

CLOUD DRIVES DIGITAL TRANSFORMATION IN FINANCIAL SERVICES

Excerpts from the 2020 Frost & Sullivan Global Cloud User Survey

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SPONSOR PERSPECTIVE

Financial institutions have embraced digital innovation at a record pace to adopt new ways of working, serve the financial needs of customers, and keep the markets performing. They have done so while still operating within their control frameworks and regulatory requirements needed to serve in all parts of the world. The tenacity of the industry and its workforce has been remarkable.

As we reimagine what the future will look like, there are a few things we foresee:

1. Agility and resiliency will remain top of mind. There is a permanent change around the use of technology to remain agile and resilient. Resiliency is top of mind with regulators, and it's critical that financial institutions avoid disruption. They will continue to build resiliency throughout their operations and value chains to serve customers.
2. Competition will be fierce. Fintechs and non-financial services start-ups are looking at every part of the value chain and creating new products and services for customers that traditional financial institutions will compete against.
3. Business models will shift. Financial institutions will look at business models to identify new opportunities to help their customers, partner across the industry to leverage competitive strengths and embed financial services throughout commerce experiences.
4. Collaboration and communication will transform. How we work and collaborate have gone through a radical change and will continue to evolve. There will also be significant shifts in the delivery of advice and service through real-time communications and the use of a 360-degree understanding of customers to deliver personalized experiences.
5. Future success lies in becoming data and AI driven. As computation and computing fabric becomes embedded in the world, we now

can take available data and turn it into analytical, predictive power using cloud and AI innovations. We believe the leading indicator of digital transformation success can be measured by an organization's ability to build predictive and analytical capabilities.

At Microsoft, everything we do is centered around our mission of empowering every individual and organization on the planet to achieve more. We are dedicated to listening to customers, understanding their needs, and working side-by-side to co-innovate and co-develop next-generation solutions, helping differentiate them in the marketplace, deepen customer relationships and grow responsibly.

That's why we're incredibly excited to bring to the industry Microsoft Cloud for Financial Services. Built for banking, capital markets, and insurance, this is an end-to-end, industry-specific cloud solution bringing together capabilities with multi-layered security and comprehensive compliance coverage to deliver differentiated experiences, empower employees, modernize systems, and manage risk. These capabilities enable collaboration and automation to streamline processes and AI and analytics tools, turning insights into action to accelerate transformation. To find out more, [visit our website](#).

We're committed to sharing our learnings and insights with the industry. We partnered with Frost & Sullivan to explore digital transformation in financial services and the opportunities ahead. I encourage you to read this report to learn why more and more financial institutions are turning to the cloud to succeed now and in the future.



Bill Borden

**Corporate Vice President,
Worldwide Financial Services**

Microsoft Corporation

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EXECUTIVE SUMMARY

For financial institutions, the first months of 2020 were a test of operational agility. In response to COVID-19's chaos—including branch shutdowns, concerns about employee health and safety, and shifting government mandates—the financial firms best able to pivot were those that were already well into their cloud journeys. Such firms leveraged a cloud foundation to support remote workers; protect data assets; serve customers and partners; and change, update, and manage critical business software on the fly.

The 2020 Frost & Sullivan Global Cloud User Survey, conducted with 239 business and IT leaders from financial services firms worldwide, emphasizes the divide between digitally mature financial organizations and those that have been slower to embrace transformative technologies. It also reveals the challenges that still remain as financial firms head into 2021. Among the interesting findings of this year's survey:

70%

growth in **multi-cloud adoption**

Multi-cloud adoption has skyrocketed among financial firms in the past year, up nearly 70%. Hybrid cloud adoption—already higher among financial firms than other industries—is up 8%. In response to the pandemic, financial firms are accelerating their cloud journeys, knitting together disparate IT environments (on-premises, edge, and multiple clouds) as a foundation for digitalization.

78%

prioritize **innovation**

More so than other industries, financial services firms continue to prioritize innovation. While most industries have contracted in response to the pandemic—focusing on survival rather than growth—financial firms continue to pursue longer-term strategies that will help them thrive against digital competitors.

83%

say they are **digitally advanced**

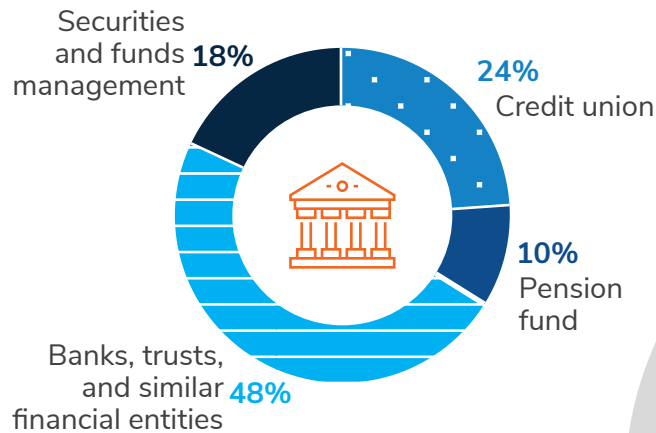
Overall, financial firms have a higher degree of confidence in their digital maturity than other industries. **83% of financial industry survey respondents believe they are more digitally advanced than their competitors.** Confidence is good; overconfidence can be a liability.

