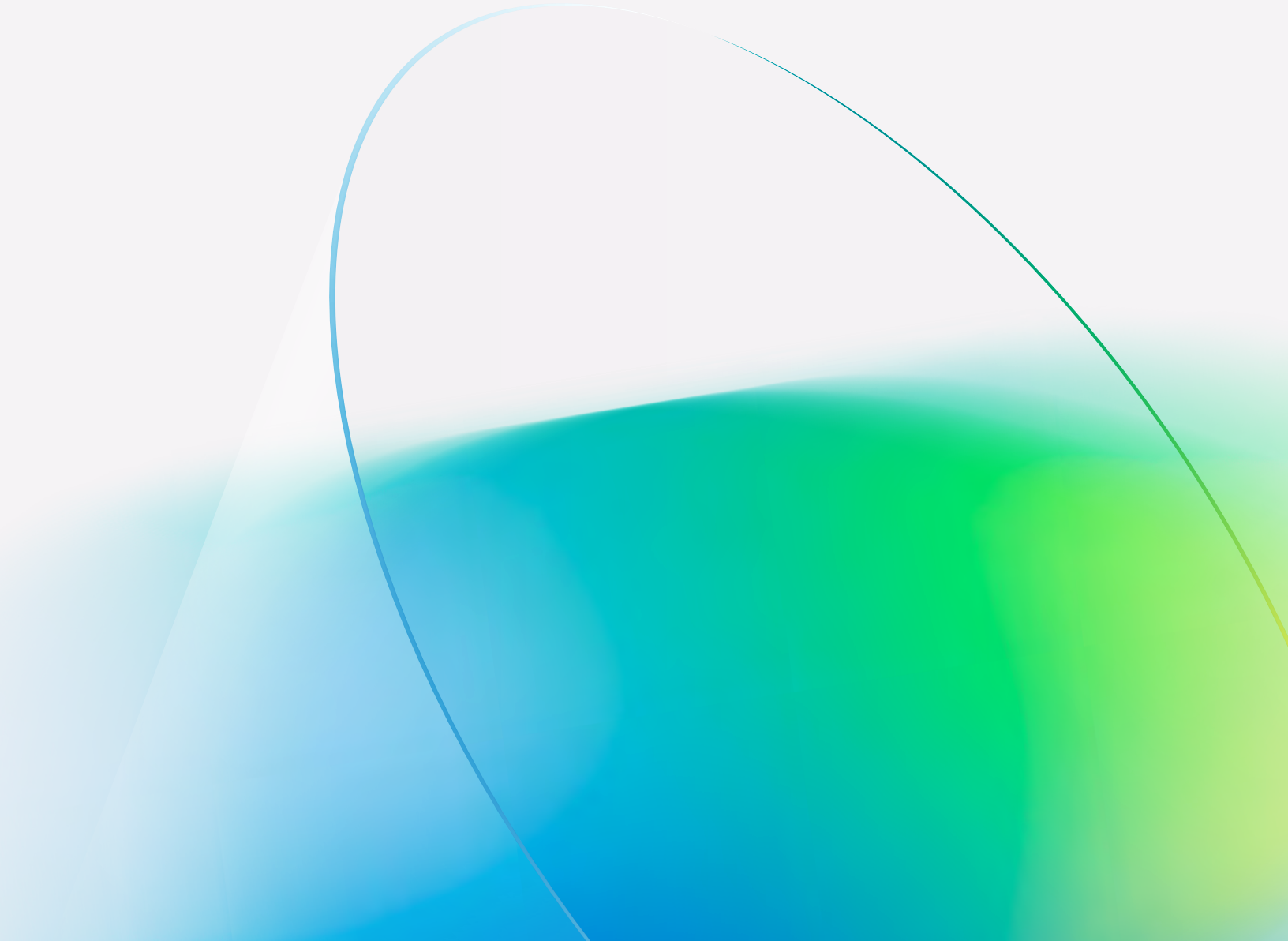
Microsoft Azure

Build an AI-Ready IT Estate

Prepare your infrastructure, databases, and applications for AI innovation



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Introduction

With its limitless scalability, the cloud has helped many businesses break through traditional boundaries and discover new ways of delivering value with data. Now, companies across industries are migrating to the cloud to adopt technology that will let them create better customer experiences, accelerate app development, and fortify security against threats—all from a flexible, unified cloud environment.

You're not alone if you're considering migrating to the cloud to help enhance business operations. A Deloitte survey found that "88% of respondents view [the] cloud as a cornerstone of their digital strategy and believe it is vital to driving revenue and maintaining a strong position in the marketplace."[1] Part of that digital strategy is adopting cloud infrastructure and using cloud databases to support the full scope of data management required for adopting AI, building next-generation intelligent apps, extracting insights, reducing time-to-market for new products, and beyond.

Common cloud migration goals for IT leaders and business decision makers

- Maximize cost savings and ROI to drive business growth.
- Achieve new heights of performance to deliver better products and services.
- Secure data and processes against emerging threats to build trust among customers and employees.
- Equip teams to use the latest AI technology so they can innovate quickly and confidently in a constantly changing landscape.

Read this e-book to learn about the many advantages of migrating to the cloud—and examine how having all of your applications, data, and workloads in the same place leads to better performance and faster insights. Along the way, you'll gain the confidence to embrace AI and next-gen technology. Finally, discover how three companies use their cloud ecosystem to support innovation strategies.

