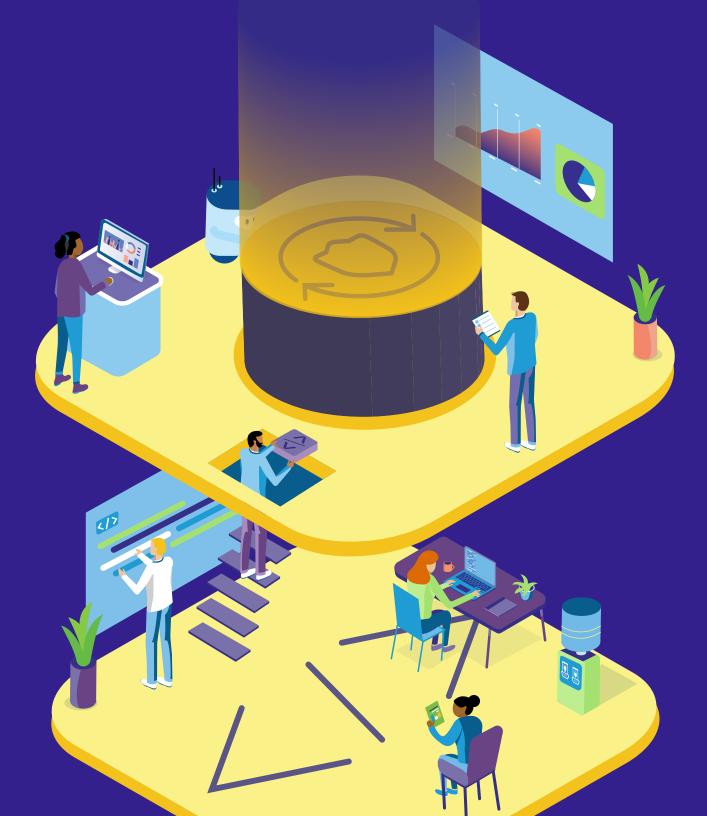


2020 STATE OF APPLICATION SERVICES REPORT



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INTRODUCTION

The financial services industry continues to demonstrate technology leadership by implementing the newest technology available.

This in turn challenges technology providers to offer business solutions that drive revenue, enhance customer engagement, and deliver on the promise of digital trust—all at a pace that is faster than their peers in other industries.

We isolated finance professionals' answers in this report, which is based on the results from 488 respondents. Their responses to our 2020 State of Application Services survey provide a unique view of the trends shaping the application landscape and how organizations in financial services are transforming to meet the ever-changing demands of the digital economy.

Welcome to the Financial Services edition of the 2020 State of Application Services Report!

Note: Throughout this report, we use the term "financial services" to reference both financial and insurance institutions.

2020 KEY FINDINGS



01

84% of organizations are executing on digital transformation—with increasing emphasis on accelerating speed to market.



02

87% of organizations are multi-cloud, and all of them use app services to enable digital trust.



03

68% of organizations implementing open banking are deploying API gateways to deliver innovation.



04

81% of organizations deploy a WAF as escalating threats mandate a strategic response.





84% of organizations are executing on digital transformation—with increasing emphasis on accelerating speed to market.



Applications and the cloud

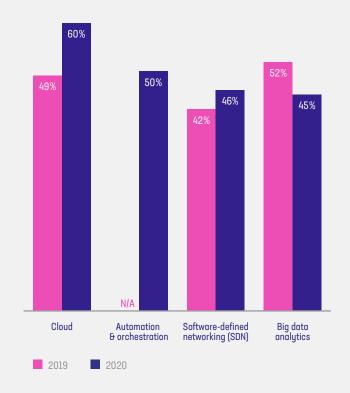
The number one strategic trend for financial services organizations is adoption of public cloud platforms. As one of the highest percentages in any industry, 60% is a compelling statistic, but it is even more striking when compared to just a few years ago when the prevailing wisdom was that mission-critical financial applications would be the slowest to move to the cloud. From just last year alone, the importance of cloud platforms within financial services organizations jumped eleven points from 49%, indicating that financial services firms are "all in" with respect to the cloud.

From last year, the importance of cloud platforms jumped 11 points from 49%, indicating that financial services firms are "all in" with respect to the cloud.

The cloud offers unprecedented speed in application deployment for organizations racing toward digital transformation, and three out of four financial services organizations say that the primary driver of those transformation efforts is to increase the velocity of new product or service introductions. Differentiated customer experiences is number two with 31% reporting digital transformation enables a faster response to emerging competitors. Aligning with the behaviors of new buyers is particularly important for 27% of financial services firms, which are creating innovative offerings to provide financial packages to gig economy workers and young digital natives around the world.