Source: 2020 Frost & Sullivan Global Cloud User Survey

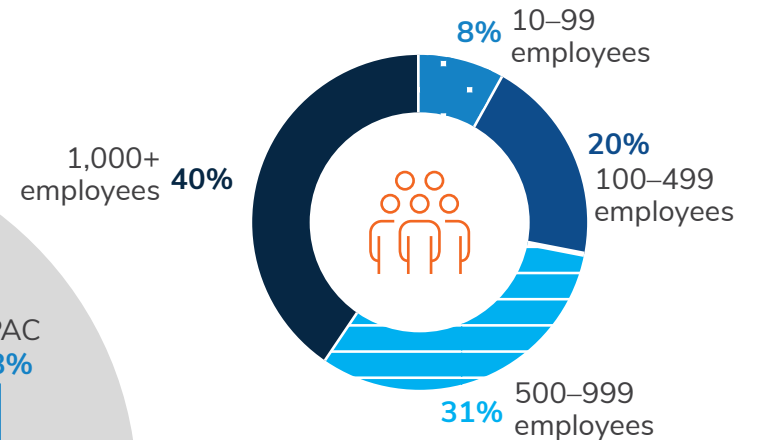
ABOUT THE FROST & SULLIVAN 2020 CLOUD USER SURVEY

This year's survey was conducted in August 2020. The survey garnered responses from 239 financial services firms; specifically, from IT and business executives who make or influence decisions regarding the purchase of IT infrastructure, software, or cloud services.

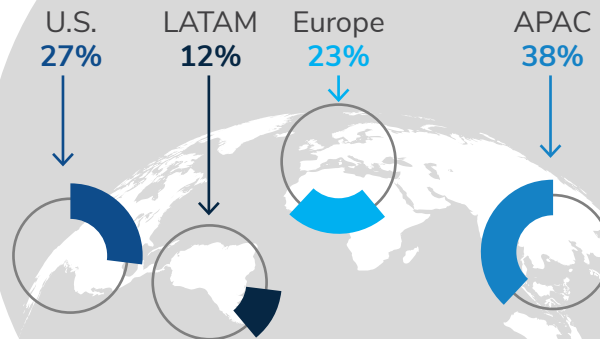
Type of Financial Organization



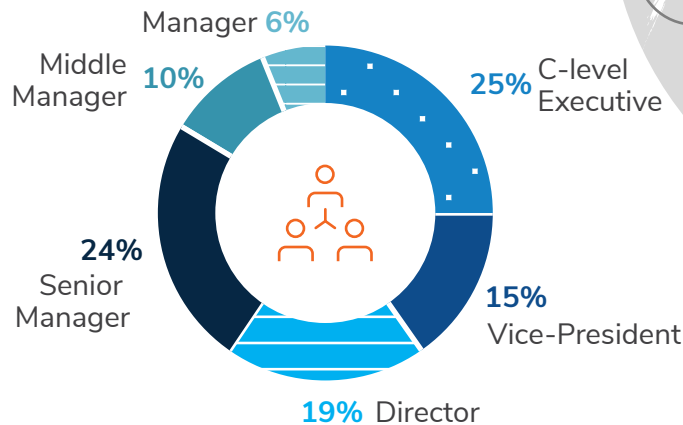
Size of Respondent Company



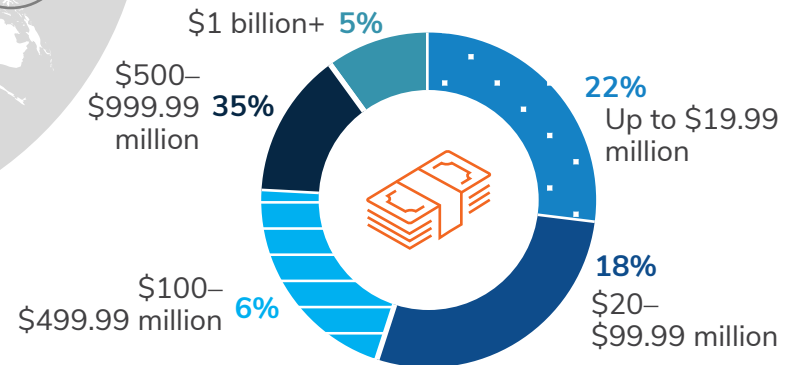
Respondents by Region



Respondent Title/Role



Respondent Firms' Revenue 2019



BUSINESS OPERATIONS TAKE PRIORITY IN CHALLENGING CONDITIONS

Financial leaders are dealing with multiple priorities as they keep their businesses running. Ranking high on their list of goals (and statistically equivalent in importance) are seven priorities, including **improving business process, customer experience, and employee productivity**. Firms need to ensure that tightly regulated processes and face-to-face customer interactions remain effective and compliant, despite a remote workforce. As they transform themselves to compete in the

digital era, financial firms are more likely than other industries to identify “reliance on data analytics” as a top strategic goal.

Surprisingly, financial leaders say they remain committed to competitive innovation, unlike other industries, which largely placed growth plans on hold during 2020. The financial industry continues to experience disruption from born-in-the-cloud startups and “fintechs” that leverage automation and intelligent technologies to bring products to market quickly and cost-effectively.

