Whitepaper

Partner opportunity:

Building a practice with Microsoft Azure Stack HCI and Intel for financial services

Microsoft Azure

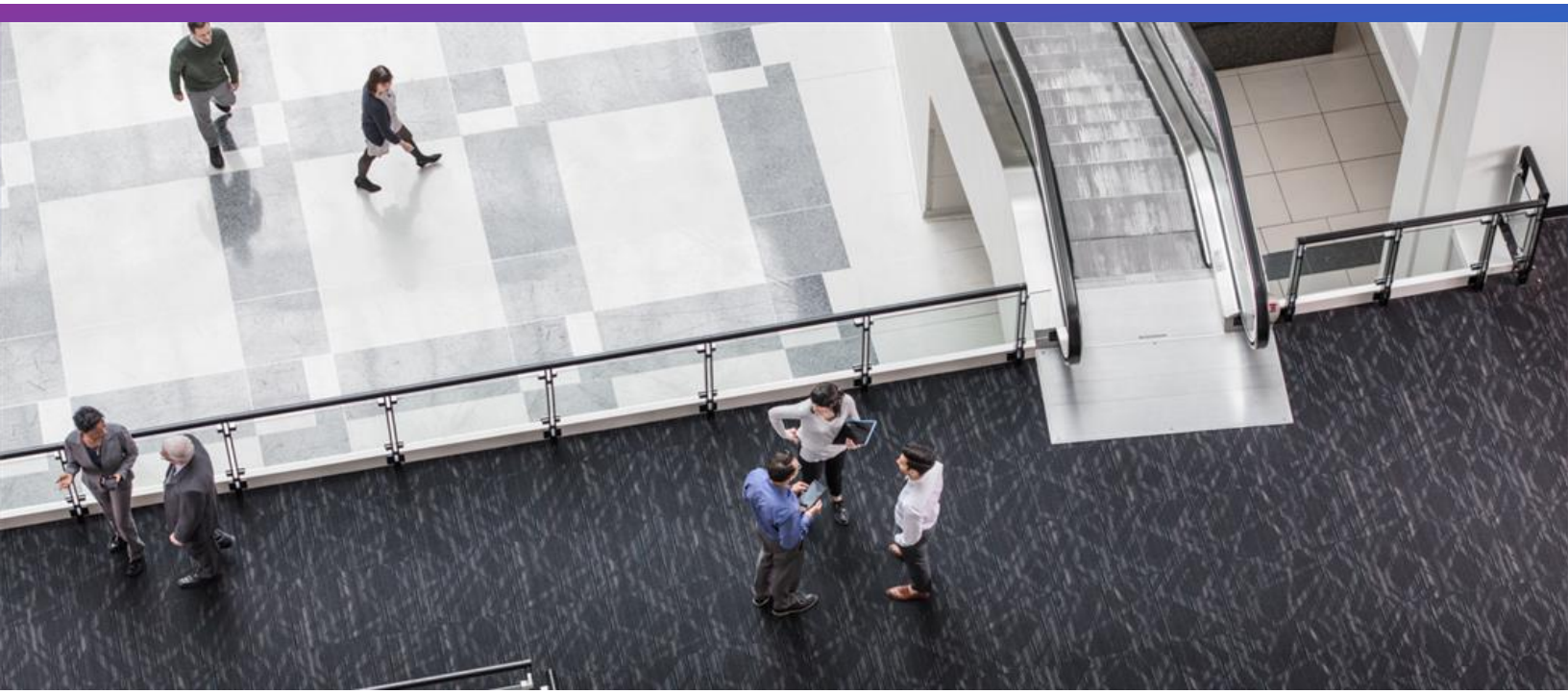
intel

Contents

Introduction

Today's enterprises are facing enormous pressure to evolve and adapt at a rapid pace, which requires a modern, digital foundation that is flexible, resilient, performant, and secure. For financial services institutions (FSIs), this need is compounded by intensifying market competition, increasing regulatory oversight, and mounting fraud and data security risks. Ensuring data availability and low latency for real-time analytics and decision making, while staying compliant with strict requirements for how data must be stored, protected, and handled, leaves FSIs looking for a robust hybrid solution that enables modern cloud security and innovation.

In this whitepaper, we'll examine how Microsoft Azure Stack HCI (Hyperconverged Infrastructure) and Intel technologies can address critical FSI infrastructure needs and help systems integrator (SI) partners understand the business opportunity in selling Azure Stack HCI for financial services. Partners will gain the guidance and resources needed to help establish a successful practice and enable future business growth, along with valuable insights for engaging customers in the financial services vertical.