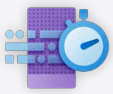
> **Many organizations have come to realize that while moving to the cloud can double their speed and efficiency, leveraging and building on the cloud can also give them enhanced capabilities that can reach 10x multiples."**
>
> **Deloitte**

[1] Closing the cloud strategy, technology, and innovation gap, Deloitte, 2022.

The business value of migration

Businesses opt to migrate to the cloud for its many advantages—the most often cited of which are security, scalability, and agility. This shift is driven by the need for a flexible and robust IT estate that can support modern demands for innovation, which requires the right environment to store, analyze, and move data—no matter where it's from or who's using it.

Most on-premises systems weren't designed to handle the data required to run advanced AI and support the next generation of intelligent apps. They also weren't built to secure data from modern cyber threats, which are getting more sophisticated. If your organization plans to innovate with AI, the first step is clear: you need a purpose-built IT estate that can handle complex and dynamic workloads.

Challenge	Cloud solution
Trust is a top priority, so introducing AI would require more resources to ensure privacy and compliance at every juncture.	 Multilayered security
Because AI models and intelligent apps require so much data, it's hard to know how much processing power or storage is needed at any given time, making it challenging to allocate budgets and resources.	 Cost-effective and dynamic scalability
With so many data sources and environments, getting the right data to the right place takes time, slowing project timelines and making it difficult to pivot with changes.	 Agility and performance

> **Cloud is the foundation of a modern IT environment and serves as an essential enabler for other powerful technologies such as artificial intelligence (AI), machine learning, the Internet of Things (IoT), and quantum computing. Those technologies would be difficult or impossible to implement without the cloud."**
>
> **Deloitte**

Centralized security in the cloud

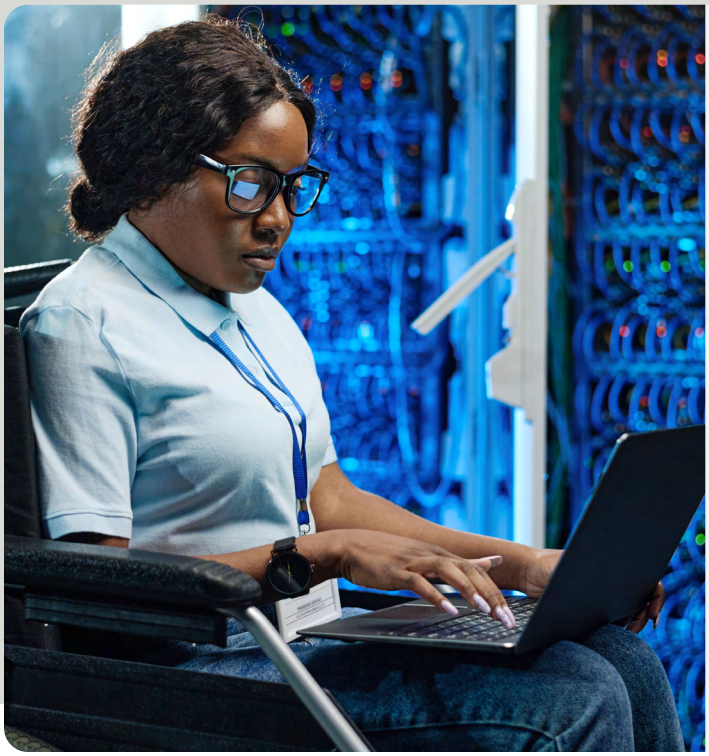
Organizations worldwide have been experiencing an overall increase in ransomware attacks. The number of human-operated ransomware attacks nearly tripled since 2022, and business email compromises (BEC) attacks skyrocketed to over 156,000 daily attempts.[2]

At a time when cybersecurity threats pose a constant risk, the cloud offers more robust security measures and compliance standards than on-premises—especially for organizations with a limited labor force or technical skill set.

Cloud solutions include security-enhancing features like encryption, authentication, and monitoring tools that safeguard data and applications. Plus, the centralized nature of the cloud simplifies security management by providing a unified platform where security policies and protocols can be consistently applied across various workloads and applications. This unified approach reduces the complexity of managing security measures in diverse environments. The cloud also provides regular updates and patches that help improve protection against emerging and increasingly sophisticated threats.

94% of businesses report significant online security improvements after adopting the cloud.

Zippia



10,000

security professionals, along with the most compliance certifications of any cloud provider, make Microsoft the only dual cloud provider and security vendor on the market.

[2] Microsoft Digital Defense Report 2023 (MDDR)

Enhanced scalability

A lack of scalability in databases and infrastructure makes it challenging to allocate resources where and when they're needed most. As a result, hardware is underutilized during periods of low demand and overextended when peak times hit.

When infrastructure and databases can't scale quickly enough to meet demand, businesses may experience downtime or service disruptions, resulting in lost productivity, poor customer experiences, and potential revenue losses. Given today's dynamic market, businesses must be able to shift with the changes—without added costs or disruptions.

Cloud services offer an elastic environment so you can easily scale resources up or down in response to fluctuating demands. Unlike on-premises environments, the cloud can scale to handle sudden spikes in user activity without compromising performance—which is critical for AI solutions and intelligent apps relying on extensive datasets. This dynamic scalability can drastically reduce overprovisioning or underutilizing resources, saving costs and freeing up those resources to create value elsewhere.