Strategic Business Goals Rated “Crucial” or “Very Important”

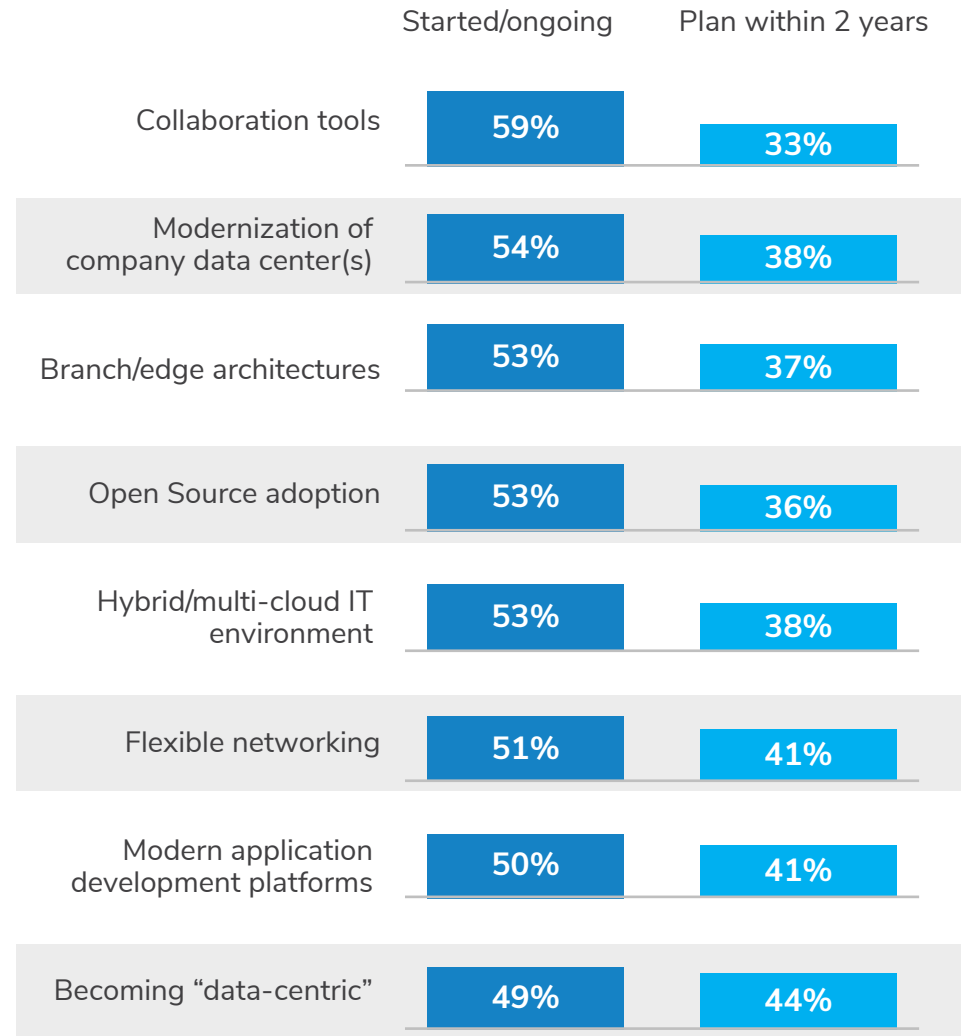


BUILDING A TECHNOLOGY FOUNDATION

An effective digital transformation is not about adopting specific technologies or solutions; but about implementing a flexible foundation: infrastructure, platform tools, and processes that will support an ever-changing flood of technologies and solutions.

Although the traditionally conservative financial industry was late to adopt many technologies, firms are now catching up with other verticals. Most financial firms are well on their way to implementing the technology foundations they will need, with around half of respondents saying they have important initiatives underway.

Implementation Status of Foundational Technologies



FINANCIAL FIRMS EMBRACE CLOUD INFRASTRUCTURE

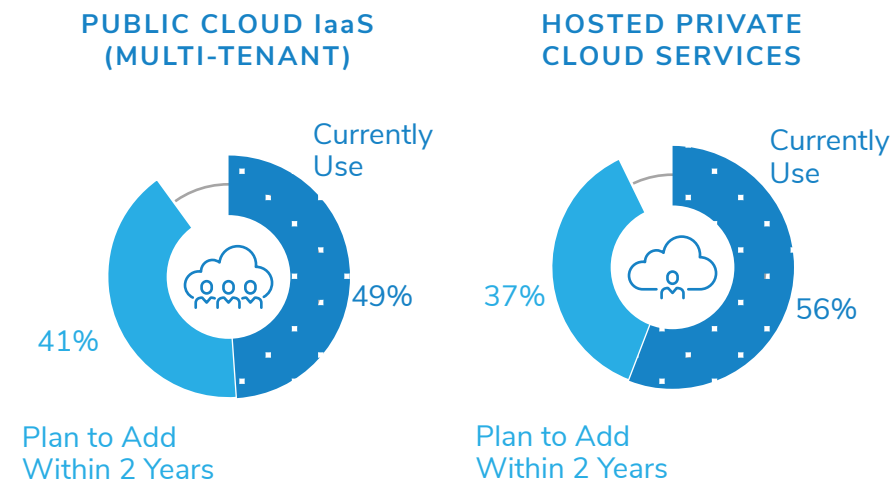
In a digital business, achievement of strategic business goals relies on purchasing, configuring, and implementing the right technologies—not just applications, but also the underlying infrastructure and platforms. Increasingly, purchase decisions are shared by all stakeholders, from IT and the business, who evaluate infrastructure options based on app requirements.

For many business apps, financial firms are choosing public cloud Infrastructure as a Service (IaaS), a multi-tenant option that offers cost-effective, on-demand availability and automated scalability. Adoption has remained steady at around 50% over the past few years. Where more consistent app performance or security is required, firms are choosing single-tenant hosted private cloud services. Adoption of these services grew by 10% in 2020.

