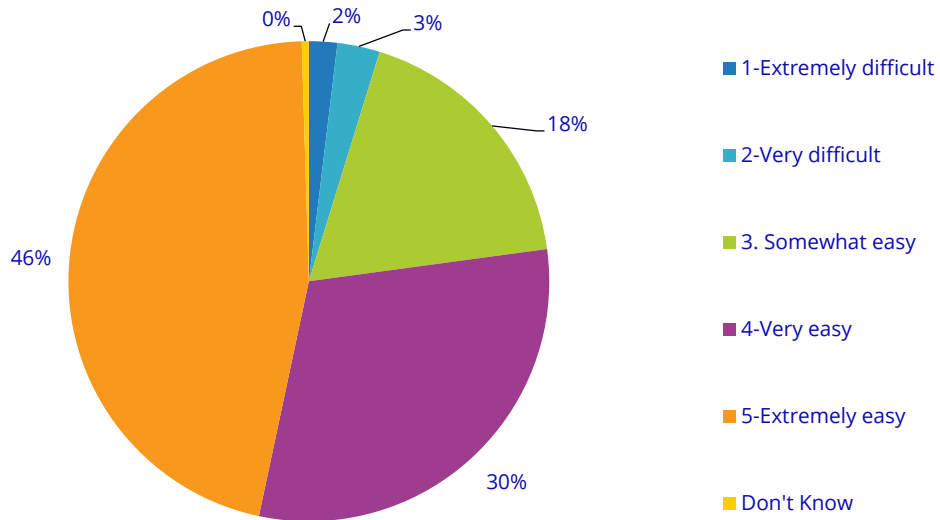


Source: IDC's *Microsoft Azure Study*, February 2020

When asked how easy the migration from on premises to Microsoft Azure was, 76% of respondents said migrating their .NET applications was very easy or extremely easy (see Figure 17).

FIGURE 17

Ease of Migration of .NET Applications to Microsoft Azure

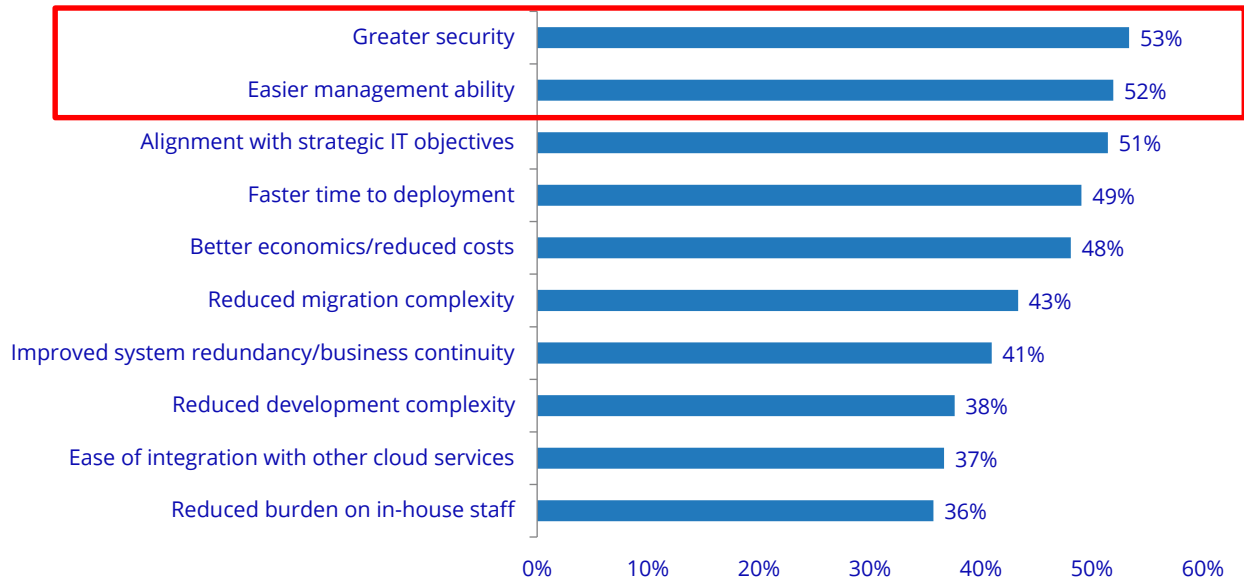


Source: IDC's *Microsoft Azure Study*, February 2020

Customers cite a variety of run-time benefits of Microsoft Azure for .NET applications. Respondents rank greater security and easier application management as top benefits of running .NET applications on Microsoft Azure (see Figure 18).