WE ASKED:

Which technology trends do you think will be strategically important for your organization in the next 2-5 years? Select all that apply.



WE LEARNED:

The strategic importance of the cloud is increasing for financial services companies.

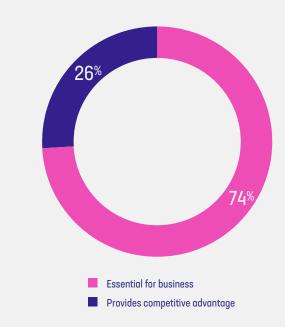
FIGURE 01: Strategic trends according to financial services organizations



Digital transformation goes hand in hand with applications; that every business today is an application business is not just a catchy marketing phrase. For 74% of organizations, applications are essential to business—without applications, they cannot operate. And 26% tell us applications support their business and provide competitive advantage. Not a single financial services respondent reported that they do not need applications to operate.

WE ASKED:

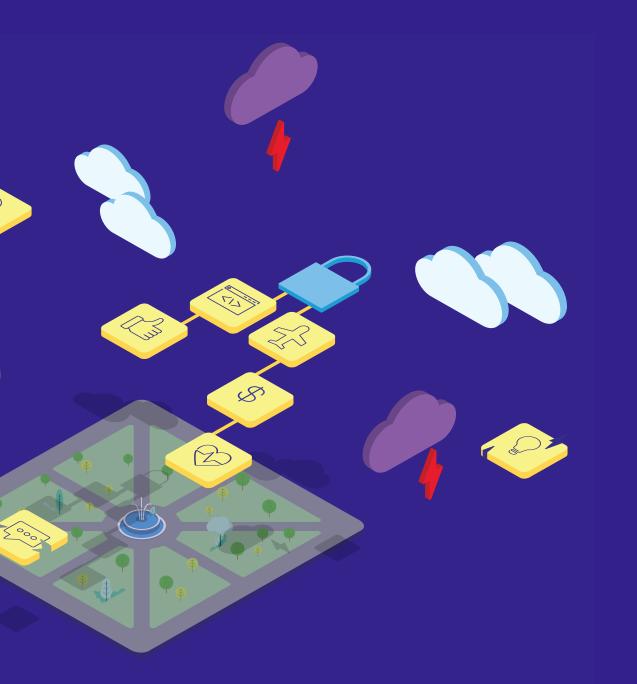
Please select the statement that represents how your organization views/treats its application portfolio. Select one.



WE LEARNED:

Applications are critical for every financial services organization.

FIGURE 02: The importance of applications to the business





87% of organizations are multi-cloud, and all of them use app services to enable digital trust.



The challenges of multi-cloud security

Financial services respondents are moving full steam ahead into multi-cloud environments. In order to compete at hyperscale, they are treating each application as the business-critical asset it is and choosing the best cloud for each application according to 41% of the respondents. Established financial services organizations and fintech disruptors are leveraging cloud platforms, with one out of five reporting they will have more than half of their apps in the cloud by the end of 2020.

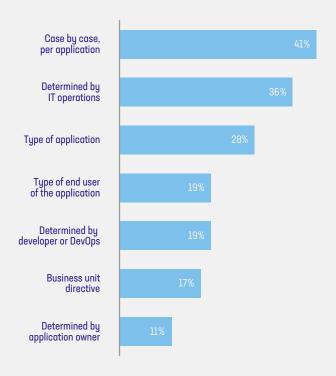
The crisis of digital trust and ever-increasing threats are elevating security to the senior levels of financial services organizations.

Multi-cloud strategies need to efficiently and effectively incorporate security to build trust. Three out of four respondents tell us it is important to deploy and enforce the same security policies on premises and in the cloud. Similar to the global results, financial services firms report applying consistent security policies across all company applications, complying with regulations, and protecting applications from existing and emerging threats are the primary challenges of operating across a multi-cloud environment.

When we focus on senior leaders in financial services, it is telling that real-time threat analytics jumps to the number two strategic trend. This is starkly different from the general population of senior leaders who place real-time threat analytics in the number six position. Clearly, the crisis of digital trust and ever-increasing threats are elevating security to the senior levels of financial services organizations.

WE ASKED:

How does your organization decide which type of cloud is best for each application? Select all that apply.



WE LEARNED:

Financial services tailor their use of cloud infrastructure to the needs of their business.

