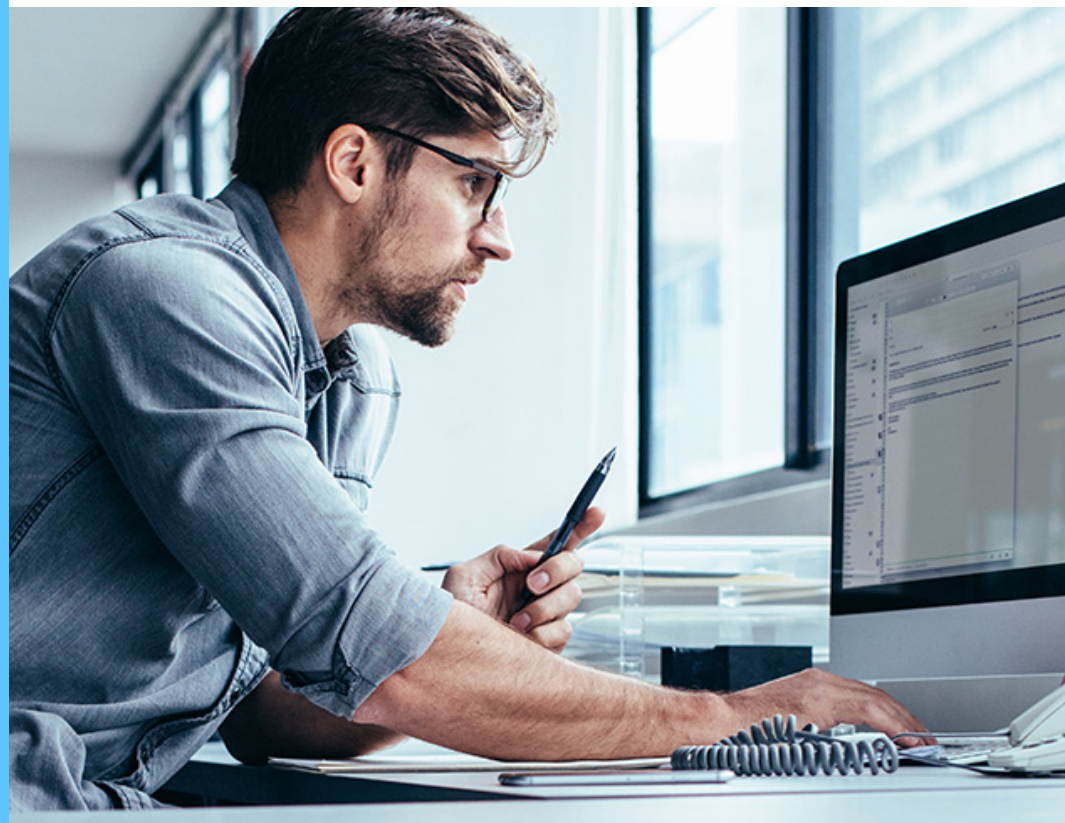
NetApp unlocks the power of the cloud for the financial services industry

NetApp



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Introduction

In the financial services industry (FSI), maximum trust and minimum risk are crucial to success. The industry is changing at an unprecedented rate. It seems that every day a new option is presented as the best way to increase customer satisfaction, efficiency, and security.

The challenge lies in choosing the best path forward in an industry where trust is of paramount importance. Missteps can be costly in terms of both expense and trust. As a result, some organizations are concerned about taking steps in any direction and risk losing traction to competitors.

NetApp is the trusted, industry-leading advisor to more than 9,000 FSI organizations worldwide, solving performance and security challenges and helping FSI companies gain a competitive advantage in this fast- evolving marketplace.

NetApp® solutions, products, and expertise can help demystify the myriad options, simplify the process, and create the right solution, whether that solution is in the cloud, on the premises, or in a hybrid environment that evolves with changing needs. This is true regardless of where an organization is on its digital transformation journey. NetApp has the expertise and experience to guide FSI organizations every step of the way, increasing efficiency, security, and customer satisfaction, while reducing cost and risk.

Chapter 1

The forecast is for fast-paced change

The financial services industry (FSI) today is experiencing an unprecedented amount of change, which can be especially challenging for a traditionally conservative industry. Moreover, the pace of change is accelerating like never before, bringing with it a host of opportunities and challenges. We understand, and we can help you be prepared for what's coming.