FIGURE 18

Benefits of Running .NET Applications on Microsoft Azure



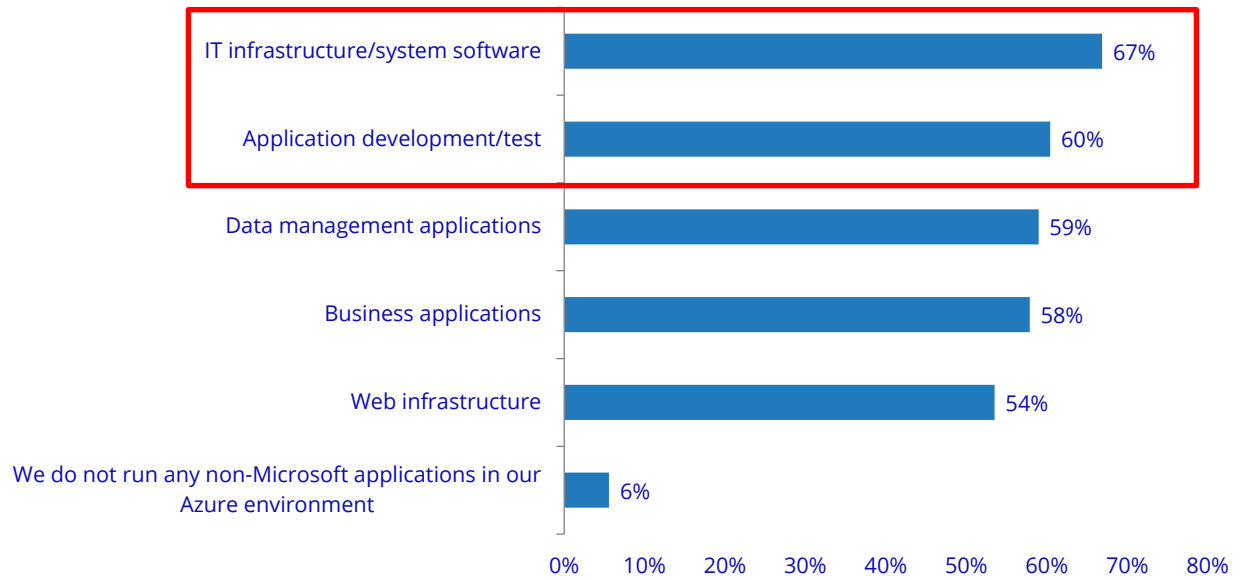
Source: IDC's *Microsoft Azure Study*, February 2020

AZURE AS A DESTINATION FOR MIXED ENVIRONMENTS – RUNNING LINUX AND WINDOWS WORKLOADS

Many enterprises run heterogeneous environments with a mix of Microsoft and non-Microsoft/Linux-based open source workloads, with 94% of respondents running some form of non-Microsoft workloads on Microsoft Azure. The leading non-Microsoft workloads they run on Microsoft Azure are IT infrastructure software and application development/test solutions (see Figure 19).

FIGURE 19

Non-Microsoft Applications Run on Microsoft Azure

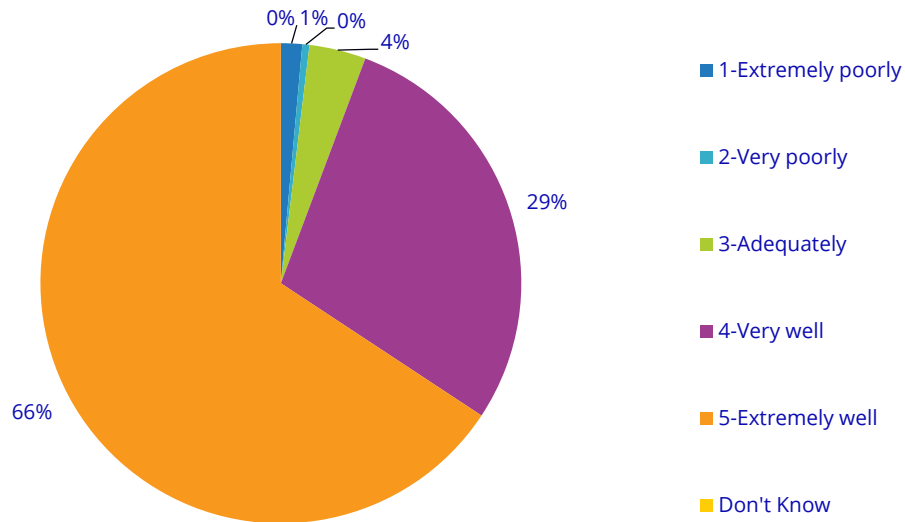


Source: IDC's *Microsoft Azure Study*, February 2020

In heterogeneous environments, Microsoft Azure is expected to run both Microsoft and non-Microsoft/Linux-based open source workloads equally well. 84% of respondents feel it is very important that a cloud provider offers a combination of Windows and Linux-based open source services. When asked about their Linux-based open source projects, 95% of respondents believed Microsoft Azure runs open source workloads very well or extremely well (see Figure 20).