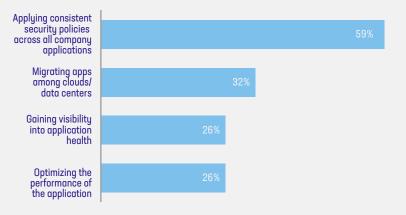
FIGURE 03: Best cloud for the app



Further, despite the business imperative to move to the cloud, security confidence varies by types of deployments. Two-thirds of respondents are confident in their ability to withstand an application attack on premises, while only 40% are confident in their ability to withstand an attack in the public cloud. Confidence has risen slightly year over year for on-premises applications, from 62% reporting confidence in protecting on premises applications in 2019. However, for apps in the public cloud, confidence remained the same from 2019 to 2020. A dearth of requisite skills contributes to the lack of confidence overall with 72% of financial services respondents reporting a security skills gap.

WE ASKED:

As you think about managing applications in a multi-cloud environment, what do you find the most challenging, frustrating, or difficult? Select all that apply.



WE LEARNED:

Consistency of security across global markets is a top priority for financial services organizations.

FIGURE 04: Multi-cloud challenges for financial services organizations





68% of organizations implementing open banking are deploying API gateways to deliver innovation.



API gateways and the growth of open banking

Open banking is a new collaborative model that enables data sharing through APIs between two more unaffiliated organizations—and it's just one example of the API economy and is an indication of the importance of API gateways. The driver for market adoption is slightly different across regions.

In EMEA, it is viewed as a mechanism to give the consumer more control over their data. In the U.S., open banking is a way for the larger, more established banks to deliver enhanced customized capabilities that leverage fintech innovation to the marketplace. In Asia Pacific, new digital ecosystems are emerging that focus on innovative financial services offered through "SuperApps" such as WeChat and Gojek. There is an opportunity in the region to provide financial services to the underserved small businesses and the unbanked consumers. Across the world, open banking is a way to deliver on the promise of rising customer expectations for more convenience, more personalization, and more control over their financial investments.

Two-thirds of financial services respondents reported that their organization provides banking services. Of those that do, 47% are planning to implement/or have implemented open banking. API gateways have an established role to play in boosting operational efficiency for internal applications. With the move to the API economy, the importance of API gateways is expanding because of several reasons:

- They are an essential mechanism for organizations to securely share data with established partners.
- They allow organizations to open APIs to public developer networks to spur an open ecosystem of innovation and expand market reach.
- They not only enable real-time exchanges, but they protect against the inherent vulnerabilities in the APIs that transfer data and communicate with back-end systems.

WE ASKED:

Are you looking to implement/or have implemented open banking initiatives?



WE LEARNED:

Asia Pacific is leading the market in open banking initiatives.

FIGURE 05: Open banking initiatives by region



With the move to the API economy, the importance of API gateways is expanding.

Published APIs to third-party communities and API call volumes are an indication of this expanded market reach. For example, 82% of the respondents with open banking initiatives have published APIs to third parties compared to just 62% who are not engaged in open banking. Similarly, API call volumes are much higher in the open banking respondent group—40% have more than 1 million API calls per month compared to just 30% of the respondents who are not implementing open banking.

WE ASKED:

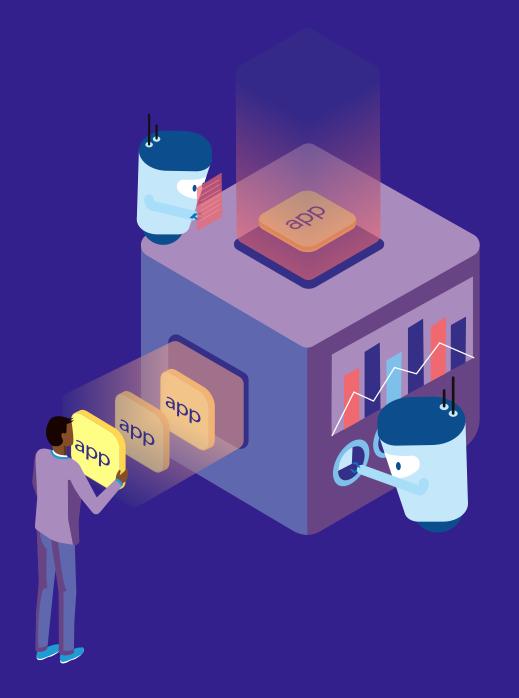
Do you use an API gateway?



WE LEARNED:

API gateways are important components of open banking initiatives.

