NUTANIX™

REIMAGINING YOUR JOURNEY TO THE CLOUD:

THE FINANCIAL SERVICES PERSPECTIVE

Enterprise IT has been forever struggling to strike a balance between cost, complexity, speed, and scale of operations. However, FinServ might just have found the proverbial pot at the end of the rainbow – covered by hybrid multicloud!

So how can financial services companies uncover hybrid multicloud and use the contents of the pot to generate revenue?

A key development in the "business of finance" is that IT isn't a support function anymore. As a result of the increasing impact and importance of data and analytics, technology has become a strategic asset that drives innovation, scalability, and speed-to-market in financial services.

Vijay Luthra, Senior VP of Engineering and Operations for Northern Trust, a 125 year-old global financial services provider with 20,000 employees, says firms in the industry have "no choice but to run IT as a business" if they are to remain competitive. Luthra is not alone in this thinking. Across the board, FinServ companies are looking at evolving cloud architectures as means of generating revenue, improving operational efficiency, neutralising systemic risks, and optimizing costs.

Truist CEO Kelly S. King was more direct. "We face a fundamental choice – disrupt our business or be disrupted," he wrote in the bank's most recent annual shareholder letter. Nutanix's third annual Enterprise Cloud Index took a five-year outlook on cloud adoption and found that in the wake of the pandemic, the hybrid cloud is the only IT model that shows positive growth in the finance industry. That's primarily because 43% of FinServ companies plan to increase spending and adoption of private cloud-based services over the next year – a whole 10% more than the average – on top of their investments in the public cloud.

What is driving this hybrid cloud adoption and what challenges do large financial companies face in speed, scale, complexity, and costs?

43%

of FinServ companies plan to increase spending and adoption of private cloud-based services over the next year

Exploring New Business Frontiers with **Hybrid Multicloud**

VPs in IT departments across the FinServ and Insurance sector are in in a great position to initiate change today. The C-suite has traditionally pressured IT to scale operations while grappling with limited budgets and legacy infrastructure. Add to that, the whole sector is disrupted by Fintech start-ups that are using cloud-native infrastructure and development practices with speed and agility, without any stringent regulatory requirements hanging over their heads and minus the burden of traditional cost overheads.

However, CTOs and tech leaders in finance now understand that the hybrid multicloud can be a catch-all, if not a panacea, for most of the limitations holding them back. Once deployed successfully and configured well, the list of benefits could be overreaching.

Optimize Setup and Running Costs:

Legacy hardware and software are some of the biggest burdens that hinder architecture upgrades in FinServ. More likely than not, you're making do with outdated technology simply because of the prohibitive cost of refactoring and re-platforming your core systems.

You don't need to be bogged down by legacy technology anymore. The Nutanix Cloud Platform has been shown to return a staggering 477% ROI in 5 years while lowering your TCO by two-thirds. This means you maximize your investment in on-prem infrastructure within the foreseeable future.

Maximize Time-To-Value

477% ROI in 5 years

62% Lower TCO

Meet Customer Expectations Every Time:

The pandemic has brought out a dramatic change in the way customers make financial dealings. While digital transactions were already on the rise, they're the norm now. Banks and financial institutions have already woken up to the new reality of 100% digital workflows in lending, payments, insurance claims, and trading ops. Add to that the plethora of contactless payment methods emerging every day and customers wanting the flexibility to trade in complex financial products from their mobile phones, and you need to redefine your IT capabilities.

Nutanix is customizable and lets you set up hybrid multicloud environments for testing and development within the hour. Migrating to the new cloud doesn't need to be onerous. What's more, the application services layer has automation and provisioning capabilities that enable you to implement the latest DevOps practices. Ultimately, these automated processes can shave off over a quarter of your development times.