Financial services trends and challenges

There is a strong sense of urgency across the financial services industry to accomplish various business objectives, including:

- Delivering personalized and modern digital financial experiences while remaining agile to adapt to changing industry and customer needs
- Harnessing data and technology like artificial intelligence (AI) to enable innovation and remain competitive with non-traditional financial service providers
- Leveraging analytics and automation to reduce risk, strengthen security, and maintain compliance with industry regulations
- Reducing infrastructure management complexity across dispersed locations
- Improving energy consumption and reducing waste to drive sustainability goals and reduce costs

Yet supporting these initiatives requires a modern digital platform—something many financial institutions are still working toward as their legacy infrastructures lack the flexibility necessary to handle today's demands and technical advancements. The rise of FinTechs (financial technology) and non-traditional players (like Apple Pay and ClearBank) is increasing the pressure on financial institutions to accelerate modernization and harness innovation to remain competitive. Sixty-nine percent of FSI leaders report that digitalization initiatives are accelerating and expected to significantly transform the industry by 2026,[1] and 74 percent say they intend to modernize data

with the cloud this year.[2] In the meantime, maintaining these aging infrastructures not only incurs excess costs and effort, but prohibits modernization of critical applications and the ability to harness data for its full potential. These outdated systems often result in redundancies, inefficiencies, and infrastructure complexity that further inhibit data collection and use, inflate technical debt, and create security vulnerabilities. Reducing infrastructure complexity—like optimizing the virtual desktop infrastructure (VDI) for hundreds of users across dispersed locations—is essential to powering modern banking initiatives and driving operational efficiency.

Being on-prem incumbent with heavy data (multiple petabytes) that is subject to strict compliance requirements, however, financial institutions need to retain their datacenters while still being able to modernize applications in a compliant way and enable cloud-native innovation. This requires a long transformation journey with months of planning and revisiting compliances, while enabling critical data and workloads to remain on premises (and secure) for faster accessibility and real-time service delivery—like checking accounts that need to be immediately accessible to customers. As FSI leaders embark on the road to modernization, they are looking to flexible, hybrid cloud infrastructures that facilitate secure data availability at the edge while avoiding the potential latency concerns of traditional cloud computing. According to Forrester, 86 percent of FSI decision-makers acknowledge that enabling edge solutions is imperative to creating customer and business value.[3]

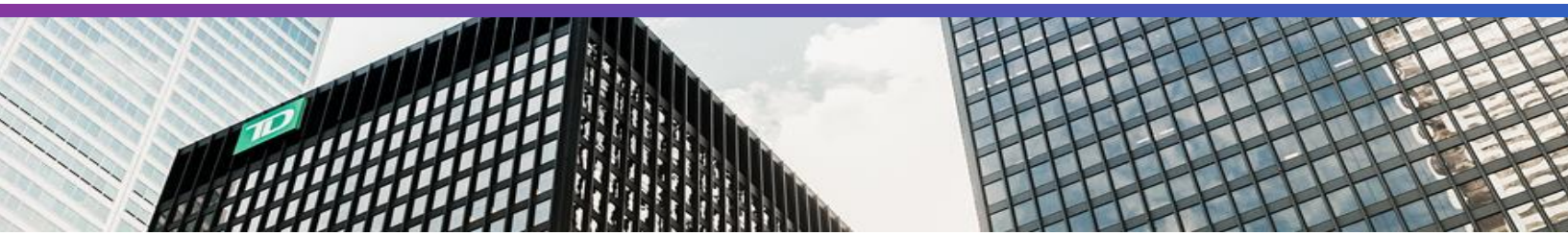
While increased digitization brings a multitude of benefits, it also magnifies critical risks around fraud, data integrity, and cybersecurity like never before in financial services. The more applications are scaled across diverse environments, the broader the attack surface and the greater the potential for security risks. As applications become more secure, attackers increasingly target other layers of the infrastructure, driving a need for deep, multi-layer security. Despite being one of the most heavily regulated industries worldwide, financial institutions are increasingly targeted with ransomware and cyberattacks. The number of ransomware attacks in 2023 nearly doubled from just two years prior, growing from 34 percent in 2021 to 64 percent last year.[4] Losses incurred by financial organizations amount to roughly $5.9 million per cyber incident, which tops nearly every industry in damages—second only to healthcare.[5]

Governing bodies and regulators like the US's Federal Financial Institutions Examination Council (FFIEC) and Financial Industry Regulatory Authority (FINRA) aim to hold institutions accountable and keep such breaches from happening, placing stringent mandates on how data must be stored, protected, and reported. Regulators have taken more than 26 compliance actions against financial institutions for deficiencies in risk management and data governance since 2016, totaling more than $3.4 billion in fines as of 2023.[6] As FSIs work to meet evolving regulatory and cybersecurity expectations, it leaves them seeking hybrid and distributed solutions that can help them leverage innovations to improve fraud detection and protect data at rest and in transit while still meeting data residency and compliance requirements.

Keeping pace with customer, industry, and cybersecurity demands means embracing and innovating with emerging technologies like AI. While the use of AI in the financial sector is still relatively conservative and requires careful regulation and oversight, it has the potential to transform the industry and deliver enormous impact from fraud detection to customer service. Accenture predicts that AI will add $1.2 trillion in value to the financial sector by 2035.[7] Many institutions have already begun introducing AI use cases, from chatbots to assist customers with basic requests, to predicting next-best-offer recommendations and optimizing call-center agent interactions. The implications for AI in fraud detection and investigation are perhaps even more impactful, enabling proactive threat anticipation to significantly reduce risk and protect customers. However, leveraging these innovations requires a robust and secure platform that can handle heavy compute power while extending cloud-built AI models to often run locally at the edge to meet compliance.