> **We had a scenario where we needed to boost compute by 10 times for just a weekend. We dynamically scaled up and back down using Azure with zero business interruption."**
>
> **Marcel Malan**
> Head of Group IT Operations and General Manager, AIA

> **In our prior environment there was a lot of downtime due to hardware failures … Moving to Red Hat Enterprise Linux on Microsoft Azure completely eliminated that downtime."**
>
> Director of cloud at an electric distribution and services company[3]

[3] The Total Economic Impact™ Red Hat Enterprise Linux On Microsoft Azure, a commissioned study by Forrester Consulting, January 2024

Rapid, agile innovation

Migrating to the cloud can profoundly improve your ability to innovate. The cloud offers a wide range of automation tools that help streamline processes like infrastructure provisioning, application deployment, and system monitoring. By automating these tasks, your teams can focus on strategic priorities instead of manual operations. This automation also provides an "express lane" for faster development cycles, letting you deploy new services and products faster without causing disruption or downtime to end users.

With Azure SQL Database and Azure SQL Managed Instance, organizations reduced unplanned outages by 36%.[4]

The cloud's enhanced speed-to-market capabilities also help organizations respond promptly to sudden changes. When new capabilities emerge, or trends shift, the cloud allows your organization to adapt quickly so it can remain competitive.

Cloud resources also enhance collaboration and knowledge-sharing between teams, fostering an innovation process driven by possibilities rather than limitations. For example, DBA teams gained back 45% of their time to work on other projects by using Azure, while IT teams reported a 29% improvement in productivity.[4] Businesses that migrate to the cloud often experience a significant boost in innovation, productivity, and their ability to pivot on a dime in a constantly changing market landscape.

Increase innovation and productivity with Azure

- **45%** faster delivery of applications with Windows and SQL Server in Azure[4]
- **40%** of FTE time reallocated to value-added business initiatives with Red Hat Enterprise Linux on Azure[3]
- **84%** reduction in operational overhead by freeing up development capacity and administration costs with Azure Database for PostgreSQL[5]



[4] IDC, The Business Value of Microsoft Azure SQL Database and Azure SQL Managed Instance Workloads, August 2023.

[5] ESG, Analyzing the Economic Benefit of Migrating from On-premises Instances to Azure Database for Postgre SQL, July 2022

A new horizon of opportunities: AI and the cloud

Infusing AI into your operations requires a set of systems and proficiencies that help ensure you don't add more complexities to your IT environment. AI adoption and cloud migration go together for companies who want to lay a reliable groundwork for future innovation.

Azure AI is a comprehensive suite of AI services and tools designed to facilitate the seamless integration of AI into business operations. It grants a wide array of capabilities, including machine learning, natural language processing, computer vision, and much more—all accessible through an intuitive interface. Using Azure AI, you can automate intricate tasks, extract deeper insights from your data, and enhance decision-making processes without requiring extensive AI expertise or added layers of complexity.

Cross-industry Azure AI use cases:

- **Optimize physical spaces**
  Automate real-time video analysis to understand how people use physical spaces with Azure AI Vision.
- **Break down communication barriers**
  Innovate voice-enabled apps to accurately transcribe speech-to-text and generate lifelike text-to-speech using Azure AI Speech.
- **Accelerate content and code generation**
  Build apps using large-scale AI models to provide advanced writing assistance and code generation using Azure OpenAI Services.
- **Discover previously impossible use cases**
  Empower developers and data scientists of all skill levels to deploy AI applications anywhere from the cloud to the edge with Azure AI Services.
- **Use advanced machine learning and deep learning**
  Build, train, and deploy machine learning models with low-code and no-code tools with Azure Machine Learning and Azure Databricks.
- **Accelerate document processing**
  Extract text, key-value pairs, tables, structures, and other information using Azure AI Document Intelligence to accelerate document processing.
- **Optimize data integration and analytics**
  Enable seamless data flow and insights across your organization with a unified platform for data integration, engineering, and analytics provided by Microsoft Fabric.
- **Supercharge productivity and creativity**
  Get fast assistance with everyday tasks, quickly generate content, and access useful insights with help from Microsoft 365 Copilot.

> Cloud infrastructure spending growth continues being driven by the explosion of AI-related investments, which not only impact servers but also started to have a positive influence on enterprise storage as well"
>
> **Juan Pablo Seminara**
> IDC[6]

[6] Shared Cloud Infrastructure Spending Continues to Accelerate, Fueled by AI-Related Spending in the First Quarter of 2024, According to IDC

The Azure advantage for AI adopters

Businesses worldwide are counting on AI adoption to solve some of their biggest problems and sharpen their competitive edge in the market. Azure helps make AI implementation easier for forward-thinking businesses and teams by providing the most reliable cloud infrastructure and databases.

With a one-stop shop for trusted AI—including cloud-native AI tools and fully managed services—you can offload many of the steps and responsibilities that come with building, deploying, and scaling AI models. This reduces complexity for your teams and frees them up to focus on strategy and innovation.

Across industries, more businesses are turning to Azure to support their AI strategies. From their cloud or hybrid environments, they're working to deploy next-generation AI solutions faster and more efficiently than had ever seemed possible. In the following pages, read about the different advantages of migrating to Azure, and how the decision to migrate translated into tangible business outcomes.