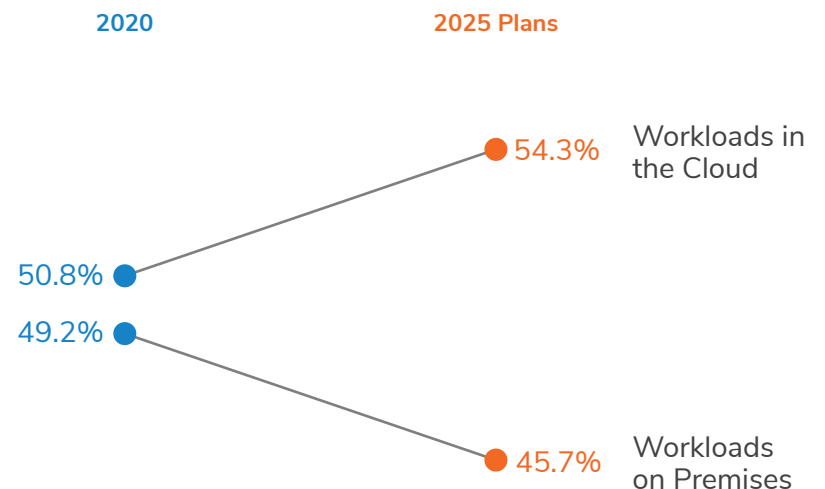
Financial organizations use an average three public cloud providers today, indicating a preference to avoid lock-in and leverage individual strengths of different providers.

On average, financial firms have placed more than half of their workloads in the cloud (public or hosted private), and that number is expected to grow faster than other industries over the next five years.

Usage of Cloud Services



Cloud vs. On Premises Workloads



HYBRID AND MULTI-CLOUD USAGE SOARS

As they pursue digital transformation, financial firms require a flexible and robust cloud infrastructure to meet their business goals. For example, innovation (cited as a top goal by 78% of financial firms) requires access to disparate data sources and sophisticated analytics tools. Speed to market calls for an easy-to-use, intelligent app development platform. Cost efficiency requires firms to host their apps on the optimal platforms, using only the resources they need.

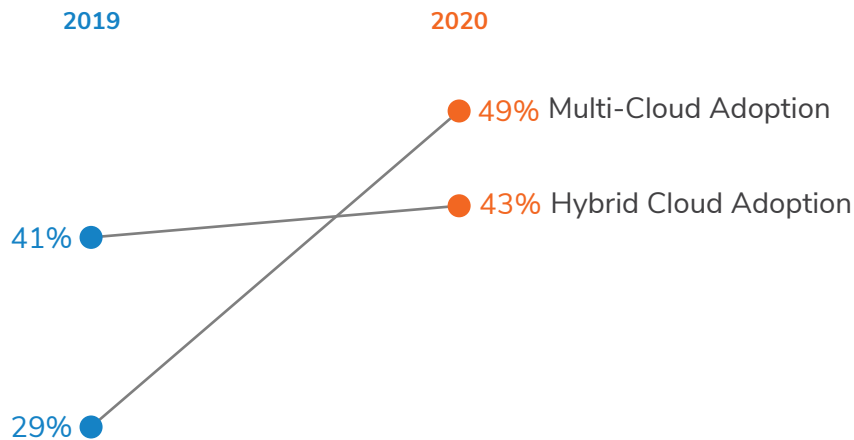
To meet these goals, financial firms worldwide have rushed to adopt hybrid and multi-cloud solutions, which give them

the flexibility to build, host, and manage data and apps across multiple infrastructures.

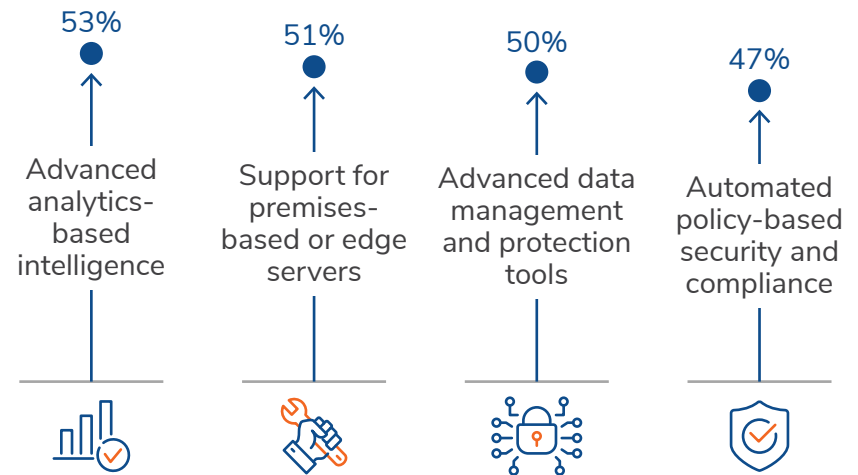
A HYBRID CLOUD is defined as any combination of cloud, hosting and private data center resources that are managed and controlled as a single pool of resources to run an application.

A MULTI-CLOUD ENVIRONMENT environment combines services and resources from more than one cloud service provider.