For financial institutions to address these challenges and realities, they need an agile and flexible infrastructure across software and hardware that gives them a digital advantage and enables them to:

- Digitize and make use of new technologies for modern customer experiences, increased efficiency, and innovation
- Strengthen cybersecurity and automate fraud detection while maintaining compliance with changing regulatory requirements
- Extend cloud capabilities to the edge to transform data into real-time insights and power innovation
- Reduce infrastructure complexity, simplify management across environments, and optimize compute power
- Quickly develop and deliver products, applications, and services to stay competitive



How the Microsoft adaptive cloud approach with Intel supports critical FSI needs

The Microsoft adaptive cloud approach provides a comprehensive and curated distributed hybrid infrastructure (DHI) stack that empowers financial institutions to move from reactive to proactive evolution and unlock new scenarios that were not previously possible. Central to this approach, Azure Stack HCI—powered by Intel technologies—presents an ideal solution to help FSIs modernize applications and infrastructure in a secure and compliant way while accommodating their on-premises dependencies. Extended Security Updates allow them to run legacy Windows Server and SQL workloads (2012 and later) free of cost, while maintaining compliance and taking the time they need to modernize. Azure Stack HCI helps FSIs better connect, collect, and leverage their data at the edge with low latency while enabling secure cloud innovation to reduce risk and strengthen customer relationships.

As a leader in Gartner's Magic Quadrant for Distributed Hybrid Infrastructure (DHI),[8] Microsoft offers Azure Stack HCI to deliver streamlined hybrid deployment, management, and optimization, while leveraging the broader end-to-end Azure platform for a more comprehensive breadth of capabilities versus competitive solutions. Gartner asserts that "*Microsoft DHI customers can tap into a robust global ecosystem that encompasses direct sales partners, OEMs (original equipment manufacturers) and the pervasive presence of Azure Cloud. This dynamic setup yields significant advantages to meet diverse requirements effectively.*" Combined with Azure technologies such as Azure Kubernetes Service, SQL managed instance, PostgreSQL, Azure AI and Machine Learning (ML), Data and App Services, and more—all managed through Azure Arc—Azure Stack HCI enables cloud-to-edge

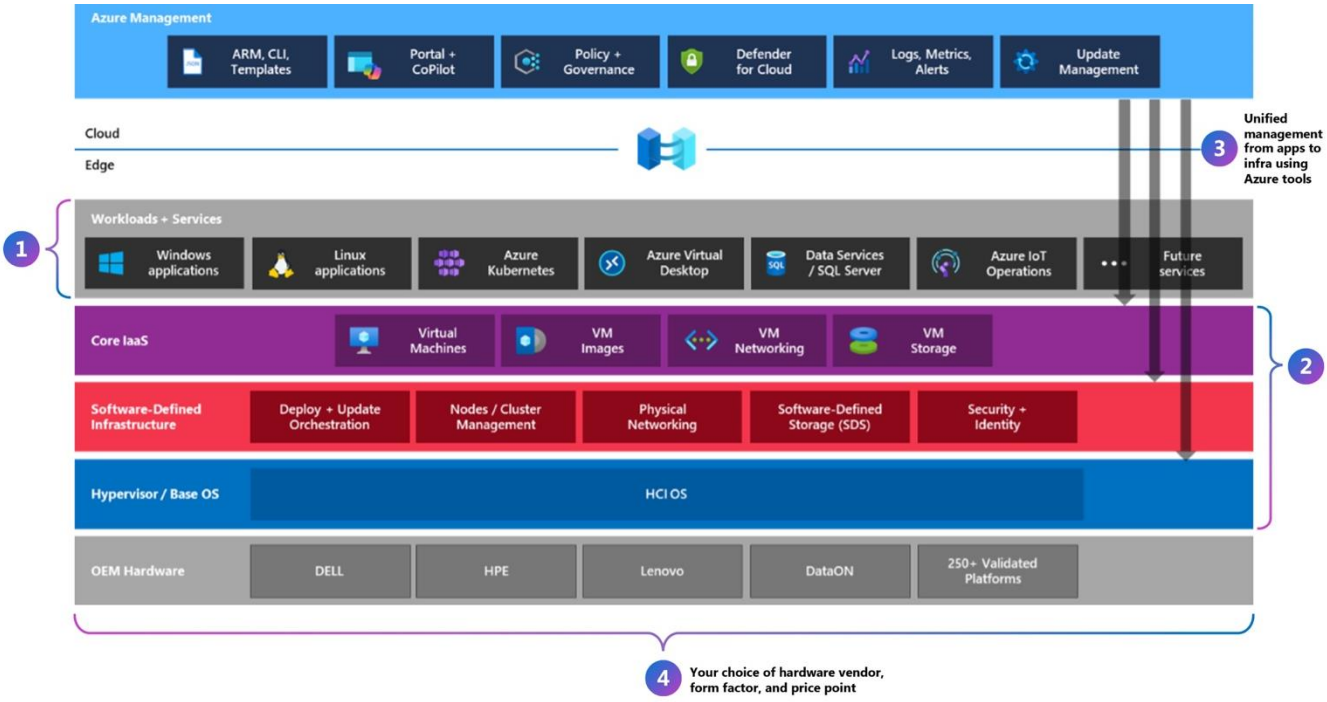
Magic Quadrant

Figure 1: *Magic Quadrant for Distributed Hybrid Infrastructure*

computing that brings cloud-native capabilities on-premises for real-time impact and action. This integrated set of technologies provides FSIs with the increased agility, data processing power, and seamless innovation capabilities they need to develop and deploy new technologies, react quickly to changing needs and demands, and deliver next-gen banking experiences.