> We were surprised that Microsoft Azure offers such a **breadth of advanced AI capabilities**, like abstract summarization, which are way beyond even the specialist AI providers."
>
> **Jon Nicholls**
> Global Chief Information Officer, Arthur D. Little

Advantage #1: Improved control of costs

Cost efficiency is always at the forefront of business leaders' minds. Azure provides many resources to help you see exactly where your cloud cost savings would come from. These tools can help you manage spending, calculate the total cost of ownership (TCO), and optimize your existing Windows Server, SQL Server, and Linux licenses using Azure Hybrid Benefit.

But the cost optimizations don't stop there. Once you're working in the cloud, Azure AI offers many more opportunities to discover new revenue streams, reduce wasteful spending, and build long-term customer loyalty—all of which can greatly impact your bottom line.

Some customers have seen up to 76% savings with Azure Hybrid Benefit for Linux.[7]

Using Azure SQL Database and Azure SQL Managed Instance reduced cost of operations by 30%.[4]

In a Forrester Consulting study, researchers surveyed early Azure AI adopters and created a composite organization to illustrate the average impact it had on ROI:

- **150% increase** in work output thanks to automation and the enhanced ability to develop and sell new services.
- **7% reduction** in costs using AI and machine learning to make better decisions and spot opportunities to optimize (equaling $16 million over three years).
- **25% improvement** in productivity for employees working on machine learning activities and 60% reduction in document processing, resulting in savings of more than $1 million over three years.[8]

[7] Azure Hybrid Benefit—Hybrid Cost Calculator

[8] The Total Economic Impact™ Of Microsoft Azure AI

Azure Hybrid Benefit: Designed to help you save

Optimize your hybrid environment while reducing costs through the Azure Hybrid Benefit by using your existing licenses for Windows Server, SQL Server, and Linux subscriptions.

With Azure Hybrid Benefit, you can potentially achieve up to 85% savings compared to the standard pay-as-you-go rate by applying your Windows Server and SQL Server licenses. This cost saving extends to the Azure SQL platform as a service (PaaS) environment and the Azure SQL Managed Instance, allowing you to maximize cost efficiency.

Furthermore, Azure Hybrid Benefit facilitates the adoption of SQL Server, which is enabled by Azure Arc using your existing SQL Server licensing. This helps you meet compliance requirements by offering unlimited virtualization options on Azure Dedicated Host and the Azure VMware Solution. These cost optimizations also extend to Linux, where customers have reported savings of up to 76% on their workloads using Azure Hybrid Benefit for Linux.[7]

According to a GigaOm study, using Azure Hybrid Benefit over a three-year commitment, customers can get mission-critical performance for SQL Server on Azure Virtual Machines up to 57% faster and costing up to 54% less than AWS EC2 on a price-performance basis.

> **Using Azure OpenAI Service to help automate some of [the] more common tasks will be an important change to the way we operate. There will be meaningful time and cost savings."**
>
> **Jeremy Legg**
> Chief Technology Officer, AT&T

Advantage #2: Migrate on your terms and achieve cloud agility

When it comes to migrating to the cloud, you have many different options for how to get there. Charting a course that optimizes your existing tools and talent is key, ensuring the migration process doesn't put additional strain on your teams and systems.

There's no "one size fits all" solution with cloud migration. Each company has unique requirements and skill sets, which is why Azure offers different avenues to suit each organization's needs. Whether you're going for a multi-cloud environment, a hybrid environment, or you're looking to take the first preparatory steps, Azure has a pathway that starts where you are so you can migrate on your terms.

Azure Arc: Maximize your resources with a gradual migration

Many companies opt for a hybrid approach to maximize their existing on-premises investments while also taking advantage of Azure services and infrastructure. Azure Arc offers a gradual "on-ramp" for companies that want the benefits of the cloud while still maximizing their on-premises infrastructure.

Azure Arc extends Azure to enable flexible application and service deployment across data centers, edge locations, and multicloud setups, simplifying governance and management across these environments. It allows you to manage and secure your mixed environments from a single point of control, providing a unified management experience for your entire IT estate.

Integrating non-Azure and on-premises resources into Azure Resource Manager allows you to use your Azure SQL Server and Azure Database for PostgreSQL as if they were in Azure. SQL Server enabled by Azure Arc enhances the security and scalability of your SQL Server instances across mixed environments, providing automated updates that keep your systems up-to-date with the latest features and security patches.

Businesses using a hybrid approach achieve a more agile and scalable development environment by 42% and accelerate business agility and innovation by 40%.

G2

Advantage #3: High performance for all workloads

To stay competitive and efficient, businesses today require high performance and scalability across all workloads, including Windows Server, SQL Server, Linux, and PostgreSQL.

Azure SQL Managed Instance is part of the Azure SQL family, which enhances performance and scalability for SQL workloads. Combining the broad SQL Server compatibility with Azure's operational and financial benefits, this fully managed database service provides features like automated patching, backup, and maintenance, ensuring that the database is always up-to-date and optimized. It also offers advanced scalability options, allowing businesses to easily scale up or down based on their needs so they can handle varying workloads efficiently, from daily operations to peak usage periods, without compromising on performance.

Migrating your SQL workloads on Azure Virtual Machines allows you to use the full versions of SQL Server in the cloud without having to manage any on-premises hardware. It also offers flexible licensing options that lower your TCO with a pay-as-you-go model so you can create SQL Server VMs according to your specific operation systems and versions, deployable on Linux or Windows. You can run Azure Virtual Machines securely from many regions around the globe, with high availability/disaster recovery and automated management capabilities that make it much simpler to manage than on-premises VMs.