Speed Up Service and Management

60 minutes
Time to set up a hybrid cloud

27%
Faster application development

Prevent Security Breaches:

The average cost of a data breach in FinServ is a mind boggling $5.85 million – over 1.5 times the average of all other sectors. The industry remains a favorite of cybercriminals and bad actors because of the treasure trove of customer information (and money) that's up for grabs.
The COVID-19 situation has forced a virtually overnight transition to remote work and increased the number of devices and networks involved. This means FSIs are more vulnerable to data and identity theft in the form of authentication and validation fraud, phishing, social engineering, DDoS, and ransomware.

The Nutanix Cloud Platform allows you to pre-empt these exacerbated threats by deploying secure VDI or DaaS systems that allow for scaling remote work while flagging known and suspected breaches at either end. Strong security across workloads and platforms means you can breathe easy even in the absence of fortified perimeters, ensuring digital continuity and data protection in the face of all-too-prevalent ransomware threats.

Mitigate Security Risks

250 Different security audits

28% More efficient security teams

Meet Compliance Requirements:

With or without the pandemic, FinServ is a melting pot of operational patterns that need to adapt to macroeconomic factors and consumer behavior alike. You want hybrid systems and cloud apps that help you maintain agility for shifting mandates that are increasingly demanding.

Data processing and analytics is the key factor around which government regulations as well as compliance processes revolve. Cloud based systems accelerate data brokering and also make it easy to mine trade surveillance data for money-laundering or fraud patterns.

Our hybrid deployments help solidify your cloud journey with preconfigured controls to modernize your risk monitoring platforms, derive new insights and trends from data, and enable continuous governance while reducing compliance costs.

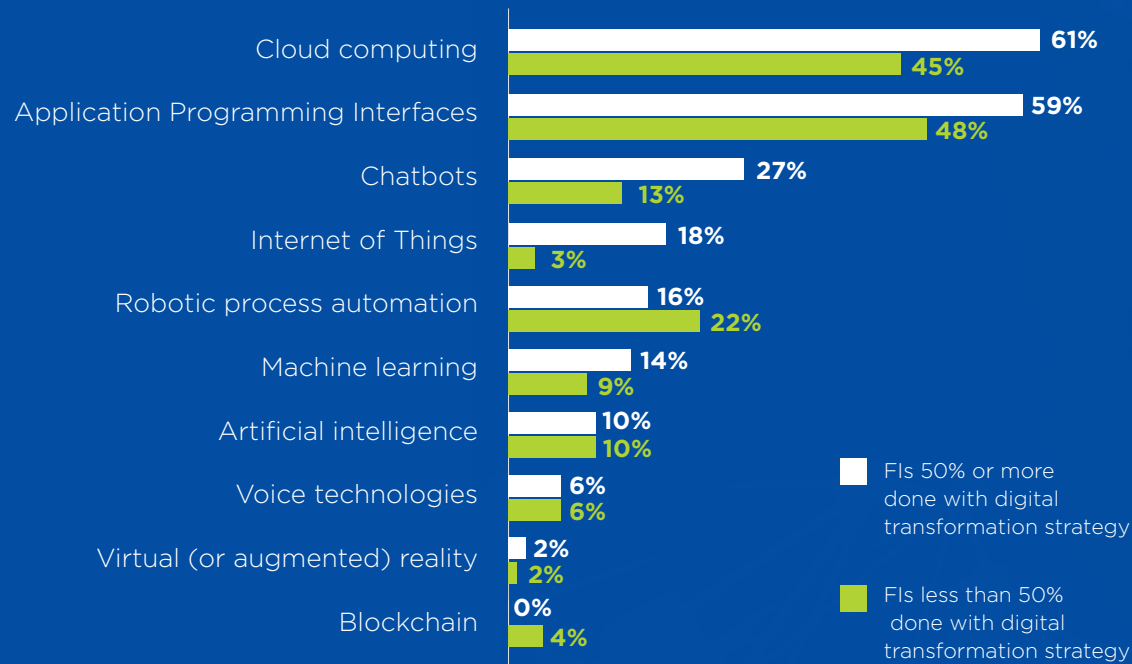**Ensure Always-On Compliance**

72% More frequent backups

85% Less downtime

Getting There: Ace Your Technology Transformation

Cloud computing and APIs top the list of emerging technologies deployed by financial institutions in the middle of digital transformation.

