NUTANIX™
YOUR ENTERPRISE CLOUD

Here for CHANGE

Architecting the Financial Services Digital Enterprise with Nutanix

Content Summary

Prepare your firm for tomorrow's challenges
Begin your journey towards digital transformation with Nutanix as your chosen infrastructure partner.

READY
FOR
CHANGE?

FOREWORD

It's open season for financial institutions. Digital disruption around the world has brought down the walls that have traditionally shielded the industry from new upstarts. Whether it's changing consumer demands, threats from leaner FinTechs and InsurTechs, or emerging financial or cybercrime risks, adapting to change is now business-as-usual within the financial services sector.

As the world leader in hyperconverged infrastructure (HCI), we've seen the changes within the financial services industry globally. Digital disruption is here to stay; the winners are always the ones who manage to transition to IT infrastructure that supports new ways of doing business. Some even find success in a hybrid IT environment, keeping the best of the old while leaving room for experimentation.

At Nutanix, we believe in tailoring solutions for your specific needs. We've dug into the data and put together this eBook just for you—so you can better understand, in six easy chapters, how Nutanix can fit into your strategy to be the winning financial institution of tomorrow.

But if you already know what you need, jump to the end of this document for contact details and we can set up a more in-depth conversation.

See you soon!

TRANSFORM FINANCIAL SERVICES BY MODERNIZING YOUR INFRASTRUCTURE

Nutanix simplifies IT infrastructure whilst simultaneously providing a secure and cloud-like datacenter necessary for financial services transformation.

The financial services sector is facing its biggest shake-up in history. It is reinventing at an accelerated pace, driven by a mix of new market models, shifting commercial objectives, and new customer expectations.

Those at the frontline of this change demand immediate and expert support from digital transformation partners that are a flexible force for innovation.

"Digital transformation is shifting technology infrastructure from being a driver of marginal efficiency to becoming an enabler of fundamental **disruption**, **innovation**, and **growth**."

More importantly, it is enabling a seamless, multi-channel customer experience, which is absolutely crucial to stay competitive and ahead of the curve.

Today's financial businesses require modern and sophisticated IT strategies that deliver on many levels, allowing organizations to move and innovate at pace, while still balancing security and ultimately controlling costs.

The challenge for legacy-based institutions lies in balancing the need for multi-market expansion at speed and scale, whilst overcoming the reliance on traditional IT systems.

Addressing this challenge will mean embracing new advances in IT. Be ready to transition from a traditional datacenter with siloed business applications to a more agile and digital-ready environment.

Ultimately, this IT evolution for most financial institutions will result in a "cloud-first strategy," defined as hybrid cloud built on a private cloud-platform implemented with hyperconverged infrastructure (HCI) and managed from a single control plane.

Like most financial companies, your institution probably needs to come to terms with a number of critical business and technology priorities:

Cloud investments to enable digital transformation

The need for comprehensive cyber security

The adoption of artificial intelligence and increased automation

The rapid rise of public ledgers such as blockchain

Cultural transformation —both internal and external

REIMAGINING THE FUTURE AND REDUCING COMPLEXITY

"Today, **hyperconverged infra-structure (HCI)** is increasingly becoming the choice for companies who want to stay competitive and ensure their datacenters are cloud-ready."

The typical firm runs about 60% of IT workloads in traditional on-prem datacenters. By 2022, it is expected to be closer to **25%**[1].

Traditional	HCI/Cloud

2019

2022
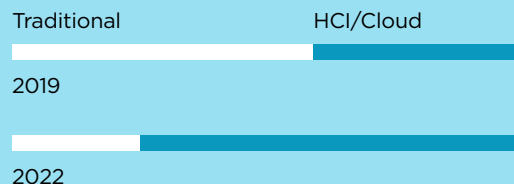
Because of regulatory, security, data privacy, and other concerns, financial companies tend to favor on-premises infrastructure, hosted IT, or private cloud over public clouds and cloud service providers. The typical financial services enterprise runs about 60% of IT work-loads on-premises today in traditional complex 3-tier datacenters[1]. However, many established firms now recognize the need to "make the leap" to consolidate and streamline datacenters utilizing hyper-converged infrastructure (HCI). This enables firms to establish a private cloud platform and a hybrid cloud control plane to increase agility and deliver more effective digital services. By 2022, it is expected that only 25% of financial services IT workloads will run in a traditional datacenter.