Azure Virtual Desktop for Azure Stack HCI streamlines delivery of best-in-class VDI with edge-local access to devices across branch locations, leveraging near-linear scalability as user volumes grow. Azure Stack HCI provides a flexible, secure, compliant, and cost-effective way to modernize existing VDI workloads for high-performance and low-latency cloud capabilities that can handle demanding FSI compute requirements while maintaining compliance.

Leveraging Microsoft's cloud-based intelligence solutions and Azure AI capabilities, financial institutions can build intelligent solutions and workflows in the cloud while extending models to run securely and compliantly at the edge with Azure Stack HCI. Azure AI services and Microsoft Copilot can help FSIs transform important tasks—from empowering call center agents to accelerate customer service with semantic search and intelligent recommendations, to combating fraud with insights gained from unstructured data sources (like voice recognition or geolocation)—all while keeping data protected and compliant with built-in security.



Azure Stack HCI is underpinned by the latest Intel® Xeon® Scalable processors, increasing the density of users that can be supported in Azure Stack HCI clusters and enhancing virtualization for seamless migration between different generations of processors and cloud environments. Built-in accelerators in the processor—including Intel® Advanced Matrix Extensions (AMX) to accelerate AI workloads, Intel® Quick Assist Technology (QAT) to accelerate compression and

encryption, and Intel® AVX-512 for financial modeling—help to address challenges with the most prevalent FSI workloads by boosting performance and power efficiency, freeing-up CPU cores, increasing data throughput, lowering latency, and increasing server utilization. Intel collaborates with Microsoft on solutions for Azure Stack HCI that deliver recommended hardware and software configurations and benchmarks across common workloads to enable high performance, cost efficiency, and security capabilities. Azure Stack HCI and Intel help optimize compute power and energy consumption to support FSI's sustainability goals and reduce costs.

Supporting FSI modernization and transformation at the edge

- **Modernize** on-premises infrastructure with Azure services and Intel-based servers
- **Deliver** cloud-native applications and services from the edge, powered by Intel
- **Transform** data into insights and value with AI and analytics, accelerated by Intel
- **Accelerate** application development and deployment with DevOps tools
- **Secure** hybrid cloud environments with Intel Crypto Acceleration, Total Memory Encryption, and Secured-core server
- **Govern** and manage apps and environments seamlessly with Azure Policy

Azure Stack HCI leverages Intel® Total Memory Encryption to encrypt a computer's entire memory system; Intel® Crypto Acceleration to speed encryption of stored data without trading-off performance; and Secured-core server to simplify security enablement while providing advanced data protection across multiple layers of hardware, firmware, and operating system.

Together, Azure Stack HCI and Intel empower financial institutions with a comprehensive approach to security and governance across the entire IT and data estate, leveraging Intel's silicon-level hardening and the industry-leading, multi-layer security benefits of Azure (delivered through Azure Arc), including:

- **Hardened security posture** and advanced threat detection to protect workloads, networks, and financial data
- **End-to-end infrastructure** and application monitoring to proactively detect, diagnose, and resolve issues from cloud to edge
- **Zero-trust encryption** with Server Message Block (SMB) for data in transit and BitLocker for data at rest
- **Software-defined networking** for micro-segmentation and network security groups
- **Policy enforcement**, access management, and governance controls to ensure compliance with industry regulations

Industry leading built-in security

Microsoft's security products are industry leading in several Gartner magic quadrants.

Confidential compute

Supported by Intel® SGX technology and hardware-enhanced capabilities built into Intel® Xeon® processors to limit access to sensitive data actively in use in CPU and memory.