Emerging Technologies Deployed by Financial Institutions

Technology	FIs 50% or more done	FIs less than 50% done
Cloud computing	61%	45%
Application Programming Interfaces	59%	48%
Chatbots	27%	13%
Internet of Things	18%	3%
Robotic process automation	16%	22%
Machine learning	14%	9%
Artificial intelligence	10%	10%
Voice technologies	6%	6%
Virtual (or augmented) reality	2%	2%
Blockchain	0%	4%

■ FIs 50% or more done with digital transformation strategy

■ FIs less than 50% done with digital transformation strategy

CORNERSTONE ADVISORS

Source: Cornerstone Advisors survey of 260 senior financial institution executives, Q4 2020

And yet, less than a third of FSIs that are halfway through the process have achieved even a 5% completion of key transformation objectives such as, increase in deposit and loan volumes, IT agility, customer retention, and reducing operational expenses. Many FSIs make the mistake of layering piecemeal cloud solutions on their existing infrastructure in an attempt to achieve functional goals. But this only makes it even more difficult for disparate workloads to scale together. In some cases, one bottleneck might entirely derail your company-wide transformation efforts.

What's the solution?

It's three-pronged: **Democratization. Automation. Unification.**

Democratization is the availability of tools and resources to personnel and users as and when they want them. It is arguably the single most important factor that acts as a direct enabler of innovation.

Automation is the streamlining of functional processes while enabling self-service for end users and customers. Hybrid clouds enable comprehensive APIs that integrate with each other in addition to keeping workloads running smoothly. But automation isn't just about adding more complex algorithms. You simply do away with coding where it isn't necessary.

Unification is real-time visibility across all clouds including on-prem environments through a "single pane of glass" interface. This allows you to monitor data/information flow and application performance across workloads without wrestling with different security protocols for different architectures.

How, then, do you go about achieving these three goals on your way to business transformation? How do you maintain business continuity and IT governance all the while?

There are 3 key levels on your journey to the cloud summit. Let's take you there:

1. Converge legacy 3-tier infrastructure into a modern HCI.

With Nutanix the tried and true version of hyperconvergence, a simple scale-out solution can lay the foundation for an intelligent hybrid cloud that can run any application you choose. Resiliency is the name of the game here.

"Almost every financial institution is introducing new digital products and services into the market to compete," said Sean O'Dowd, Head of Global Financial Services Strategy and Solutions for Nutanix. "Technology partners are bringing their entrepreneurial approach to financial services and it's helping IT departments modernize infrastructure, adopt hybrid cloud, protect their enterprise and be more responsive to changing business needs."

Modernizing your infrastructure doesn't mean ripping it out and replacing it with more expensive technology. Rather, that Nutanix HCI will consolidate all your existing IT resources and uses standard, commodity hardware with locally attached storage to maximize operational efficiency. This architecture eliminates the need to purchase storage, networking, and server hardware – it is driven by a software-defined platform that unifies management and does away with vendor lock-in.
Which means you get a web-scale architecture while optimizing infrastructure costs down to the last penny.

2. Expand functional capabilities by transitioning to the cloud.

Once you have an HCI in place, you're ready to scale and simplify your operations by making a transition to the cloud. It does not matter where these capabilities are being deployed - on-prem, private cloud, or public cloud, it should be seamless. Once you enter this phase, your days of waiting to acquire and utilize technology resources are over.

Here are the specific advantages that your organization can gain:

- **Automation:** the Nutanix Cloud Platform uses ML to optimize resource allocation and utilization, proactively detect anomalies, and deliver exceptional QoS to users. The biggest gains lie in freeing up staff from routine maintenance and allowing them to focus on strategic problem solving and innovation.

- **Storage:** This is where your data management objectives start to fall into place. Our clouds allow provisioning of multiple storage types within a single platform –accessible by databases, applications, users, backups, or any other entity that needs them.