Market trends show change on all fronts

As part of a highly regulated and compliance-driven industry, many FSI companies have been slower to adopt some of the modernization technologies that have disrupted other vertical markets. Market conditions, such as increased customer expectations, new competition from fintech, and even events such as the global pandemic, are forcing FSI companies to accelerate their plans to modernize. Predictions are for continued industry growth[1] in numerous areas, including the following:

- Overall IT spending is expected to **grow 6.2%** year over year, with FSI to reach **$421B-$436B** by 2023
- Worldwide public cloud revenue was expected to **grow 6.3%** in 2020 to **$257.9B** from **$242.7B** in 2019, and continue to grow to **$364B** by 2022[2]
- The storage market is predicted to **grow 2.4%** year over year, with FSI to reach **$5.3B** by 2023

An increased demand for technology to enable distributed workforces, as well as a need for more customer-centric and mobile banking apps (stemming from branch closures and full-scale lockdowns), are critical-path decisions for many FSI leaders.

In IDG's June 2020 survey of cloud adoption, more than 60% of respondents reported running workloads and applications "all or mostly on-premises." At the same time, 59% reported that they plan to run workloads and applications "mostly or entirely in the cloud" within the next 18 months—a massive and rapid shift.[3]

What do these trends mean for you?

The most likely short- to mid-term model will be a combination of on-premises, hybrid cloud, and public cloud, particularly when it comes to the migration of business-critical Tier 1 enterprise applications.

In general, there is an increased need to provide modern, personalized financial products and services to meet evolving customer demand. To fully understand these evolving needs, your organization requires deep customer intelligence, translating mountains of data into actionable analytics and insights. Innovation follows insight. Millennials don't want to bank or do business the way their parents and grandparents did. They will continue to push for convenience, speed, and access at all times, from all places, through all devices.

Increasingly, we are seeing an upswing in the global need for FSI innovation, driven both by consumer demand for better experiences and by an increased appetite for secure, remote enterprise capabilities. In addition to digital transformation and cloud mandates, you are facing mounting pressure to adopt artificial intelligence (AI), machine learning (ML), and blockchain to automate and improve both experience and decision making. AI and ML are already being used in risk management, fraud prevention, stock performance prediction, process automation, and the personalization of services. Blockchain is now being used for cross-border transactions, trade finance platforms, clearing and settlements, identity verification, and credit reporting. Pressure to adopt will continue as these technologies show positive results in automation, cost savings, and fraud reduction.

Added to all this is the overlay of compliance, which is both ever-changing and increasingly complex.

In addition to privacy regulations that vary by jurisdiction, such as GDPR and CCCA, you are juggling resilience and resolution requirements, retail and wholesale conduct requirements, and a slew of Know Your Customer and Anti-Money Laundering regulations. Technology can help your compliance team control data, achieve compliance objectives, and integrate compliance directly into your organization. Compliance does not have to be reactive; it can be a strategic, proactive function.

The Greek philosopher Heraclitus wrote "The only constant in life is change" around 500 BCE, and the adage rings truer than ever today. It is crucial for your organization to embrace change in order to triumph over your competitors and succeed in a tumultuous marketplace.

Chapter 2

Industry challenges—overcome yours with technology

FSI companies like yours must contend with a growing number of challenges that are increasing risk, reducing profitability, and eroding customer trust.

Cybersecurity threats are on the rise

Very high on the list of challenges is the increasing number of ever-more complex cybersecurity threats from a rapidly expanding number of sources. Nowhere is this a more serious threat than in your industry. With the increasing focus on information as a lynchpin of financial services, the threat of data breaches continues to grow, as data becomes a highly attractive target for cybercriminals.

Attacks are on the rise. In fact, on average, hackers attack a system connected to the internet every 39 seconds, amounting to about 2,244 intrusion attempts each day.4 New threats emerge constantly, with hackers moving quickly to exploit new loopholes and to work around security measures put in place to combat previous threats. In addition to the old standards of credential and identity theft, ransomware threatens to not only steal data, but to hold it hostage. There are also an increasing number of data attacks stemming from motivations other than theft, such as destruction and disruption.