Financial Firms using Hybrid and Multi-Cloud Services



HIGHEST-VALUE FEATURES OF A HYBRID CLOUD PLATFORM

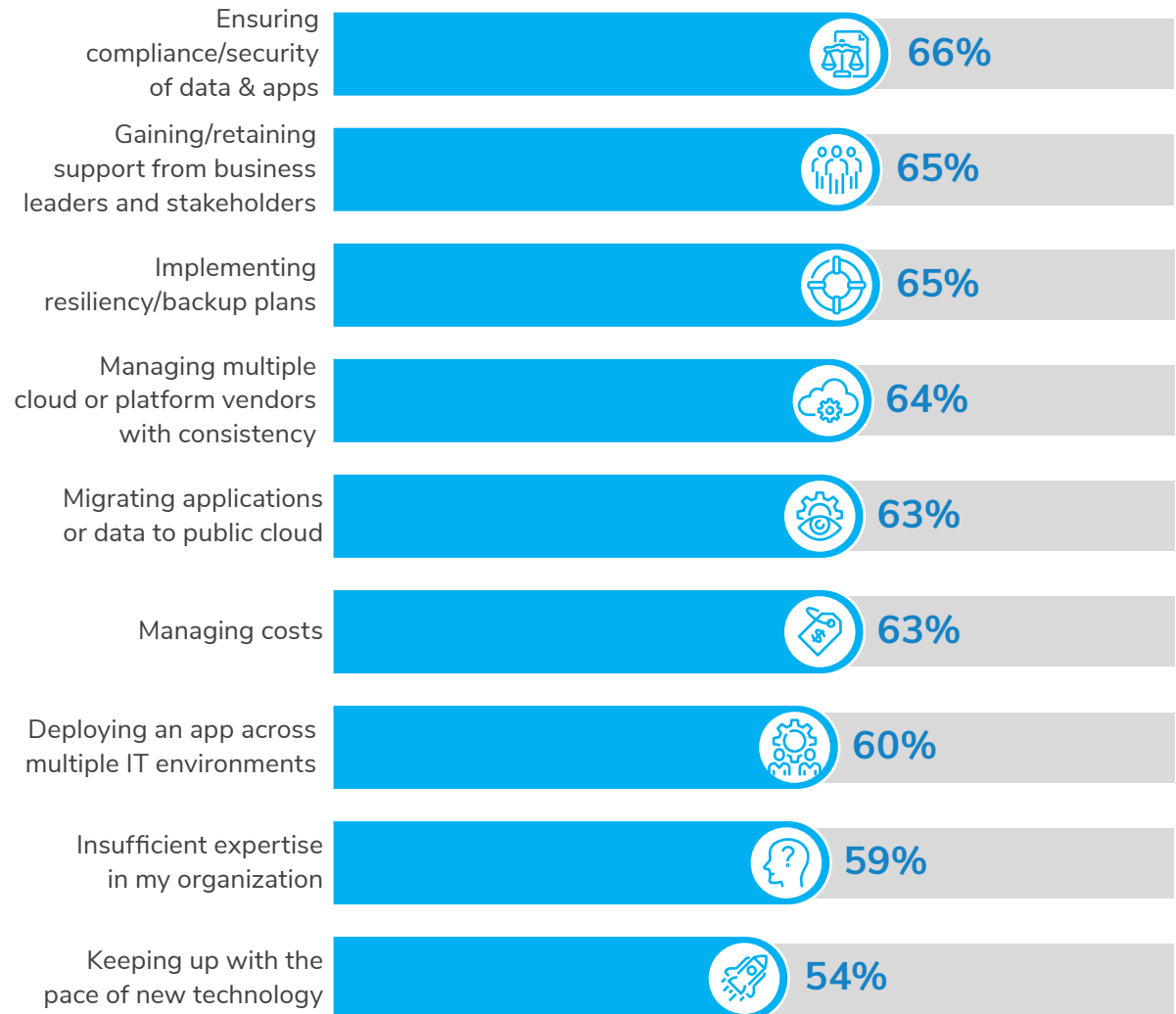


WHAT CAN GO WRONG? HURDLES TO IMPLEMENTING A HYBRID, MULTI-CLOUD

Despite—or maybe because of—the rush to expand their infrastructure options, financial firms are still struggling to implement an effective hybrid, multi-cloud. In some cases, the challenges are significant: nearly a quarter of respondents said the challenges halted their cloud initiatives.

Compliance and resiliency were among the greatest hurdles, with two-thirds of respondents rating them as crucial (defined as “halting the initiative”) or very important challenges (defined as “adding significant time or cost to the initiative”). In the past year, as work-from-home routines took hold, financial firms struggled to protect data that was processed and transmitted via non-secure public internet and personal devices. Technical issues related to managing, migrating, and deploying cloud apps also ranked high on the list.

Implementation Challenges

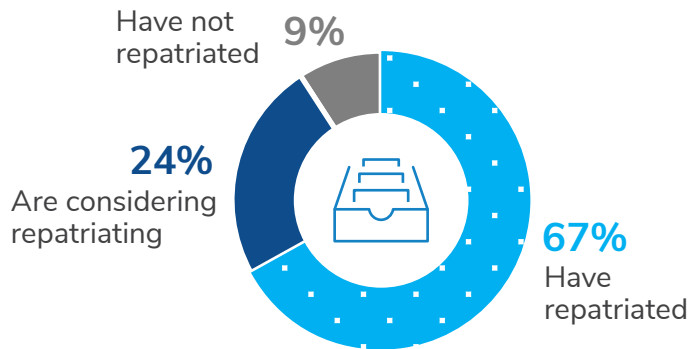


MOVING SOME CLOUD WORKLOADS BACK TO THE PREMISES

As financial firms continue on their digital transformation journeys, some are revisiting their earlier cloud decisions as a step toward optimizing their environments. This includes “repatriation” of workloads—that is, moving cloud apps and data back to the premises data center.