- **Cost governance:** Want to gain true visibility into cloud costs and enforce spend policies across business units? The Nutanix cloud metering features let you visualise and monitor cloud consumption at the most granular levels, including departments, teams, and individuals.

- **Availability:** The Nutanix Cloud Platform offers a high level of resiliency and protection for data and business critical applications (whether they're cloud-native or enterprise apps). Built-in replication, redundancy, and self-healing capabilities do away with the need for drills.

- **Security:** Security is the USP of hybrid multicloud systems. Rest doubly assured on this front with Nutanix's real-time security audits, native data encryption, and app-centric microsegmentation features.

3. Unify hybrid multicloud operations.

The final step is to integrate multiple public clouds according to your workload requirements and unify your platforms. The outcomes – seamless interoperability and application portability – are like thunder and lightning: the rainmakers of your cloud infrastructure.

Companies frequently hesitate to expand from private or on-prem to hybrid multicloud models because of the level of complexity involved. There are questions that have no clear answers:

- Which workloads work best on private clouds and which ones are ready for the public cloud? Which of them are predictable, persistent, or sporadic?
- Which applications do we need to rearchitect? Do we need to develop new cloud-native apps?
- How many platform management tools do we use? What software will we need to monitor and manage the new infrastructure?
- What about industry standards and regulations? What policies, processes, and documentation do we need to prove we remain compliant?
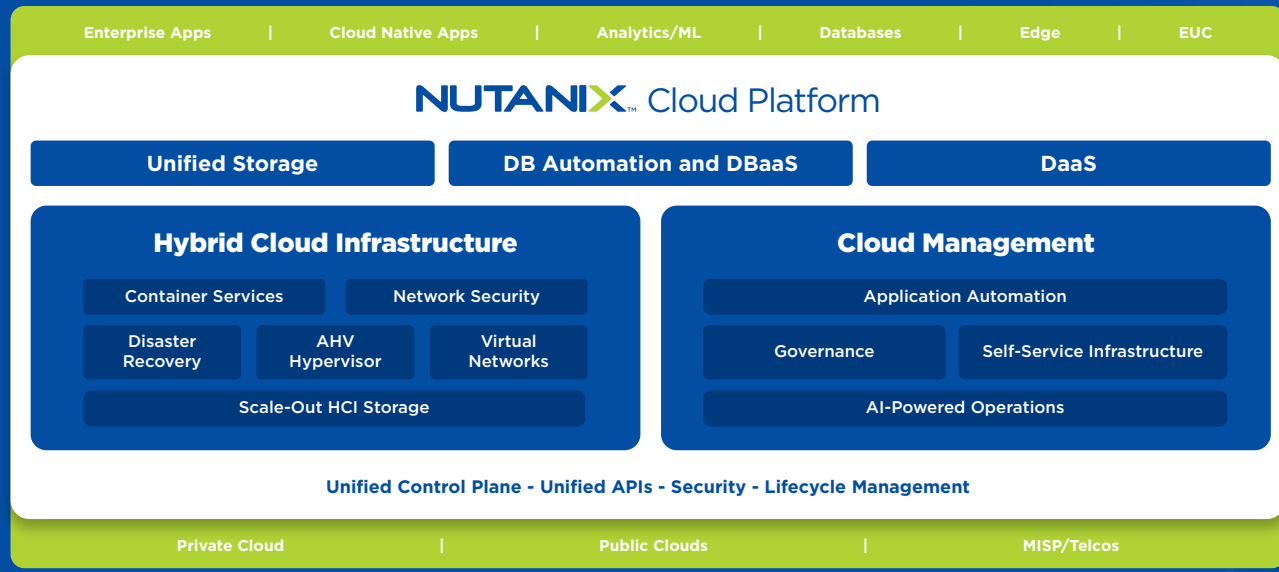
Given these uncertainties, IT teams often asked, "Is hybrid multicloud solving the problem or creating more complexity?" The Holy Trinity of one-click operations, intelligent automation, and always-on availability was always unattainable.