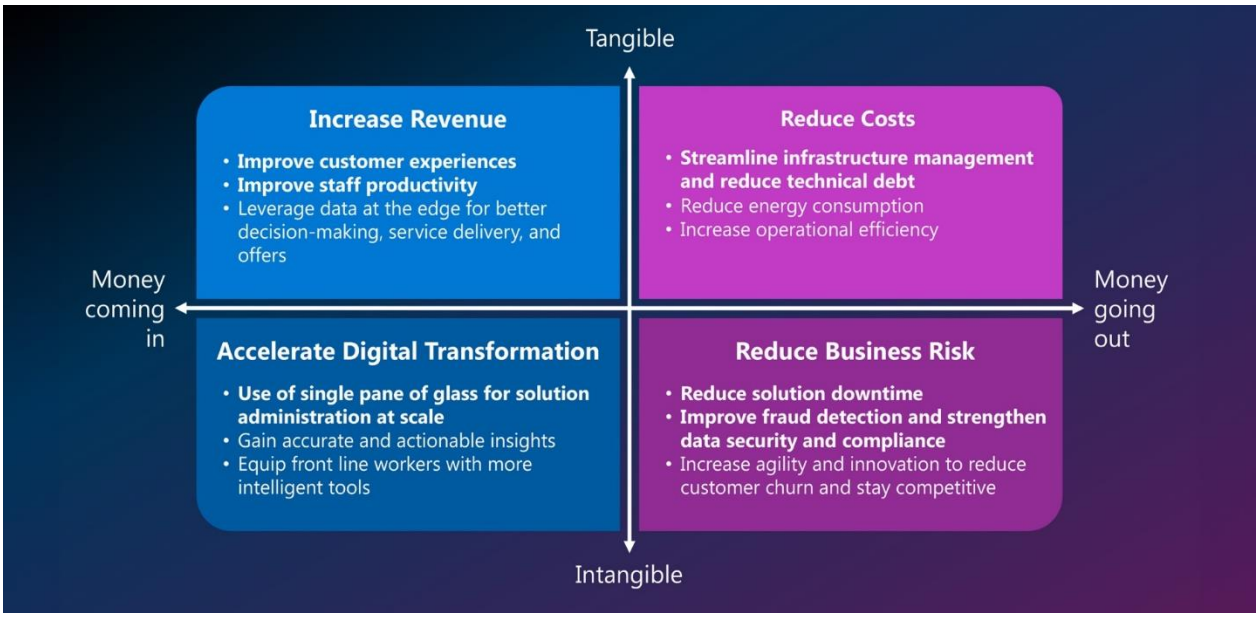
Security built for the Azure datacenter

Azure Stack HCI security derives learnings from our hyperscale cloud and brings it to your datacenter.

Silicon-assisted security

Unique differentiation delivered with our Silicon and OEM partners via Secured-core, providing industry-standard hardware-based root of trust to ensure only trusted components load in the boot path.

Azure Stack HCI and Intel simplify infrastructure management and reduce complexity, providing consistency across both hardware and software for greater agility to deploy, run, and optimize container-based applications and virtualized workloads from anywhere. Delivering a consistent Azure experience across environments, Azure Stack HCI helps to reduce operating expenses (OpEx) and drive efficiency. Flexible deployment options allow organizations to reuse existing hardware that matches validated node requirements, while familiar management tools (like Windows Server Admin Center, Azure portal, PowerShell, etc.) mean health organizations can leverage the same personnel and skills they've already invested in.



The business opportunity for partners

While modernizing legacy systems is crucial to supporting the new, digital age of modern banking and the innovations necessary to keep pace with emerging competitors, it requires significant investment, technical expertise, and seamless integration with existing workflows. Microsoft's adaptive cloud strategy provides partners an ideal opportunity to help customers navigate these complexities in their modernization journey while bringing the power of Azure anywhere and everywhere.

"Selling Azure Stack HCI is really about helping customers transform and move to a modern, end-to-end hybrid platform that can support their business needs," says Christophe Le Roux, Microsoft's Hybrid Service Sales Director for EMEA. The financial services industry, particularly, presents a prime market opportunity for Microsoft and SI partners to help these organizations modernize while addressing their unique infrastructure challenges with Azure Stack HCI.

Empowering Partners with Microsoft Azure Stack HCI

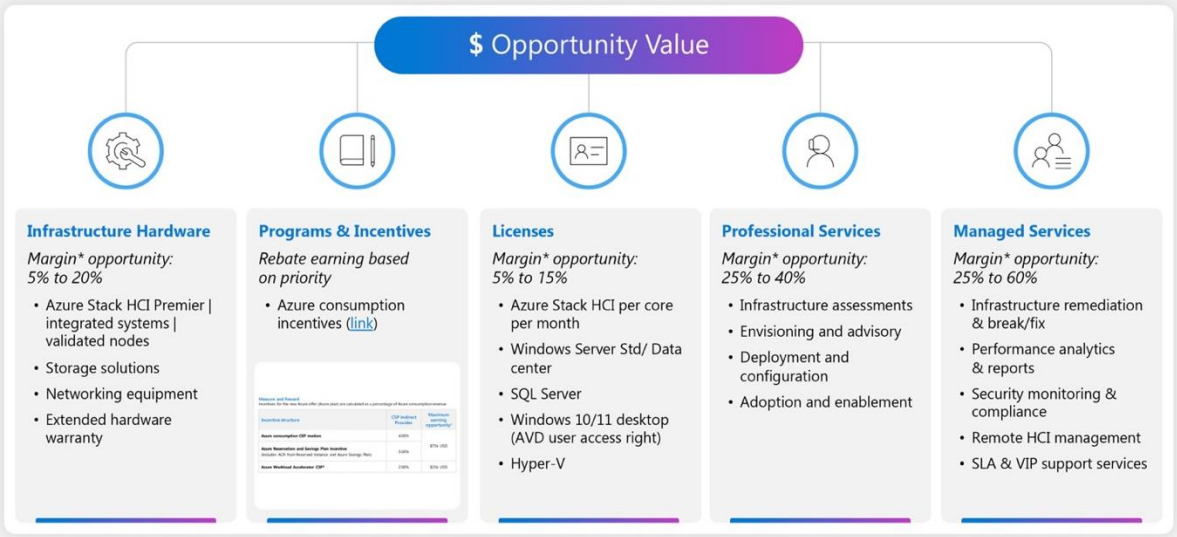
Market Opportunities	The best option for customers looking for VMware alternatives post acquisition. Bridge to (and from) the cloud to enable FSI workloads and operations while ensuring compliance. Deliver on the demand for edge capabilities. CSP-enabled.
Business Relevance	Deliver advanced solutions to solve FSI challenges in the simplest way possible (for the customer). Address modernization and transformation strategies.
Revenue Opportunity	High revenue and margins on Azure Stack solutions. Capture additional revenue with add-on products and services tied to Azure Stack HCI solutions and FSI use cases. Leverage the flexibility to size to any customer requirement.