FIGURE 20

How Well Microsoft Azure Runs Linux-Based Open Source Applications

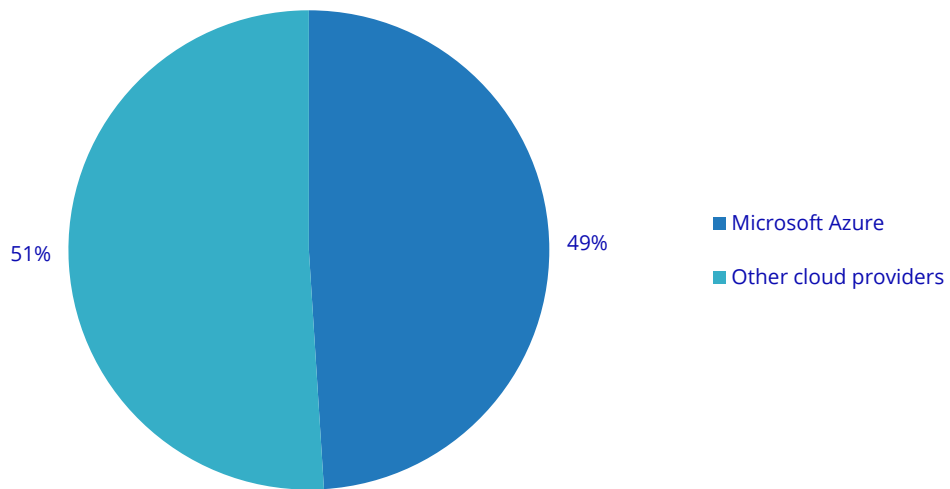


Source: IDC's *Microsoft Azure Study*, February 2020

This satisfaction with Microsoft Azure's open source capabilities is highlighted by the fact that 49% of respondents' public cloud-based Linux projects are run on Azure. Furthermore, respondents feel Microsoft is now viewed as a good partner in the open source community, with high ratings on key open source community actions, including no branching or forking of open source projects (see Figures 21 and 22).

FIGURE 21

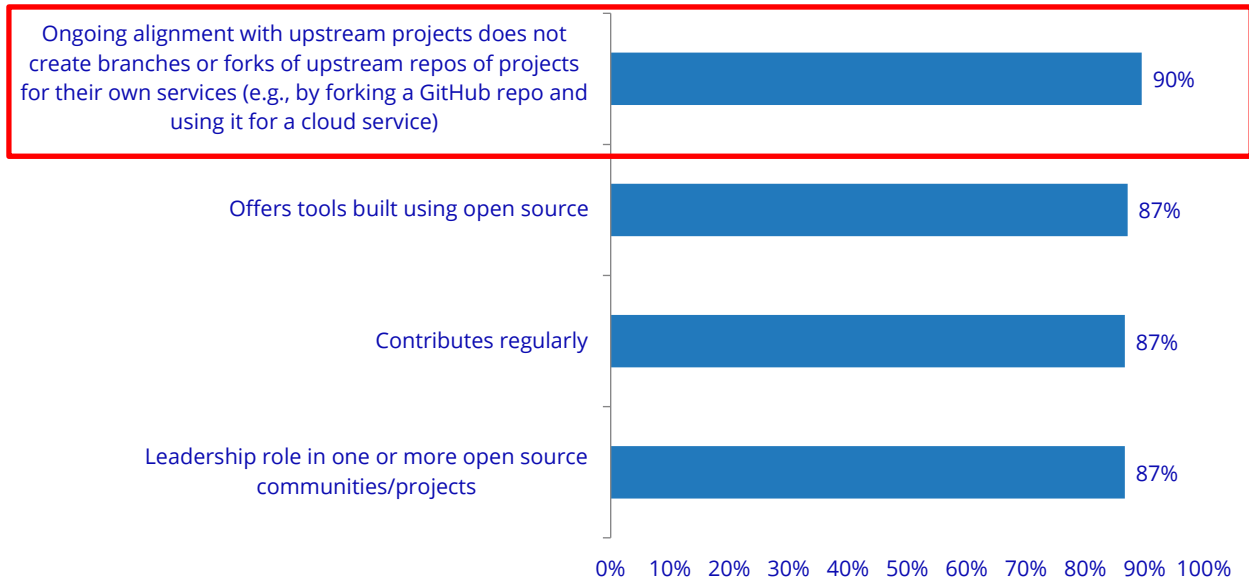
Percentage of Linux-Based Open Source Applications in the Cloud