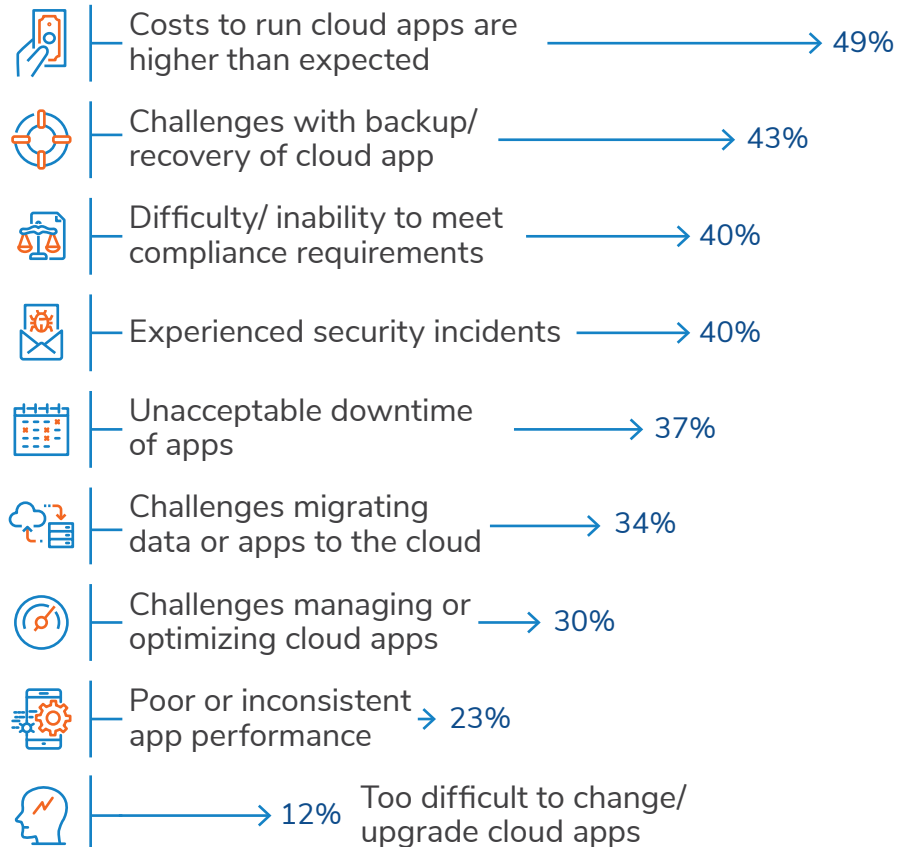
In the early days of cloud, many financial organizations quickly migrated apps to the public cloud—before considering that a different deployment model (on-premises, edge) might better support business objectives, such as app performance, cost, or compliance.

Workload Repatriation from Cloud to Premises



The top reasons for repatriation, as reported by survey respondents, underscore the importance of security and resiliency to highly regulated financial firms. In addition to cost, financial firms are most concerned with ensuring their apps and data are highly available, secure, and compliant.

Top Reasons for Repatriating a Workload



THE CLOUD KNOWLEDGE GAP

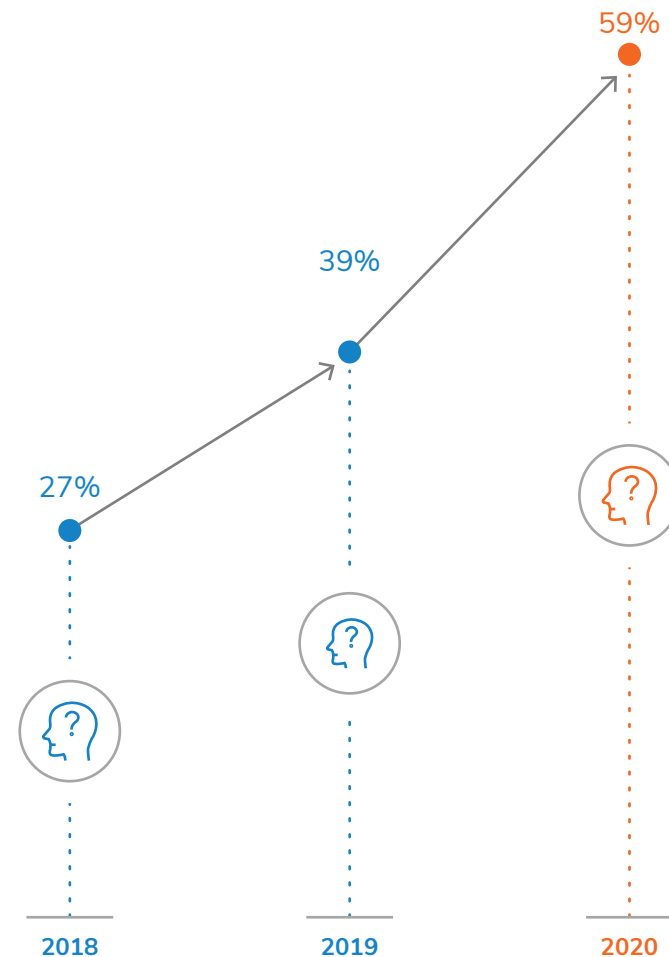
When businesses struggle with their cloud implementations, the underlying cause is not in the cloud model itself, but in organizations' desire to harness it for maximum value. Their frustration is understandable: with half of the IT budget and resources going toward legacy IT infrastructure and apps, financial organizations have limited ability to hire or train staff to focus on ever-evolving cloud offerings.