Over 37 percent of FSI data leaders report that modernizing legacy data systems is currently a major challenge, and 74 percent indicate that their organizations will need a "moderate" to "large" amount of outside help to help them transform.[2] "FSI customers know *why* they need to migrate, but they need help with the *how*," says Le Roux. "There's a real opportunity here for partners to move from simply being a technology supplier in selling Azure Stack HCI, to more of an advisory role—acting as a complete transformation partner that can help them navigate the transition, manage their data, and create a long-term relationship of value." While revenue margins are already high for Azure Stack HCI, partners can open the door to additional revenue and a larger business opportunity by offering assessments, complete transformation planning, scoping and

configurating Intel-based servers, ongoing infrastructure management, or other value-added services that complement the initial Azure Stack HCI solution sale.

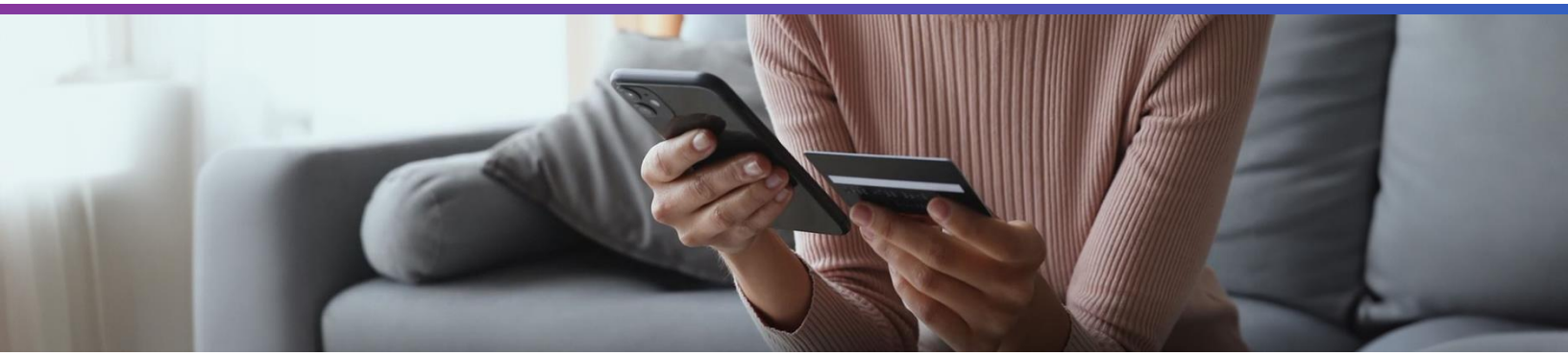
Microsoft partners and OEMs have proven success selling into the FSI vertical. One partner helped a large financial institution modernize its legacy storage area network (SAN) to Azure Stack HCI with Intel Xeon Scalable processors. The institution has benefitted from a simplified infrastructure, improved security, reduced latency, and faster transaction times and workload performance—all helping to improve service delivery and customer satisfaction. The partner worked to provide white glove service and incorporated its own Hybrid Cloud Solutions for additional data recovery capabilities, which enabled a more resilient deployment while driving supplemental revenue and ongoing value for the partner.

Partner profitability with Azure Stack HCI



* estimated margin

"What we've seen is that customers are looking for an integration partner that can help them deploy at scale, regardless of the hardware providers they are using, and can help them from an engineering perspective to handle the underlying complexities across their providers and devices in a more long-term engagement," notes Samantha Doherty, Director of Edge Infrastructure and Devices at Microsoft.



Best practices for building an Azure Stack HCI practice for financial services

Gaining internal alignment

Once executive commitment is established, it is crucial for partners to focus on cultivating internal alignment across hardware and software teams to approach hybrid cloud as a unified business motion. "Partners who have successfully unified these teams and work together are doing really well in this space, while those who have teams competing internally are not," remarks Keerthi Nemallapudi, Microsoft's Hybrid Cloud Business Lead, ANZ. Because Azure Stack HCI involves complexities across both hardware and software, business units can find themselves siloed within their organizations, often with a naturally competitive environment. To help break down organizational silos and support a cohesive business strategy, partners can leverage Microsoft's extensive enablement resources to cross-train teams and drive alignment. "When you have hardware teams skill-up on the Azure components, it opens up the world of cloud to a strictly on-prem team. And vice-versa for cloud software teams to get a feel for what hardware looks like and how it functions. This takes away the ambiguity and internal competition to really bring the teams together in support of the unified business motion for hybrid cloud," says Nemallapudi.