Combatting these threats is big business. It is estimated that global spending on cybersecurity products and services will exceed $1 trillion cumulatively between 2017 and 2021.[5]

Competition from neobanks is increasing

You are also under fire from up-and-coming, agile neobank competitors (a branch of fintech) that are not saddled with cumbersome legacy systems. Almost half of bankers (46%) see their legacy systems as the biggest barrier to the growth of commercial banks.[6]

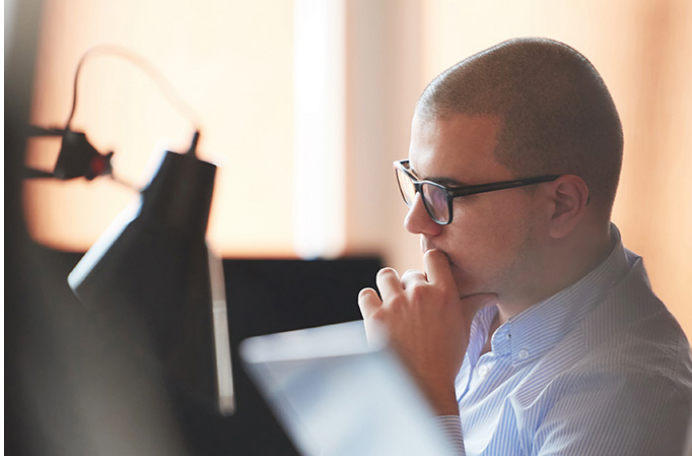
Neobanks are financial technology firms that offer internet-only financial services; they don't have physical branches. Neobanks appeal to tech-savvy consumers who don't mind doing most of their money management through a mobile app. Neobanks are investing heavily in technology and going after low-hanging, profitable FSI fruit. They employ cloud-native technologies to target younger customers with a wide range of attractive financial services that are mobile, convenient, personalized, and trendy, speaking to the needs and desires of their generation.

According to KPMG, global fintech investments in H1 2020 totaled 1,221 deals and $25.6B.[7] The global fintech market is expected to grow at 20% CAGR to $305B between 2020 and 2025, primarily based on high investment by fintech companies in technology-based solutions and APIs.[8]

Global regulatory fragmentation and the rising cost of compliance

The role of compliance has undergone several dramatic shifts in the past 15 years and continues to evolve in response to both external pressures such as multijurisdictional regulations and the pandemic, and internal pressures to take on a more strategic, more progressive, less reactionary role. Both sources of pressure mean that in addition to an expanding and changing role, compliance requires new resources, priorities, technologies, and skillsets to get the job done. And the cost of that compliance is rising sharply. According to an April 2020 report by LexisNexis Risk Solutions, the cost of compliance to global FSI companies in 2020 alone was expected to be $181B.[9]

Because regulatory requirements differ from one jurisdiction to another, there are associated additional processes, work, and costs. “A single directive can lead to 28 different variations, with EU member states ‘gold-plating’ the transposition into national laws and regulations. That’s a nightmare for digital banks [trying] to mitigate regulatory risk and maintain compliance,” wrote Professor Tom Butler at the University of Cork.[10]



Critical global shortage of workforce skills in IT and security

Along with the growing emphasis on IT and cybersecurity, we are in the midst of a global shortage of the people we need in these key roles. In 2019, cybersecurity professional organization (ISC)2 reported that the global shortage of skilled workers in IT had exceeded 4 million, up significantly from a year earlier at 2.93 million. This total included more than 560,000 unfilled IT positions in North America, more than 290,000 in Europe, and 2.6 million in APAC.[11] Of the organizations that responded to the (ISC)[2] survey, nearly 65% said they were suffering from a shortage of cybersecurity staff. Attracting and retaining skilled employees has never been more crucial—or more difficult.

Pandemic exacerbates challenges

The pandemic forcefully underlines the challenges facing the industry. Being thrust into a situation where FSI companies like yours—along with all other enterprises—needed to accommodate remote workforces has brought many issues to a head.