Elevate performance and scalability: Windows Server and SQL Server workloads

Capabilities provided by Hotpatch, Automanage, and other features help ensure high performance for workloads by minimizing downtime, automating routine management tasks, and optimizing resource utilization.

- **Automated patching** sets up maintenance windows and ensures that restarts from system updates happen at the best time for the database.
- **Broadest SQL Server** compatibility supported by fully managed, integrated services and AI-powered features that enhance performance and security.
- **High availability and disaster recovery (HADR)** for both Azure-only and hybrid solutions help ensure business continuity in the event of a disruption or maintenance operation so you can minimize the impact on customer workloads.
- **Automated backup** for Azure virtual machines automatically creates database backups to help protect your data from deletion or corruption. It also lets you configure long-term retention (LTR) for when rules require that backups be available for long periods for when rules require that backups be available for long periods.
- **Azure Virtual Desktop** enables access to Windows 11 and Windows 10 from virtually anywhere in the world.

> **Azure SQL Managed Instance was the only data store that could hold our data and process the number of transactions that we have."**
>
> **Minh Duong**
> Customer Hub Senior Manager, American Airlines

Linux and PostgreSQL often serve as the backbone for mission-critical applications and data-intensive workloads. As open-source tools, they require strong infrastructure, regular updates, and reliable support to ensure high performance and dynamic scalability.



Enhance performance and scalability: Linux and PostgreSQL

Azure supports a broad open-source software ecosystem, making it a robust environment for running Linux and PostgreSQL while driving performance and scalability.

- Microsoft supports a wide range of Linux distributions and closely collaborates with Canonical, Red Hat, SUSE, and the broader Linux community.
- Azure Virtual Machine Scale Sets and Azure Compute Fleet allow you to scale your infrastructure to meet changing demand without impacting performance.
- Fast, scalable storage helps you manage demanding workloads, offering support for up to millions of IOPS, double-digit GBps, and single-digit millisecond latencies.
- Azure Database for PostgreSQL Flexible Server offers significant performance gains, including faster transaction processing and higher throughput for large-scale apps.

Advantage #4: Training resources for all skill sets

One of cloud migration's biggest concerns is the perceived lack of management skills. A Gartner survey of 437 global firms revealed that IT executives see talent shortage as the most significant barrier to deploying emerging technologies (like the cloud)—even though some servers, like SQL Server, allow users to transfer skills into the cloud easily. Still, many IT leaders worry they don't have the tools or training to seamlessly transition their teams to using Windows Server, SQL, Linux, PostgreSQL, and VMware in the cloud, and some feel they'd need to hire scores of tech professionals and engineers to handle it effectively.

Adapting to new technology—and having the confidence to use it freely—requires the right learning resources and expert support. Azure helps fill in the talent gaps by continually releasing new learning modules, workshops, and step-by-step documentation to support your cloud migration from any skill set starting point. Furthermore, they'll also benefit from expert Azure support at every step of the migration to ensure a successful launch into the cloud.

Advantage #5: Go to market faster with cloud-native capabilities

Cloud-friendly applications and systems are those that can work effectively within a cloud environment, even if they weren't originally built with the cloud in mind. However, transitioning to cloud-native applications is the natural next step to take full advantage of cloud computing. These apps and systems are designed to maximize scalability, flexibility, and efficiency in the cloud from the start.

Cloud-native capabilities allow you to build and run scalable applications directly in your public, private, and hybrid clouds. From there, developers can take advantage of different microservices and serverless functions so they can build and deploy new apps quickly. Moreover, thanks to container orchestrations with code-to-cloud pipelines (such as Azure Kubernetes Service (AKS), you can deploy securely with almost no downtime. From coding and debugging to deployment and management, the cloud-native approach helps ensure your apps are optimized for any architecture and device:

- **Microservices**
  Fix bugs and manage updates without having to redeploy he whole application.
- **Serverless solutions**
  Eliminate time spent on infrastructure-related activities with low-code/no-code services and developer-friendly APIs.
- **Containers**
  Bundle your application's code with the necessary configuration files and libraries into a container image that developers can deploy to the host operating system with zero or minimal modifications.

45% faster delivery of applications with Windows and SQL Server in Azure.[3]

> "Leaders … are using more advanced cloud services such as AI and ML, cloud-native development, and edge computing/IoT."
>
> **Deloitte**

Advantage #6: Enable AI innovation at scale

All these benefits contribute to the ultimate goal's success: infusing your business operations with advanced Azure AI capabilities that will provide even more cost savings, operational efficiencies, and robust security features. Organizations and businesses worldwide use the Azure AI Foundry—including Azure OpenAI Service, Azure Machine Learning, and Azure AI supercomputing infrastructure tools—to deliver more excellent value and cost savings without forcing IT teams to take on more than they can handle. Once you've migrated to the cloud, your team will be able to innovate AI at scale according to your business goals and IT team skill sets and resources.

Colocation—the practice of housing databases, apps, and infrastructure in the same cloud—can also play a significant role in assisting AI adoption. By collocating on the cloud, businesses can access high-performance computing resources, low-latency connectivity, and scalable power solutions essential for AI workloads, allowing organizations to efficiently process vast amounts of data required for AI while reducing the overhead of maintaining data centers. Colocation also provides enhanced security and compliance features, ensuring that AI deployments are handled securely and responsibly. Meanwhile, data gravity improves performance for AI workloads by encouraging apps and services to move closer to the data—rather than moving large amounts of data—which reduces latency and increases processing efficiency.