Or so it seemed.

The Nutanix Cloud Platform is the industry's first Hybrid and Multicloud platform that extends your HCI and private cloud stack to public clouds like AWS or Microsoft Azure. This means you can pick the right resources for your workloads and migrate, extend, or burst data, apps, and licences from datacenters to clouds or from one cloud to another seamlessly.

The above major steps and paths as FinServ firms rapidly digitalize. Societe Generale is one example of a global bank who **started down this path a while ago** and **continues to accelerate its efforts.**

NUTANIX™ Cloud Platform

Enterprise Apps | **Cloud Native Apps** | **Analytics/ML** | **Databases** | **Edge** | **EUC**

| Unified Storage | DB Automation and DBaaS | DaaS |

Hybrid Cloud Infrastructure

- Container Services
- Network Security
- Disaster Recovery
- AHV Hypervisor
- Virtual Networks
- Scale-Out HCI Storage

Cloud Management

- Application Automation
- Governance
- Self-Service Infrastructure
- AI-Powered Operations

Unified Control Plane - Unified APIs - Security - Lifecycle Management

Private Cloud | **Public Clouds** | **MISP/Telcos**

What this means for FinServ is that they now have the ability to:
- Deploy robust VDI systems running I/O intensive apps for large-scale financial transactions.
- Maintain familiar workflows and toolsets with cloud native integration.
- Scale up or down instantly (on-demand elasticity) with the option to hibernate unused resources.
- Create a hybrid cloud environment in less than 60 minutes

"We can run application loads inside our datacenter or move them from one cloud to another cloud. Nutanix is enabling this with Containers and Docker strategy," said Delen Alexandre, Executive Director at Delen Private Bank, which moved from a legacy datacenter to a unified hybrid cloud architecture They also ended up reallocating 50% of their IT budget to new technology in the process. "We don't have to look at the metrics because it is running so smoothly," Alexandre added.

Your Turn: Create Value Out of Technology!

When the coronavirus outbreak hit in March 2020, many financial institutions were caught unawares. Trade had to go on, but traders couldn't. Deals had to be made, but dealers didn't show up.

London-based wealth management firm JM Finn was ready. They able to enable their entire staff of 400 to work from home and keep managing wealth portfolios without missing a beat. As their peers scrambled to get remote workers connected and operations humming, JM Finn's Nutanix-powered VDI delivered high-intensity trading capabilities to every employee's home.

Their datacenter streams heavy-duty financial applications to dealers and traders, who sometimes need up to eight screens to do their job. "They are very impressed with the technology," said James Cosson, Head of IT at JM Finn of these power users, who have zero tolerance for lag, let alone downtime. "It's running like lightning."

No surprise then, that Nutanix has a Net Promoter Score (NPS) of 92 and averaged over 90 for the last 6 years running.