Almost overnight, there was an urgent need to mobilize remote workers and to provide the technology to enable massive numbers of workers to access the data, systems, and applications they need to work remotely and securely. Suddenly, companies that never before needed to allow both Windows and Linux access to data needed to make that change almost instantly. The fast-tracking of equipment, software, applications, policies, and procedures was staggering and will have lasting implications. An October 2020 survey by KPMG and the Financial Services Skills Commission found that 53% of FSI employees aged 31 to 45 want to work more flexibly post-pandemic, while many under 30 are very interested in working from home permanently.[12] Other surveys show that 83% of all employees say they would like to work from home at least one day a week, and 73% of executives report that working from home during COVID-19 has been a success.[13] At the same time, research indicates that working from home is resulting in a 20% to 40% increase in employee productivity.[14]

However, there has also been a sharp increase in misinformation and disinformation. Several U.S. organizations, including NASDAQ, the Securities and Exchange Commission (SEC), and the Financial Industry Regulatory Authority (FINRA), have warned of spikes in market manipulation due to the COVID-19 pandemic.[15]

Although the situation may seem daunting, the good news is that new cloud technologies and data tools are designed to help you securely maximize the value from your legacy applications, while leveraging data seamlessly across your entire ecosystem. This ecosystem includes traditional on-premises technologies, private and hybrid cloud solutions, and even multicloud applications offered by hyperscalers. You can blend in deep data insights from new opportunities, such as edge devices, and benefit from the automation and resilience introduced through AI and ML.

The next chapter explores how NetApp is working with more than 80% of the top global FSIs to help them design and deploy solutions that keep their existing workloads and applications secure, We also introduce new roadmaps to help companies accelerate their response to market pressures with advanced service offerings, governance processes, and compliance models.

Chapter 3

You need flexible solutions. NetApp has them.

We know that you're experiencing unprecedented and accelerating rates of change, which can be unsettling in an industry as conservative as yours. We also know that you're facing a dizzying array of companies pitching complex solutions to solve all your business woes. Although it's true that technology is going to be a major factor in your success, the sheer number of options can be overwhelming. That's where NetApp comes in. We can help you create and execute the right technology plan for your organization. Don't just keep pace with change—get ahead of the curve.

Case Study:

How NetApp helped one national bank reduce risk and simplify operations

As part of its cloud-first strategy, one of the largest banks in the Netherlands with a long pedigree and offices in 15 countries—decided to migrate its mission-critical Murex application to Microsoft Azure, Such a migration had never been done before. The goal was to enhance and simplify operations and to reduce risk, ensuring compliance in multiple complex regulatory environments and avoiding punitive penalties.

Murex is a high-transaction application that plays a critical role in accelerating transformation and compliance for companies that operate in strict and complex regulatory markets. More than 50,000 users worldwide rely on Murex for their daily trading, hedging, funding, risk management, and processing operations.

Initially, the plan was simply to refresh the Oracle Exadata platform, but in keeping with its cloud-first strategy, the bank undertook a test to determine whether it was possible to migrate Murex to Azure. The stakes were high, but the reward would be significant in terms of compliance, operational efficiency, and reduced cost.

Azure NetApp Files played a key role in the success of the migration of Murex to Azure, because of the low latency, high performance, scalability, availability, and security needed to meet stringent regulatory requirements.

Key business benefits include:

- Eliminating serious regulatory penalties at the national and EU level
- Creating a culture of integrity under European Central laws
- Simplifying operations, reducing costs, increasing automation, and creating better governance to drive innovation

The bank has been delighted with the results of the migration. In addition to reducing risk and cost and simplifying operations, the decision to embrace Azure and Azure NetApp Files as part of its cloud-first mandate is also helping the bank to move closer to its corporate goal of sustainable growth.

Six ways NetApp is helping other FSIs and how we can help you too

Constant fraud attempts demand constant protection

We offer always-evolving and fully proven fraud detection solutions that:

- Prevent loss
- Protect data and privacy
- Keep your business safe from malicious attacks
- Reduce your total cloud storage TCO

We've got your back with features like robust, high-level encryption, multi-factor authentication, cross-region replication, detailed analytics, and network-based access control lists (ACLs).

We use powerful AI algorithms to prepare FSI business application data and cloud environments to help you be privacy-ready.

Our solutions protect you every step of the way:

- From initial data ingestion
- To training AI models
- To live data inference
- To data archiving

Let us dramatically reduce the time it takes you to get from data to insights, actions, and outcomes. We can help you operate in real time so you can employ a proactive prevention strategy.

We are the Switzerland of cloud. Ja, that's us.

We've partnered with Microsoft Azure, AWS, and Google Cloud to deliver the advanced capabilities you trust from NetApp across multiple clouds and on-premises locations. Wherever your data resides, now and in the future. This means that your business is resilient and your data is "future proofed" so you can move it wherever and whenever you need to. Anywhere. Anytime.