One of the defining qualities of a reliable cloud infrastructure is a commitment to the responsible use of AI. At Microsoft, the Responsible AI Standard encompasses six key principles: fairness, reliability and safety, privacy and security, inclusiveness, transparency, and accountability, providing concrete guidance beyond the usual high-level AI principles. It establishes company-wide regulations that ensure you adhere to human-centered AI principles when developing and deploying AI technologies.

Six principles of responsible AI

Fairness
AI systems must treat all individuals equitably.

Inclusiveness
AI systems should empower and engage everyone.

Reliability and safety
AI systems should consistently perform securely and safely.

Transparency
AI systems should be easy to comprehend.

Privacy and security
AI systems must prioritize security and safeguard privacy.

Accountability
Individuals should be answerable for AI systems.

The excitement around AI is palpable. According to a Forbes Advisor survey, 64% of business owners feel AI will improve customer relationships and increase business productivity.[9] At the same time, organizations, businesses, and the people they serve need assurances that they won't be put at risk by engaging with AI.

End users want privacy, inclusivity, transparency, and accountability with their AI systems to interact with AI-enabled applications without fear or hesitancy.

[9] Forbes Advisor, How Businesses Are Using Artificial Intelligence, April 2023

Azure across industries: Three migration success stories

Discover how Azure customers use their cloud-enabled scalability and agility to achieve new heights of productivity and customer satisfaction.

SAS enhances its security posture and streamlines processes with Azure migration

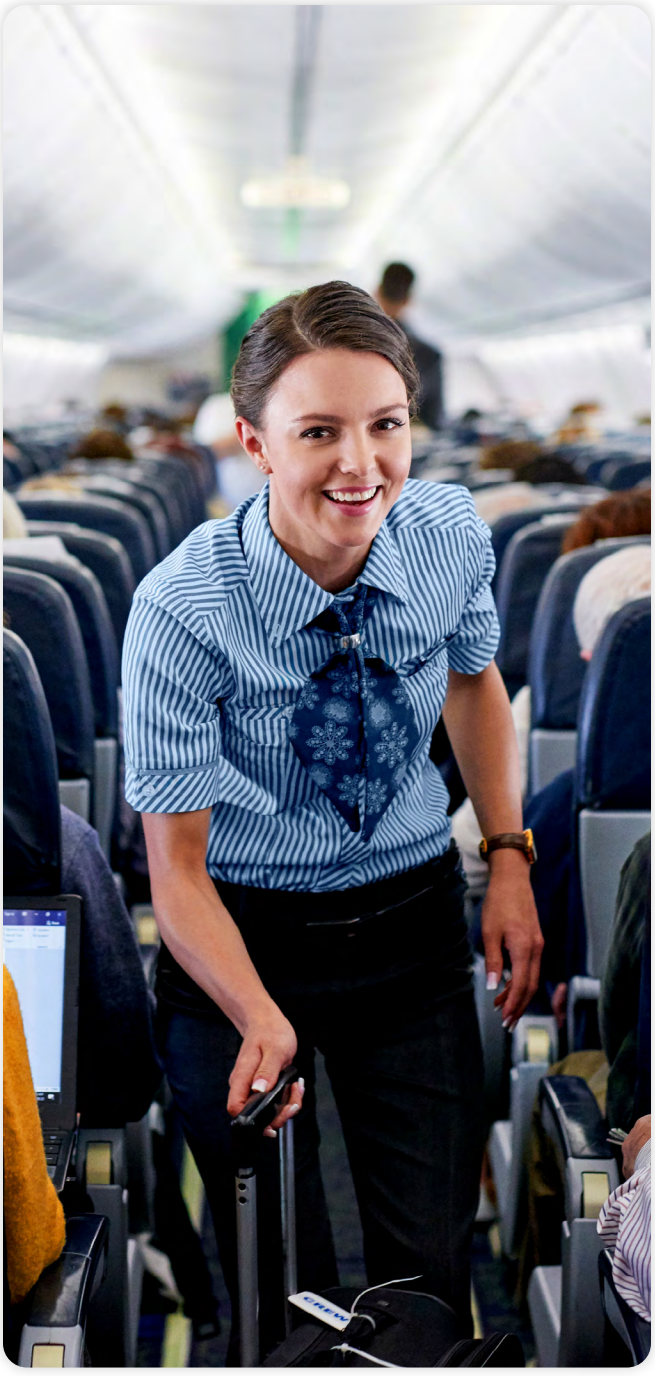
SAS — Scandinavian Airlines was looking to improve its technology to provide better service to over 30 million customers. The airline wanted to increase operational efficiency and empower its developers to focus on innovation rather than maintaining infrastructure.

The airline's primary goals were to enhance scalability, security, and support for developers to create better customer experiences. This ambition led SAS to transition from an infrastructure as a service (IaaS) solution to a fully managed platform as a service (PaaS) using Microsoft Azure.

Working with Microsoft, SAS assessed applications, prioritized workloads for migration, and determined the migration approach. Together, they migrated 101 databases and 20 critical applications to Azure, using Azure SQL Database and Azure SQL Managed Instance. This seamless transition was facilitated by thorough planning and robust support from Microsoft, ensuring minimal disruption and maximum efficiency.