Technical enablement and upskilling

Azure Stack HCI is a robust solution that can deliver the right business value, but implementing and running it at its optimum level requires skilled knowledge of not just the product itself, but the greater Azure platform. Partners looking to build an Azure Stack HCI practice for FSI should start by investing in training and upskilling to build their knowledge base. "Partners should work with their own Azure Stack instance, to really get in there and break it, fix it, and learn it inside and out," says Le Roux. "It's also essential to have a strong understanding of the greater Azure ecosystem, services, and integrations, as this is the true differentiating aspect behind Azure Stack HCI." Microsoft provides extensive enablement and training resources that can help partners get started with building a knowledge base, which can be found in the *Get Started* section below.

Beyond upskilling on Azure Stack HCI, partners should also invest time in understanding the unique needs and challenges of the financial services industry to help drive initial conversations and establish strategic relevance with customers, while also helping to identify use cases and opportunities for delivering value-added services or solutions.

Positioning Azure Stack HCI

Selling Azure Stack HCI is not about selling a datacenter; it's about positioning it as a critical enabler within the larger, end-to-end Azure ecosystem—which is the key differentiator. "It means leading with the completeness of the Azure components and platform, and then positioning Azure Stack HCI as the essential hybrid component within that," explains Le Roux. Virtual desktop has been a particularly critical use case for FSI organizations, given the vast number of users across dispersed branch locations. This need was addressed with the launch of Azure Virtual Desktop for Azure Stack HCI in February 2024. "Most Azure Stack HCI conversations we have with FSIs start around how to simplify all of that," Le Roux adds.

Determining value-added services

Partners should consider where they can bring additional value to customers through add-on services that can drive additional revenue, such as:

- Assessments
- Transformation planning
- Ongoing infrastructure management
- Hardware procurement
- License management
- And more

The most successful partners deliver curated services and solutions that not only help them become a strategic transformation partner and trusted advisor but position themselves as central to customers' success through holistic service offerings. "Where we see partners have the greatest strength is in providing an end-to-end service, from procuring and providing the hardware, to delivering consultation services, and providing the licensing. This gives customers a single, complete source of support, versus having to go to OEMs or Microsoft directly for help," notes Nemallapudi.

SI partners can also consider bringing in independent software vendors (ISVs) who can help strengthen the deal and provide additional solution offerings to address industry-specific needs (e.g., a fraud detection solution) or consider developing a unique value-add solution and becoming an ISV themselves. Get more information on becoming a Microsoft ISV, here.

Identifying opportunities

Use case: Infrastructure and application modernization

- Customers looking for alternatives to VMware following the acquisition by Broadcom
- Quick wins that require less initial commitment but potential for longer-term, progressive transformation—including Extended Security Updates (ESU) for SQL Server and Windows Server workloads and apps that are at end of life—for which Azure Stack HCI offers an elegant, compliant, and cost-effective solution

Use case: Desktop virtualization

- FSIs with demanding workloads that can't be executed in the cloud and that need to simplify VDI for hundreds (or even thousands) of users and devices across their distributed locations to save on costs and ensure compliance

Use case: Security

- Financial institutions that have recently experienced a fraud or ransom attack that are seeking to strengthen security and/or re-establish compliance

Use case: Existing Azure customers

- Existing Azure customers using Azure for its strengths in analytics and AI present an opportunity to discuss Azure Stack HCI adoption for broader infrastructure and app modernization