We offer a single, flexible, autonomous cloud volume platform with full visibility and control, and a simple, native cloud experience for advanced data services, including data sync, data backup, data tiering, file caching, and compliance. No matter where your data is—in the cloud, on your premises, or in a hybrid environment—we ensure that you're protected today and into the future, no matter what that future brings.

Compliance. Compliance. Compliance.

Our solutions help you secure and protect all your data across all environments. They comply with regulations in multiple jurisdictions, including Europe's General Data Protection Regulation and the California Consumer Privacy Act, to name just two. We help you save time and reduce costs by automating many tasks including:

- mapping sensitive data
- locating privacy violations
- producing impact analysis reports

Generate reports like Data Subject Access Reports (DSARs) in seconds, instead of weeks.

Speed and agility

You can migrate even your most challenging mission-critical workloads to the cloud without sacrificing performance or security. Workloads that demand ultra-high performance and ultra-low latency, including HPC, SAP, WVD, and Oracle—we can handle them all. And they can work as well or better in the cloud than they've ever worked on premises. Gain flexible, scalable solutions that evolve with your needs now and in the future.

Edge computing, flash technologies, AI and ML, and a powerful unified data platform deliver access to your data at warp speed. We also make sure that you can dramatically reduce the time it takes to move from data to actionable insights.

Partner up, partner

At NetApp we partner only with the best. We work with our network of partners to deliver exactly the solutions our customers need to gain adaptive planning, resilient development, seamless application integration, rapid delivery, and continuous improvement. We've even acquired several partners to integrate their innovations into ours. And, as mentioned earlier, we partner with all the top names in the public cloud. No need to drop their names again.

We believe in the power of partnership. Just like you do.

Innovation is our middle name

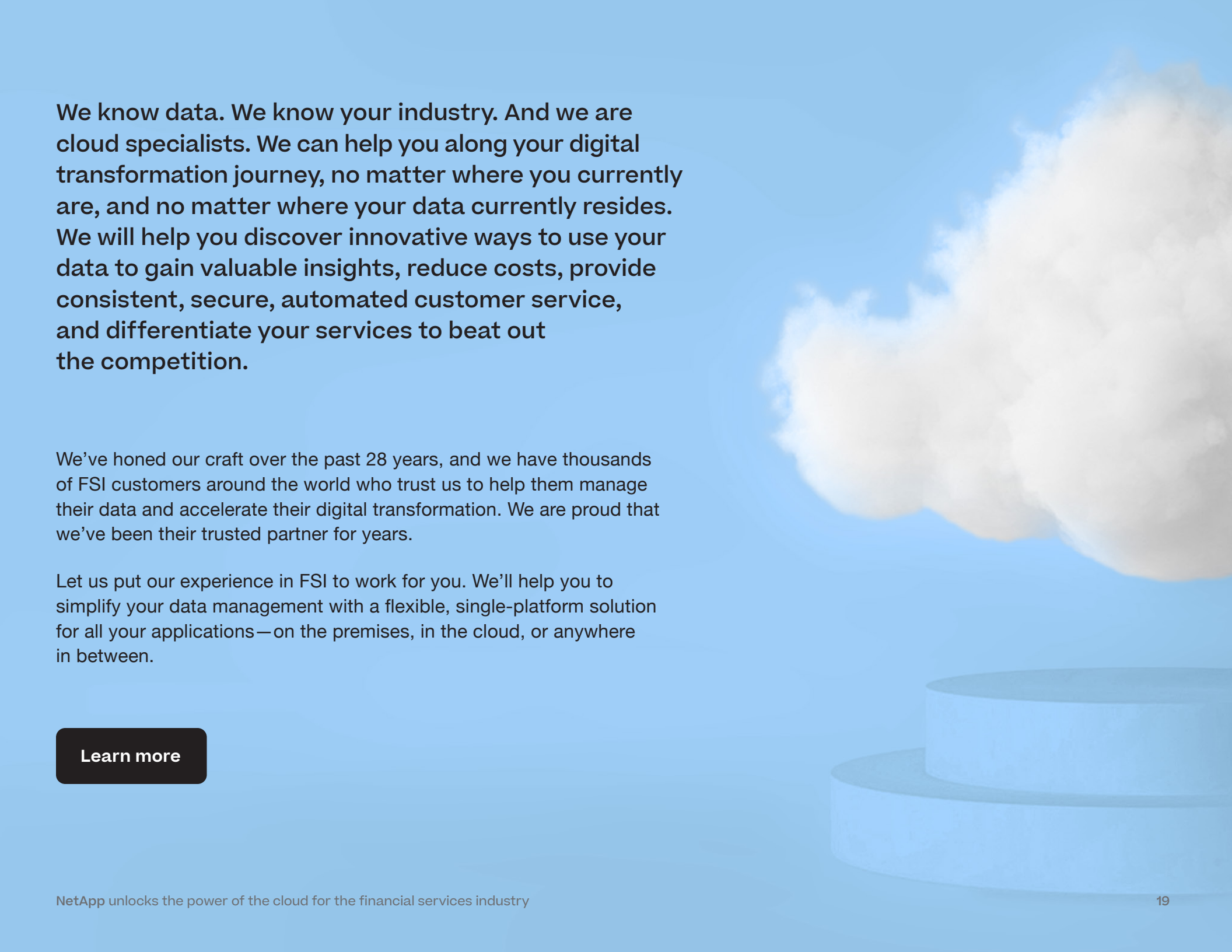
We're never content to rest on our laurels. We know that nothing in your business stands still, so neither do we. Whether it's subscription-based pricing for on-premises solutions, automated solutions for private cloud, serverless and storageless solutions for containers, or cloud-based virtual desktop services to meet the needs of remote workforces while reducing costs by up to 50%, we're fast and agile. And we're always inventing better solutions for our customers.