Solutions:

- Azure SQL Database
- Azure SQL Managed Instance
- Azure App Services
- Microsoft Defender for Cloud



The migration to Azure brought immediate benefits to SAS. By leveraging Azure SQL Database and Azure SQL Managed Instance, SAS improved its security posture and operational efficiency. The move allowed for the decoupling of databases and applications, streamlined integration with Azure monitoring and alerting, and more agile DevOps workflows. This resulted in continuous innovation, better scalability, and optimized resource management. The airline now enjoys faster deployment of environments, better control over internal systems, and significant cost savings by shifting from capital expenditures to operational expenditures.

Read the full story >

> **With our migration to PaaS, we got what we wanted: greater scalability, reliability, security, agility in managing our IT infrastructure—and greater peace of mind—all without the cost and hassle of doing this ourselves."**
>
> **Daniel Engberg,**
> Head of AI, Data, and Platforms at SAS — Scandinavian Airlines

The airline's migration to Azure PaaS took **only 126 days**, exceeding initial expectations.

Cloud migration accelerates SaaS development at Sapiens International

Serving more than 30 countries worldwide, Sapiens International specializes in insurance technology to help insurers modernize and streamline operations. Their software as a service (SaaS) platform provides much-needed support to businesses and families during critical times, offering prompt and effective responses to their customers' needs.

Sapiens wanted to transform its infrastructure to support the creation of advanced insurance solutions. The company needed to reduce development times while increasing the accuracy and efficiency of key processes like underwriting, claims processing, and fraud detection. It also wanted to enable its customers to create custom chatbots for improved service delivery, all within a framework that ensures security and compliance.

To meet these goals, the company decided to adopt the full Microsoft Azure stack, including services like Azure Kubernetes Service (AKS), Azure SQL Managed Instance, Azure Database for PostgreSQL, and Azure Cosmos DB. The migration facilitated a seamless shift of critical workloads to the cloud, allowing developers to focus on innovation.

Solutions:

- Azure SQL Database
- Azure Database for PostgreSQL
- Kubernetes Service (AKS)
- Azure Cosmos DB
- Azure SQL Managed Instance
- Azure OpenAI Service



The flexibility and scalability offered by Azure's microservice architecture enabled frequent updates and easier automation, significantly enhancing the company's data management and analytics capabilities. Plus, using Azure OpenAI Service helped accelerate the development of generative AI solutions, which has been crucial for automating complex tasks and improving overall operational efficiency.

Following migration, Sapiens has significantly improved the speed and accuracy of insurance processes. The automation of tasks such as document analysis and chatbot creation has reduced development times and costs and enhanced service quality. Insurers using Sapiens' solutions can now handle queries and claims more effectively, offering their customers quicker and more accurate responses.

The implementation of generative AI has also helped Sapiens continue innovating and setting new standards in the industry, with plans to expand these solutions globally. Sapiens International's transformation underscores the impact of using advanced technologies to drive industry innovation.

Read the full story >

> **Being AI-ready was the driver for our earlier migration to Azure. We made a pivotal shift toward modernizing our infrastructure and improving operational efficiencies to support AI innovation."**
>
> **Alex Zukerman**
> Chief Strategy Officer at Sapiens

Migrating to Azure gave Sapiens the support it needed to build highly scalable relational apps that improve customer experiences.

Bank of Montreal migrates its market risk management platform for higher performance

The Bank of Montreal (BMO) faced significant challenges with its market risk management platform. The platform needed to handle more frequent stress tests and increasingly complex risk models.

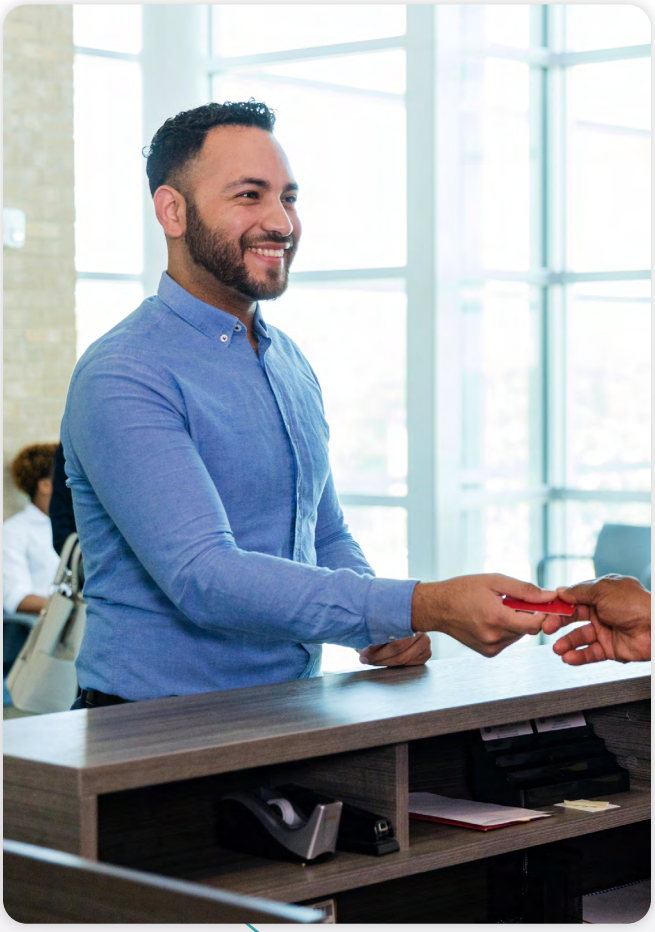
Its Capital Markets Trading Desk and Market Risk teams must perform value at risk (VAR) analyses and other calculations after business hours to anticipate risk and maintain stability, which requires greater capacity, scalability, and performance.