- 59% of financial services respondents say insufficient staff knowledge has led them to delay or halt their cloud implementations.
- 54% of respondents identify “keeping up with the pace of new technology being introduced into the market” as a critical challenge to cloud implementations.

To fuel their digital transformation and prepare both IT and business employees for the future, **firms must invest in people as well as technology, by utilizing cloud providers' ongoing market and product education.**

Interestingly, the percentage of companies claiming insufficient knowledge has risen in the past few years. As the complexity and pace of cloud technologies accelerate, organizations across all industries feel less inclined to deal with it on their own.

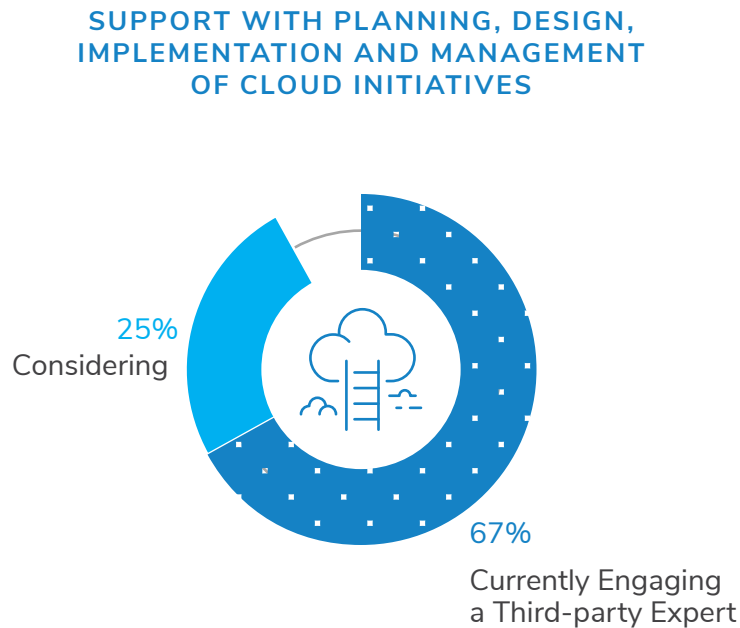
Financial Firms Citing Insufficient Expertise as a Significant Hurdle to Cloud Implementation



MANAGED AND PROFESSIONAL SERVICES FILL THE GAP

The complexity and urgency associated with implementing an effective cloud strategy has led to a rise in managed and professional services engagements. If they don't offer such services themselves, cloud service providers partner with a range of local and global service providers who act as a guide, mentor, and partners to organizations.

Financial Firms Engagement of Third-Party Cloud Experts



The specific services utilized by survey respondents reflect their priorities and their knowledge gaps. Backup and recovery services top the list, consistent with its high placement among user challenges. Many organizations seek help in getting started: building roadmaps and recommending clouds. An interesting revelation is the high value placed on organizational and cultural change: digital transformation has an impact far beyond the IT department, and a smart business will prepare for change among all employees.

Most Popular Managed/Professional Services

Planning/implementing backup and recovery procedures	39%
Managing organizational/ cultural change	37%
Optimizing cloud costs	36%
Creating an edge strategy and roadmap	36%
Developing a cloud strategy and roadmap	36%
Customized app development/integration	32%
Optimizing legacy apps for cloud deployment	32%
Managing cloud on an ongoing basis	32%
Assessing apps to decide where to deploy them	30%
Recommending the best public cloud services(s)	29%
Migrating apps to public cloud	29%

DIGITAL MATURITY: IS TOO MUCH CONFIDENCE A RISK?

Despite the challenges, financial organizations feel positive about their digital journeys. In fact, they outpace all other industries in their self-confidence.

However, there is a risk if confidence leads to complacency. To remain competitive, financial firms must consider the cloud not as

an end, but as a foundation that will enable them to quickly and effectively adopt any technology, today and into the future.

Confidence in Digital Transformation Journey



95%

of businesses are “very” or “somewhat satisfied with their primary public cloud service provider

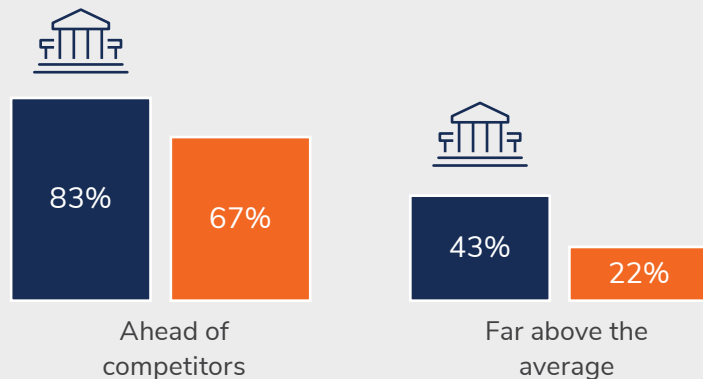
More than

90%

of businesses rate their technology initiatives as “excellent” or “very good” at meeting stakeholder expectations