We know data. We know your industry. And we are cloud specialists. We can help you along your digital transformation journey, no matter where you currently are, and no matter where your data currently resides. We will help you discover innovative ways to use your data to gain valuable insights, reduce costs, provide consistent, secure, automated customer service, and differentiate your services to beat out the competition.

We've honed our craft over the past 28 years, and we have thousands of FSI customers around the world who trust us to help them manage their data and accelerate their digital transformation. We are proud that we've been their trusted partner for years.

Let us put our experience in FSI to work for you. We'll help you to simplify your data management with a flexible, single-platform solution for all your applications—on the premises, in the cloud, or anywhere in between.

Learn more



[1] IDC Worldwide ICT Spend Guide; Includes impact of COVID-19. Quoted in Steve Collins' Converge presentation "Modernizing Enterprise Applications and Workloads"

[2] https://www.gartner.com/en/newsroom/press-releases/2020-07-23-gartner-forecasts-worldwide-public-cloud-revenue-to-grow-6point3-percent-in-2020

[3] https://www.infoworld.com/article/3561269/the-2020-idg-cloud-computing-survey.html

[4] https://eng.umd.edu/news/story/study-hackers-attack-every-39-seconds

[5] https://cybersecurityventures.com/cybersecurity-market-report/

[6] https://www.fraedom.com/3120/why-upgrading-legacy-technology-is-a-priority-for-the-banking-industry/

[7] https://assets.kpmg/content/dam/kpmg/xx/pdf/2020/09/pulse-of-fintech-h1-2020.pdf

[8] https://www.prnewswire.com/news-releases/fintech-industry-report-2020-2025---trends-developments-and-growth-deviations-arising-from-the-covid-19-pandemic-301080282.html

[9] https://www.bankingexchange.com/bsa-aml/item/8202-cost-of-compliance-expected-to-hit-181bn

[10] https://www.globalriskregulator.com/Subjects/Reporting-and-Governance/Digitisation-becoming-crucial-for-tackling-regulatory-fragmentation

[11] https://www.infosecurity-magazine.com/news/cybersecurity-skills-shortage-tops/

[12] https://www.computerweekly.com/news/252490869/Financial-services-staff-want-work-from-home-policies-to-continue-after-Covid

[13] https://www.pwc.com/us/en/library/covid-19/us-remote-work-survey.html

[14] https://globalworkplaceanalytics.com/resources/costs-benefits

[15] https://www.securitymagazine.com/articles/93534-six-cybersecurity-threats-the-financial-services-sector-faces

About NetApp
In a world full of generalists, NetApp is a specialist. We're focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world's biggest public clouds.

As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services, and applications to the right people—anytime, anywhere.

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