Net Promoter Score for Top Brands compared with Nutanix
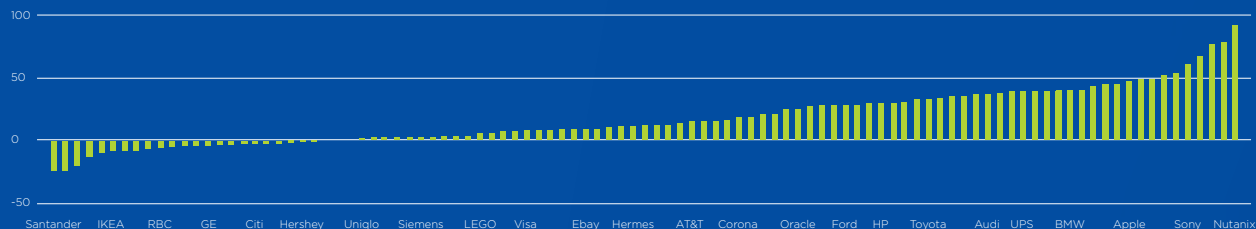
At Nutanix, we don't thrust our solution down your throats, like most big-name vendors do. Our experts sit down with you to understand your industry, your business objectives, your people, processes, and technology, and then guide you to a nimble, transformative, and cost-effective cloud solution.
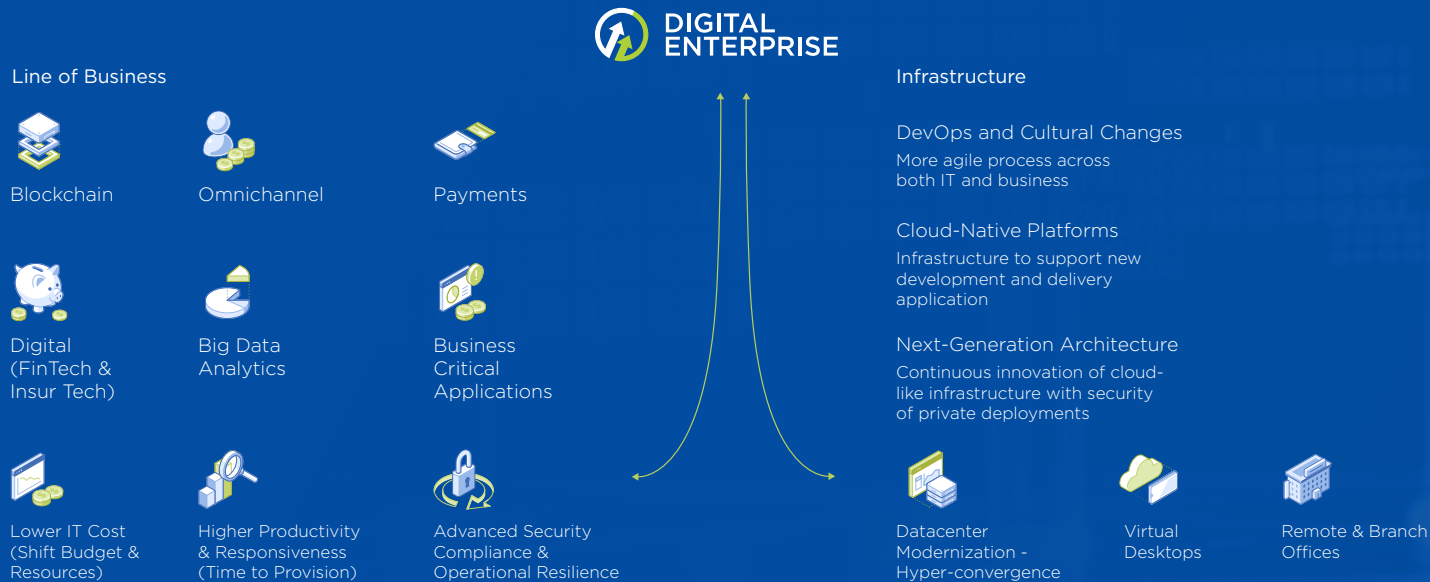
We help YOU build and customize your own tech stack that will serve you far out into the future just as well as it does today!

This "can do" approach and attention to detail has taken Nutanix to the TOP of Gartner's Magic Quadrant for Hyperconverged Infrastructure Software – and kept us there for the last 4 years. Our "ability to execute" remains unmatched. Although every cloud journey is different, this paper has outlined a reference framework for