To build next-generation infrastructure, companies must look beyond legacy architecture and modernize datacenter infrastructure to balance on-site and "within-cloud" operations. A traditional 3-tier infrastructure can no longer keep up with complex IT demands— it is unwieldy, doesn't provide a firm foundation for DevOps, cannot scale with magnitude, and is prone to bottlenecks. Today, hyper-converged infrastructure (HCI) is increasingly becoming the choice for institutions who want to stay competitive and ensure their datacenters are cloud-ready.

Consolidating compute, storage, networking, and virtualization in one solution, HCI breaks down the legacy storage silos of 3-tier infra-structure to reduce complexity and allow for superior performance and resilience.

[1]Enterprise Cloud Index Report

YOUR DIGITAL TRANSFORMATION PARTNER

"With a proven track record in providing secure and agile cloud-like infrastructure, HCI can lay the foundation for a hybrid IT environment that will **simplify** and **accelerate IT operations**."

A growing number of financial services organizations have discovered that an enterprise cloud such as Nutanix offers the agility of public cloud without sacrificing control over critical resources. But this is a move that cannot happen overnight and needs to be navigated carefully, requiring meticulous and mature consideration to decide which applications and services will run in the cloud. Success hinges on creating the right set of cloud environments that can power next-generation applications and better satisfy user expectations—while sustaining the traditional applications that your business has relied on for years.

Nutanix has exploded into the financial services sector and is the recognized market leader[1] for hyperconverged infrastructure. Nutanix can future proof businesses and provide an agile platform to innovate while flexibly responding to increased customer and regulatory pressures.

With a proven track record of providing secure and agile cloud infrastructure, HCI can lay the foundation for a hybrid IT environment that will simplify and accelerate IT operations. This platform will eliminate infrastructure fragmentation, improve scalability as the business grows, and offer on-demand availability, all while reducing costs and providing free resources that will focus on delivering new leading-edge customer experiences and innovations.

[1]Gartner Magic Quadrant for Hyperconverged Infrastructure Report

REIMAGINING THE FUTURE AND REDUCING COMPLEXITY

At Nutanix, we believe in tailoring solutions for specific needs. The following six chapters outline how Nutanix can fit into your strategy to be the winning financial institution of tomorrow.

ENHANCE CUSTOMER EXPERIENCES

Today's financial services customer has become both digitally savvy and functional in a mobile environment. It doesn't matter if they're a rural farmer making fertilizer payments or a resident of a major city applying for a personal loan. They expect their customer experience to be consistently excellent no matter where they are or what they're doing.

You can empower your IT engineers to develop and operate customer-first solutions by supporting them with a launchpad that's both reliable and agile. If you're worried about the prohibitive cost of traditional virtual desktop infrastructure (VDI), don't be. Nutanix HCI bundles storage, servers, networking, and virtualization software in one sensible budget.

Make room for experimentation
Develop, test, and launch customer-first applications across the world without worrying about breaking the system. Nutanix supports cloud-like deployments that create a dependable and consistent platform for your engineers to innovate and create. Improve customer experiences across all segments with cutting-edge product innovations that make transacting with a financial institution so much easier.

More reliability and business continuity
Control the customer experience while effortlessly maintaining uptime with Nutanix HCI, which combines the reliability of a traditional on-premise datacenter with the seamless functionality of public cloud.

NEXT: Gather momentum with scalable solutions

THIERRY PINART
Chief Technology Officer for Global Infrastructure Group, Société Générale

"Through the private cloud and its capacity to create development environments, we can address the needs of our organization more rapidly and consequently address our clients' needs more rapidly.

We have strong ambitions regarding the cloud and we rely on the established partnership we have with Nutanix to continue to bring value to our clients."

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GATHER MOMENTUM WITH SCALABLE SOLUTIONS

The financial institutions of tomorrow will be dealing with a much wider range of niche product innovations as they continue catering to the great swathes of previously under-served populations. From paying bills and making transfers to getting loans and lines of credit, these transactions will, more than ever before, be digital. They will need to occur on an IT foundation that is agile and can cope with sophisticated data usage.

As a leader in the financial services sector, you will need to build and scale products and solutions quickly to where the customers are, or risk losing out to the leaner upstarts. With Nutanix HCI, you get to start small and add nodes as you go along. Nutanix software is also compatible with most leading server companies, so you can bring the disparate systems sitting across various branches into a single management platform.