To address these challenges, BMO identified Azure as the solution for its capacity needs. The bank migrated and expanded its Market Risk Next Generation (MRNG) platform to Azure within a year, achieving a smooth transition, running Linux on Azure and Azure Spot Virtual Machines for cost-effective scalability.

Solutions:

- Windows Server
- Linux on Azure
- Azure Spot Virtual Machines

Migrating to Azure helped BMO reduce overall costs by 30%.



BMO scales up its platform from 35,000 cores a night to an estimated 80,000 cores on demand.

The migration to Azure brought substantial benefits to BMO. By using Azure's infrastructure, the MRNG platform now runs twice as fast as it did with the previous cloud vendor, and the bank has reduced overall costs by 30%. Azure's scalability allows BMO to scale its platform from 35,000 cores a night to up to 80,000 cores when needed. This scalability and parallel processing capabilities have resulted in a sixfold reduction in overall analysis time, enabling BMO to perform more than a billion calculations a night. Azure Spot Virtual Machines further optimizes costs and integrating Windows Server on Azure enhances performance and security.

With Azure, BMO has gained better scalability, enhanced risk management capabilities, and significant cost savings, positioning itself to meet future demands and continue providing exceptional customer service.

Read the full story >

> **BMO's use of Azure has ultimately led to a sixfold reduction in overall analysis time, cut overall costs by 30%, and helped us run jobs twice as fast, and we can do more than a billion calculations a night and counting to value all of our capital market positions."**
>
> **Carl Gomes**
> Chief Information Officer, Market Risk and Treasury Technology at BMO

Trusted security in the cloud

Azure is a Leader in The Forrester Wave™ Infrastructure-as-a-Service Platform Native Security (IPNS) category, receiving top ratings in several categories, including risk visibility, encryption, and Zero Trust criteria. Azure also excelled in the strategy category, demonstrating strong product vision and community engagement.

Keeping your multicloud and hybrid environments secure from development to runtime requires a comprehensive cloud-native application protection platform. Platforms like Microsoft Defender for Cloud enable a multicloud approach to security by centralizing and unifying your security needs across private and public clouds.

Being a leader in the data security platform market helps Azure customers safeguard sensitive data from internal and external threats, including intellectual property, trade secrets, customer information, and personally identifiable data. The result is a stronger sense of trust and greater peace of mind during innovation.

Protect your workloads with trusted cloud security and expertise

- 100+ compliance offerings, including in 50+ global regions and countries (US, European Union, Germany, Japan, the United Kingdom, India, and China)
- 35+ compliance offerings specific to key industries including health, government, finance, education, manufacturing, and media
- 3,500 security experts actively monitoring to protect your data
- 65+ trillion threat signals analyzed daily

> **Our investors and users are familiar with Microsoft and view its platforms as trustworthy. That also makes us more reputable and helps us cultivate trust among our customers."**
>
> **Michael Javier**
> Co-founder and CEO, CWallet

Launch your IT transformation in the cloud

With an expected $1 trillion in value generated for US Fortune 500 companies by 2030, cloud adoption is poised to deliver significant results for companies who move their infrastructure and databases to the cloud. What does that mean for you and your business?

Now is the perfect time to migrate to the cloud.

Migrating to Azure offers numerous benefits for your organization, including:

- **Cost savings**
  Apply existing Windows Server, SQL Server, and Linux licenses to Azure Hybrid Benefit for a pay-as-you-go model and reduce spending on redundant hardware.
- **Flexibility and scalability**
  Scale up or down compute, storage, and network resources without concerns about physical infrastructure. Choose from public, private, or hybrid cloud deployment models based on security and compliance needs.
- **Code-to-cloud security**
  Cloud-native security with Microsoft Defender for the Cloud helps safeguard data and apps from threats, giving you continuous visibility of your multicloud and hybrid environments.
- **Innovation and productivity**
  AI, machine learning, IoT, blockchain, and serverless computing help address business challenges and streamline the software development lifecycle, from planning to deployment.
- **High-performance support for Windows Server, SQL Servers, Linux, and PostgreSQL**
  Critical applications run seamlessly while using the skills your teams already have.

> **The assessment and use of AI, triggered by generative AI, is starting to dominate the planning and long-term investment agendas of businesses and cloud providers will play a significant role in the evaluation and adoption of AI enablement services."**
>
> **Rick Villars**
> Group Vice President of Worldwide Research, IDC

Migrate to Azure to set the stage for AI innovation

Migrating to Azure is the first step to building a lean, secure, and cost-effective IT estate capable of continuous modernization. With cloud-native security and more compliance offerings than any other cloud provider, your team can protect your applications and resources in every stage of their development—from code to cloud—so your organization can take larger and more meaningful strides to meet your goals.

Whether you need to manage databases or big data workloads, Azure provides the tools and services to achieve high performance and efficiency. Designed to handle diverse workloads, from simple web applications to complex AI solutions, Azure enables your organization to stay agile and secure in a constantly changing technological landscape.

Innovation happens on Azure

| Linux on Azure | Windows Server | The Azure SQL family | Azure Database for PostgreSQL

Explore Azure Migrate and Modernize offerings >

Talk to an Azure expert about your organization's needs.
Contact sales >

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