FIGURE 06: API gateway usage





81% of organizations deploy a WAF as escalating threats mandate a strategic response.



Driving engagement through application services

Application services enable organizations to efficiently implement security to build trust. Over half of financial services respondents named security as the most important characteristic of an application service. Unsurprisingly, the top application services deployed today in organizations are dominated by security with firewalls and SSL VPN leading the group at 86% deployed. WAF deployments have increased year over year with 81% deployed compared to 77% in 2019. Nearly one-third of organizations evaluate the type of application before deploying a WAF.

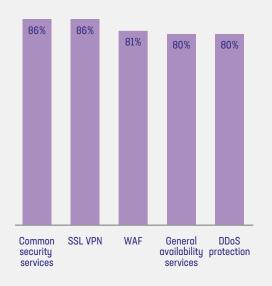
As the types of applications expand in financial services organizations, the need to tailor security to each application becomes even more important. Security services overall are deployed in greater numbers in financial services firms; anti-bot and fraud and abuse prevention specifically are deployed ten percent more frequently in financial services versus other industries.

Over half of financial services respondents named security as the most important characteristic of an application service.

Security is strategic to financial services firms because it is one of the foundational requirements for excellent customer experience. Even the most conservative financial companies are finding that their customers expect a rich experience like the ones offered by Alibaba or Google. Customers expect to be engaged personally, but personalization requires data and financial services organizations need to prove that they are worthy guardians of personally identifiable information (PII).

WE ASKED:

Which of the following application services does your company currently deploy in an on-premises data center/private cloud or the public cloud. Select all that apply.



WE LEARNED:

Security dominates the list of top five app services deployed today.

FIGURE 07: Top five application services deployed today



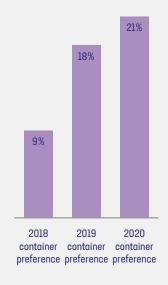
Application services also deliver high-quality customer experiences to drive engagement by ensuring the availability and speed of critical applications. App services such as load balancing, global server load balancing, and DNS are deployed by four out of five financial services respondents compared to three out of four of the global respondents. Common optimizations such as TCP optimization, WAN optimization, caching and compression are slightly higher in financial services organizations—54% compared to 52% in the global results.

Attracting and retaining digitally native customers is also compelling financial services organizations to innovate faster utilizing public cloud and modern (cloud- or containernative) architectures. Financial services respondents have demonstrated that with 9% in 2018 compared to 21% this year reporting that they prefer container deployments for their application services.

Also indicative of financial services organizations moving toward greater adoption of public cloud and modern (cloud- or container-native) architectures is the top application services planned for deployment. The list starts with SDN gateways and SD WAN at 42%, followed by API gateways at 39% and Ingress control at 35%. All of these app services planned for deployments saw significant increases over 2019, which suggests that financial services organizations are ramping up their efforts to deliver next-generation customer experiences.

WE ASKED:

For on-premises application services, what is your preferred form factor?



WE LEARNED:

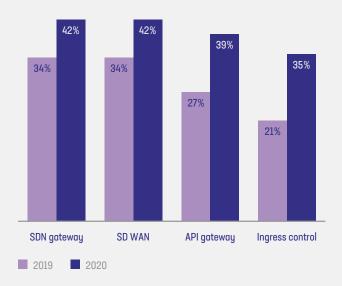
Financial services firms are rapidly increasing their investment in modern application architecture environments.

FIGURE 08: Container preferences 2018-2020



WE ASKED:

Which of the following application services does your company plan to deploy in an on-premises data center/private cloud or the public cloud in the next 12 months. Select all that apply.



WE LEARNED:

Financial services organizations are rapidly adopting public cloud and modern (cloud- or container-native) architectures.



FIGURE 09: Top application services planned for deployment 2019 and 2020



CONCLUSION

To deliver more personalized and effective products for their customers, financial services organizations are moving to introduce new transaction types and new applications, while modernizing their infrastructure.

Personalized customer experiences, value-added services, and expanding ecosystems promise exciting opportunities for revenue growth.

However, these new open ecosystem environments also provide an expanded attack surface for fraudsters. It is a certainty that financial services organizations will continue to be worldwide leaders in deploying trusted application access, and application security that leverages machine learning and threat analytics.

As these new businesses and ecosystems evolve, a wide range of application services will not only provide the required security but will also help unlock both the application and business insights necessary to deliver innovation to the market.

STATE OF APPLICATION SERVICES: FINANCIAL SERVICES EDITION / 2020 REPORT