National and international expansion

As many institutions look to roll out digital capabilities nationally and globally, a solid foundation is required to run multiple applications across different locations. Nutanix HCI offers the middle ground between a completely internet-dependent public cloud, which will not work in rural areas with poor connectivity, and the safer, but often unwieldy, on-premises datacenter.

Implement programs at scale

Solve major human resource bottlenecks by getting new employees up-to-speed with virtual desktops that can be accessed from any location. Or, implement programs quickly at scale by pushing them out from the centralized datacenter to all relevant devices within the network. The sky's the limit with VDI, which can now be deployed with cost-effective HCI.

NEXT: Optimally manage data & perform analytics

VIJAY LUTHRA
Chief Technology Officer, Northern Trust

"Nutanix's technology helped us simplify and centralize our support model with a single team, significantly improving end user experience while also delivering the performance we needed.

We are big believers that hyperconverged infrastructure is the next evolution of the market, and it fits well into our overall platforms and cloud strategy. Our clients will benefit from our investment in hyperconverged infrastructure through increased operational agility, efficiency, and scale."

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OPTIMALLY MANAGE DATA & PERFORM ANALYTICS

Using big data analysis to combat financial crime at a predictive level is just one illustrative example of how vital capturing, storing, securing, accessing, and analyzing timely data is to the financial services industry. Stay ahead of the game by deploying data-driven, home-grown, and third-party applications on the Nutanix platform. Seamlessly capture current and historical data before applying deep analytics to sniff out suspicious transactions or predict customer behavior.

By being able to crunch down granular data ranging from call center notes, criminal records, credit ratings, past claim records, and transactional patterns, you will be far better equipped to accurately and efficiently transact business. You could even go a step further to implement machine learning so your system can make intelligent, predictive guesses based on historical trends.

Data-as-a-Service with ease of management and faster provisioning
Rather than dealing with separate software vendors to solve for data-intensive requirements, including curbing anything from money laundering to insider trading, consolidate all your data on a single platform and implement enterprise-wide specifications within an elegant database management solution. Nutanix also incorporates built-in security and compliance and can provision resources to the business much faster than traditional architectures.

Better and more timely analytics
Cyber criminals are increasingly sophisticated. Rather than playing catch-up, you must stay ahead by taking a proactive approach against financial crime. Big data allows you to mitigate financial risks by identifying transactional patterns typically displayed by criminals. Better still, automatically block suspicious transactions for investigation and you could eliminate crime before it happens.

NEXT: Cost efficiencies

JAKE YANG
Senior Director of Global System and Storage, Nasdaq

"Our IT infrastructure team (which is my team that manages all of our hardware systems and OS), our security team (the biggest user of Splunk, with very high data retention and performance requirements), and our tools team that manages the actual Splunk deployment, all weighed in on the decision.

There was unanimous agreement among all three groups that Nutanix Enterprise Cloud Platform was the best solution for our needs."

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COST EFFICIENCIES

The industry-wide push towards digital products and services has created an imperative to improve the cost-efficiency of supporting IT infrastructure. On one hand, moving to HCI allows for operational simplicity and a lower total cost of ownership (TCO) whilst maintaining control with an on-premise environment. On the other hand, moving to a cloud environment allows for immediate automation of the most mundane tasks, such as backups and upgrades. It also opens the possibility of utilizing the vast array of online IT resources from just a single click.

Nutanix gives you the benefits of both worlds. Cut infrastructure costs with a classic HCI setup and enjoy a dramatic increase in productivity with cloud-like functionality.

Reduce your infrastructure footprint
We know that you aim to obtain cost savings as you transform. To do so, you will need to drastically reduce expenditure by automating operational and repetitive activities such as maintenance, systems support, and disaster recovery. By using Nutanix's built-in diagnostics and intelligence, you can pare down your infrastructure footprint almost immediately upon deployment.

Release more time for value-added work
Most companies spend up to 80% of their IT budget on day-to-day operations, leaving only 20% for innovation. Nutanix aims to bring that ratio closer to 50/50, so you can allocate budget and staff to new, more value-added projects. Technology should enable, not inhibit, an institution's ability to grow. Treat IT as a core competency, rather than as a cost center, and you could soon see additional profits as you shift resources away from non-revenue generating tasks.