Figure 1: Magic Quadrant for Hyperconverged Infrastructure Software

Source: Gartner (November 2021)
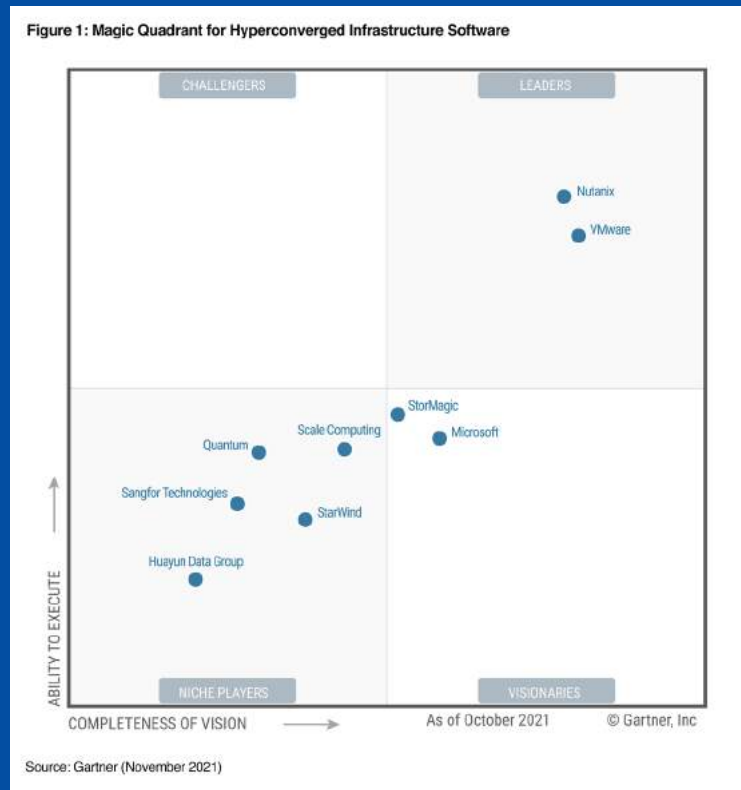
Although every cloud journey is different, this paper has outlined a reference framework for financial enterprises to build an efficient and agile hybrid cloud solution.

Nutanix Financial Services Digital Enterprise Customer Journey

DIGITAL ENTERPRISE

Line of Business

Blockchain

Omnichannel

Payments

Digital (FinTech & Insur Tech)

Big Data Analytics

Business Critical Applications

Lower IT Cost (Shift Budget & Resources)

Higher Productivity & Responsiveness (Time to Provision)

Advanced Security Compliance & Operational Resilience

Infrastructure

DevOps and Cultural Changes
More agile process across both IT and business

Cloud-Native Platforms
Infrastructure to support new development and delivery application

Next-Generation Architecture
Continuous innovation of cloud-like infrastructure with security of private deployments

Datacenter Modernization - Hyper-convergence

Virtual Desktops

Remote & Branch Offices

We can help co-create and execute a hybrid cloud strategy that solves your most pressing problems and helps you reshape the FinServ industry to your advantage!

Take Alberta Investment Management Corporation (AIMCo), one of Canada's largest and most diversified investment management companies. They handle over $115 billion in AUM including pension, endowment, and government funds.

Each day after markets close, AIMCo consolidates its data to perform NAV calculations overnight and populate reporting data marts for its traders and portfolio managers. After deploying Nutanix Enterprise Cloud, the firm gained a full two and half hours on this calculation process. They now use this time to verify input data and weed out errors.

Tony Payne, VP of Business Technology at AIMCo, said: "Migrating to Nutanix has made our operations run more smoothly and efficiently. Less manual work and accuracy are paramount, but equally important is the increased productivity and morale of our teams. In some ways, that is our strongest outcome."

No wonder AIMCo is migrating more of its critical applications and workflows to the Nutanix Enterprise Cloud platform. "Over the last quarter we have seen our SLOs rise to the highest level we have ever achieved," said Payne. "We are expanding our full production environment onto Nutanix."

Getting **Started with Nutanix**

Get in touch today to know more about the **Nutanix Hybrid Multicloud**

To learn more about how Nutanix can help you transform your big data operations and integrate analytics with your business processes, visit **https://www.nutanix.com/solutions/hybrid-multicloud**. You can contact Nutanix at **info@nutanix.com**, follow us on **Twitter @nutanix**, or send us a request at **www.nutanix.com/demo** to set up your own customized briefing. You can also **take a test drive** of Nutanix infrastructure with no hardware, setup, or cost. Experience the simplicity and agility of public cloud combined with on-premises performance, security, and control via an easy-to-follow guided tour.

Take a Test Drive

NUTANIX™