Source: IDC's *Microsoft Azure Study*, February 2020

FIGURE 22

Microsoft Azure Rated as "Very Committed" to Open Source Community Actions



Source: IDC's *Microsoft Azure Study*, February 2020

OPPORTUNITIES AND CHALLENGES

As enterprises move key business applications and services to the cloud, they choose to partner with cloud providers that support their top priorities. These needs are likely different from the needs of early cloud adopters, creating several important opportunities and challenges for Microsoft Azure.

Opportunities include:

- **Enterprise mindshare.** Microsoft has an opportunity to build upon its strength in offering a full stack of enterprise IT workloads to help bring more businesses to the cloud and Microsoft Azure. As a long-standing enterprise technology leader, many enterprise customers will naturally look to Microsoft to help them with their digital transformation journey.
- **Pure-play opportunities.** Microsoft can counter the perception that Azure only runs or is best suited to run Microsoft workloads. By doing so, Microsoft can win more business with enterprise customers that run heterogeneous application environments. This can be realized by further strengthening offerings that make it easier to run non-Microsoft/Linux-based open source applications and by continuing to actively contribute to the open source community.
- **Strong partner network.** Microsoft has been recognized for its world-class partner network to support enterprise customer environments and integrations. This leadership in the partner community reinforces Microsoft's full-stack capabilities and is an important selling point for enterprises. Leveraging and continuing to expand this partner network create an opportunity to strengthen Microsoft Azure's market stance.

Challenges include:

- **Competitors strengthening partner networks.** Other cloud providers are catching up in terms of establishing their own partner networks. By building out their network of partnerships, these providers are establishing greater credibility in the enterprise and could challenge Microsoft's advantage in this market.
- **New market realities.** Another challenge for Microsoft surrounds potential shifts in enterprise priorities as businesses accelerate their move to the cloud to quickly respond to fundamental workplace changes brought on by the COVID-19 pandemic. And while moving key applications and services to the cloud is usually driven by strategic priorities, tactical factors like cost are becoming an increasingly important factor in vendor choice.
- **Legacy software licensing perceptions and practices.** Even as it places increased focus on cloud offerings, Microsoft may need to overcome legacy software licensing perceptions and practices associated with using its market leadership position to its advantage and pursue restrictive licensing models. Whether warranted or not, Microsoft must shake the image of relying on vendor-friendly legacy pricing models and demonstrate that it is embracing customer-friendly SaaS licensing models.

IDC GUIDANCE/KEY TAKEAWAYS

Businesses today find themselves in the midst of great disruption, with one of the few certainties being that IT – and the cloud – will be fundamental drivers as they rework strategies, systems, and processes to adapt to their new reality. As enterprises consider partnering with the cloud providers best equipped to maximize their success, they should keep several points in mind:

- **Partner with pure-play cloud technology providers.** Trust in your cloud provider is of critical importance to enterprises. Technology partnerships should not become a business risk. Organizations want to be confident that their cloud providers will not become a direct competitor, will not misuse data for their own business benefit, and will protect customer data privacy. Pure-play cloud providers that are solely focused on enterprise technology are highly trusted.
- **Consider Microsoft for your open source and Linux-based workloads.** Many enterprises run heterogeneous environments with a mix of Microsoft and non-Microsoft/Linux-based open source workloads. As one might expect, customers are highly satisfied with how their Microsoft workloads run on Microsoft Azure. But Microsoft is seen as running non-Microsoft/Linux-based open source workloads equally well. Furthermore, Microsoft is seen as participating in the open source community and consistently rates well on key community actions.
- **Look to cloud providers that offer pre-integrated solutions.** The vast majority of businesses surveyed believe it is very important that their cloud provider understands both the technology and the industry-specific context of their expanding application ecosystem. Pre-integration of solutions such as security services enables businesses to deploy faster and more cost effectively. This pre-integrated support of critical business needs can be a differentiator for cloud providers.
- **Run .NET applications in a cloud environment that is purpose built to make development, deployment, and migration easy.** As .NET applications are moved from on premises to the cloud, enterprises want an easy transition that helps them achieve fast time to market. They look to take advantage of Microsoft Azure for easy migration and purpose-built integrations. In particular, respondents found deep integrations with other Microsoft technologies like Active Directory and SQL Server, and the CI/CD pipeline, make deployment faster and easier.

About IDC

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