NEXT: Improve cyber security

KEVIN J. ARBOUR
Former Vice President of Enterprise Services and Technologies, Empire Life

"We are very pleased with our decision to move our core infrastructure to a Nutanix-based solution. Enterprises are entering a digital economy, moving from an era of IT industrialization to the era of digitalization where new business models bring the digital and physical worlds together. We are seeing unprecedented changes in business designs and disruptions in existing business models.

This drives new expectations and IT service demands. Infrastructure and Operations leaders need to embrace new technologies and architectural paradigms that enable and grow with the business while managing the total cost of ownership.

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IMPROVE CYBER SECURITY

The overall sentiment towards cyber security in the financial sector can probably be described as a tug-of-war between innovation and safety. Amid hurried moves to digital applications and cloud computing, we see security teams struggling to keep pace with the need for greater speed and agility. But imagine if IT transformation and cybersecurity could move forward in tandem.

Security must be ingrained in the culture and security considerations need to be an essential part of the organization's decision-making in order to meet the high-bar of regulatory compliance as well as address the challenges of the evolving security threat landscape. Enterprises should strive to incorporate automation into the process of maintaining security in the infrastructure in order to avoid human error and deliver seamless scalability without compromising security in an ever-changing environment.

Securing the enterprise

Nutanix brings a broad range of capabilities including "security-first design" and "defense in depth" to fit the stringent requirements typical of any financial services institution. Security in the enterprise must begin with a robust infrastructure foundation. This is where Nutanix not only provides operational and financial value, but also aids in improving security posture and preventing data breaches by ensuring these critical areas are a focal point.

Ensuring cloud compliance

Ensure continuous cloud security and compliance for multi-cloud environments with one-click remediation for cloud vulnerabilities. Nutanix provides insights into security vulnerabilities in real-time so you can resolve potential threats before they turn into business challenges. Other services include event-driven security monitoring in real time, policy-based automation, and one-click remediation for security controls and configuration, all within a user-friendly public cloud environment.

NEXT: Employee empowerment

PETER MARSHALL
Former Head of Infrastructure,
Bottomline Technologies Inc

"As far as the customer is concerned, payment processing is all done in the cloud but with none of the security, governance, and compliance issues associated with public cloud platforms. That's crucial given our customer base, which includes banks, government departments, and other institutions that will actively avoid the public cloud for precisely those reasons.

With the help of the Nutanix Enterprise Cloud Platform, we've been able to transform the way we handle payments. Given the rate at which they're switching, our customers clearly appreciate what we've achieved."

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EMPLOYEE EMPOWERMENT

Keep your employees happy or be prepared to lose them to a FinTech. That's the reality of the job market in the financial services sector today, especially in a workforce skewing towards digital natives. Data infrastructure must be equipped to handle demands for IT services with 24/7 accessibility; user experiences across the company must also be consistently excellent.

Get your weekends back

Nutanix centralizes control and can consolidate all third-party applications into a single management console. With fewer contingencies to manage, datacenter employees can look forward to spending less time fighting crises, freeing up more of their working hours for innovation and leisure.

More access to IT infrastructure

Give employees more autonomy and accessibility by providing self-service portals to IT infrastructure. Create virtual machines, allocate resources, and configure user roles easily on the Nutanix Prism dashboard. This not only improves productivity, but also gives employees the freedom to manage their own projects independently.

Connected as one company

Working in a remote branch office can often be isolating. End user computing (EUC), including VDI and DaaS, provides a consistent user experience across all your devices within the network, so employees can stay connected even when stationed on the other side of the planet.

BLAIR WRIGHT
Chief Information Officer,
London Capital Group

"A major factor in keeping our deadlines has been the fact that we haven't had the complexity of installation and diverse skill set requirements we would have had with other vendors. We've also managed with far fewer heads than we thought and haven't had to hire any storage specialist."

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PREPARE YOUR FIRM
FOR TOMORROW'S CHALLENGES

If you would like to learn more, please visit our website: **www.nutanix.com/finserv**
Or please contact us at: **www.nutanix.com/contact-us**

Begin your journey towards digital transformation with Nutanix as your chosen infrastructure partner. Achieve agility, efficiency, and most importantly, create industry-shaping product innovations to stay ahead as one of the world's leading financial institutions. This eBook has included suggestions for how Nutanix can help co-create and enable you to build the digital enterprise of tomorrow.

As the world leader in next-generation data infrastructure solutions, Nutanix delivers the best of both worlds: the simplicity and agility of public cloud together with the performance, security, and control of private cloud.

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