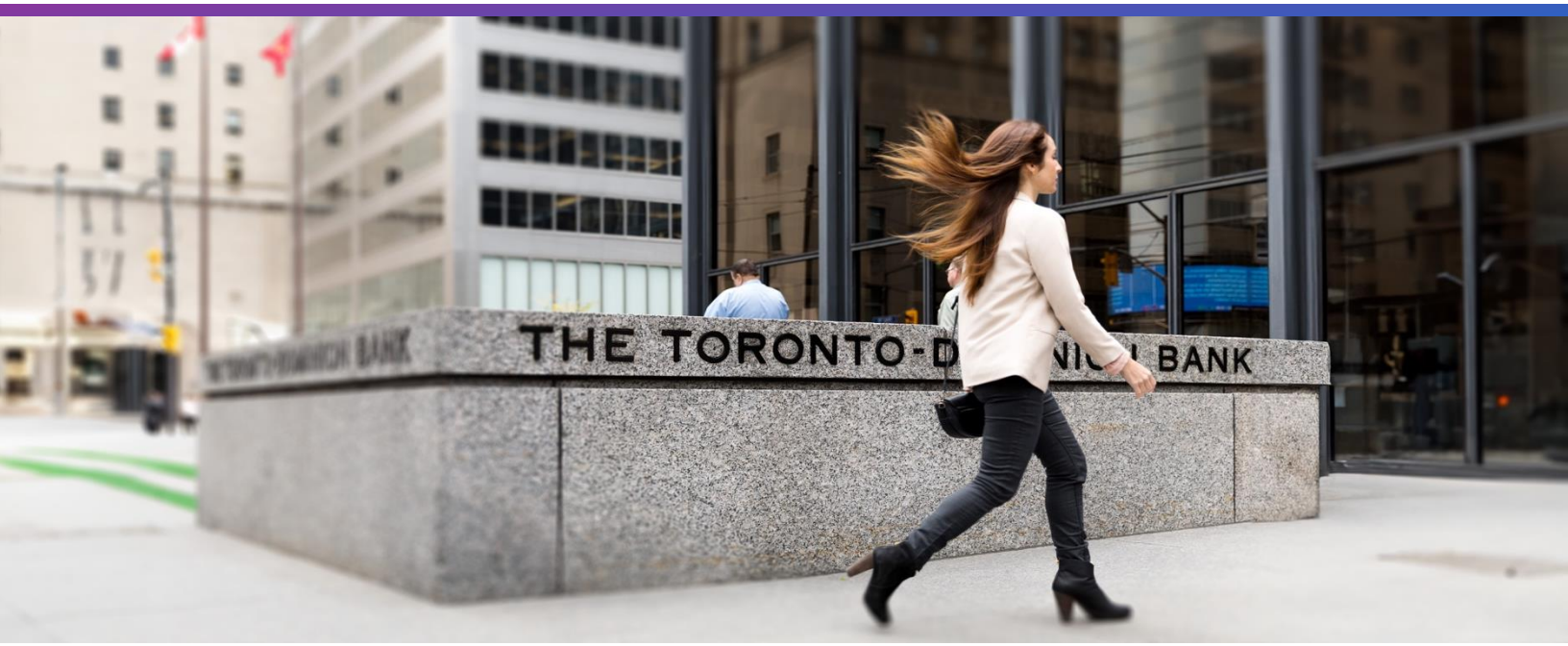
Engaging customers

When engaging a new financial services customer for Azure Stack HCI, partners should focus on the following key steps:

1. Gain a deep understanding of the customer's unique business needs and challenges
2. Discover and even help the customer formulate its immediate and long-term goals
3. Translate customer priorities into a technical strategy that can be mapped to Azure Stack HCI (and broader Azure) capabilities and benefits
4. Tie the technical strategy back to the critical business needs of the institution

As partners do this, they should consider the different business personas in the financial institution that they'll be engaging, identify what they care about, and tailor conversations around addressing those needs and pain points.

- **Business Decision-Makers (BDMs)**
    - **Roles:** Chief Experience Officer (CXO), Chief Executive Officer (CEO)
    - **What to talk about:** questions aimed at understanding the key business needs and priorities; demonstrating how the strategy with Azure Stack HCI can improve not just the IT infrastructure but deliver on core business outcomes
    - **What they care about:** adhering to industry compliance, improving risk management and eliminating financial fraud, streamlining operations and operational costs, increasing internal productivity, improving and digitizing customer experiences, enabling innovation with new technologies like AI
- **Technical Decision-Makers (TDMs)**
    - **Roles:** Chief Technology Officer (CTO), Chief Information Officer (CIO), Director of Infrastructure
    - **What to talk about:** technical features, capabilities, and pricing
    - **What they care about:** streamlining infrastructure management and efficiency, reducing complexity, strengthening security posture and compliance, improving access to data



Get started with partner enablement resources

Microsoft adaptive cloud with Azure Stack HCI and Intel technologies can help financial institutions realize the vision for cloud-to-edge computing and support a future of modern banking that is secure, customer-centric, efficient, and compliant, while presenting a vast opportunity for Microsoft partners to grow their business and ignite new revenue streams. Through extensive training and enablement resources, Microsoft provides partners with the necessary support to launch a successful distributed hybrid solution practice with Azure Stack HCI and Intel in the financial services market.

Visit the Azure Partner Resource Gallery to download the Azure Stack HCI Partner Resources Guide, which contains valuable links to relevant training, marketing materials, and more—all in one place.

Learn more about the Intel solutions for Azure Stack HCI:

Intel Deep Dive Training on Azure Stack HCI

Unify Operations Across Hybrid and Multi-cloud Environments

Secure Your Microsoft Azure Arc-enabled Environment with Microsoft and Intel

Accelerate AI Inferencing Workloads and Boost Security on Azure Stack HCI with Intel AMX and Intel TME

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1 Gartner, The Digital Future of Finance, 2022.
2 Hakkoda, Financial Services and Insurance State of Data, 2024.
3 Forrester, Emerging Edge Computing Momentum In The Financial Services Industry (FSI), 2023.
4 Sophos, The State of Ransomware in Financial Services, 2023.
5 IBM, Cost of a Data Breach Report, 2023.
6 Deloitte, Data Management Trends in the Financial Services Sector, 2023.
7 Forbes, Key Strategies for Adopting AI In Financial Fraud Prevention, 2024.
8 Gartner, Magic Quadrant for Distributed Hybrid Infrastructure, 2023.