SELF-ASSESSMENT OF DIGITAL TRANSFORMATION PACE



■ Financial Services
■ All Companies

FINANCIAL SERVICES FIRMS RELY ON AZURE TO ACCELERATE DIGITALIZATION

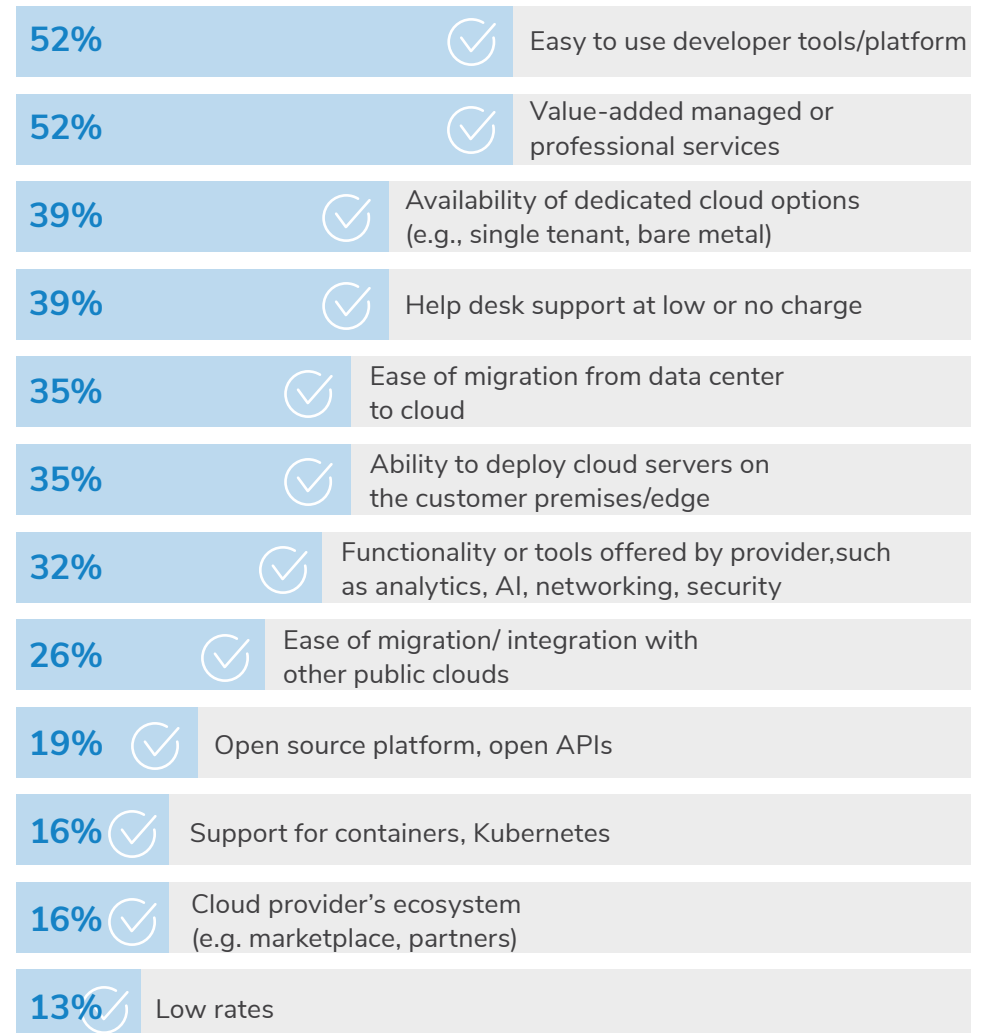
According to the survey, 45% of financial services institutions use Microsoft Azure to run their cloud applications and data. 94% say they are satisfied or very satisfied with their Azure services.

Their reasons for choosing Azure over other cloud service providers reflect the unique challenges of the industry. Over half of Azure users cite “easy to use developer tools” as a key selection criterion; for firms that prioritize innovation as a means to compete with fintechs, the ability to quickly develop, deploy, and update software is essential.

Azure also helps them close the knowledge gap. Respondents cite managed and professional services available from Microsoft and partners, to help them implement and optimize their clouds. They also value Azure’s extensive help desk options.

Azure users cite Microsoft’s single-tenant cloud option, as well the ability to deploy the Azure stack in their on-premises data center or branch. These options allow firms to leverage hybrid cloud benefits for their most secure data and apps.

Reasons for Choosing Microsoft Azure



KEY TAKEAWAYS

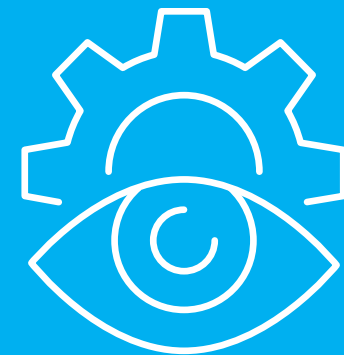
The Frost & Sullivan 2020 Global Cloud User Survey yields a host of opportunities for the financial services industry and the cloud and managed services providers that serve it.

Financial services organizations need assistance designing, implementing, and managing their hybrid multi-clouds — and they're willing to pay for it. The number of financial firms planning to add managed and professional cloud services is expected to increase by 37% in the next two years. Managed services providers would do well to introduce services specifically geared the unique needs of the financial services segment.

A robust cloud management and orchestration platform is what separates a true hybrid, multi-cloud from chaos. Platform providers must ensure their tools consistently support the full range of hybrid, multi-cloud environments (on-premises and edge servers, co-location, all major cloud service providers). For financial firms, the greatest value will come from converged functionality; e.g., data protection and management tools; artificial intelligence; security and compliance.

Market education will keep businesses digitally prepared. Not long ago, technology projects— such as a software installation or hardware refresh— had a defined beginning and end. Today, an organization's technology must continually evolve to keep pace with the changing market and competitive landscape. Financial services leaders must seek out partners that can help them make sense of the onslaught of technology options, lest they become either overwhelmed or complacent.

For more information
about the 2020
Frost & Sullivan Cloud
User survey, contact your
account executive or visit
www.frost.com





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