



Unlock Your Growth Potential with Migration to Cloud

EBOOK



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INTRODUCTION

ABOUT THIS EBOOK

This ebook is intended to help decision-makers in large and medium-sized organizations understand the benefits of migrating data and applications to the cloud.

You'll Learn:

- ◆ Why organizations of all sizes are migrating their on-premises and collocated datacenters
- ◆ The benefits of a cloud migration
- ◆ How to evaluate whether the time is right for a cloud migration
- ◆ The basics about how to get started



LIMITATIONS OF ON-PREMISES AND COLLOCATED DATACENTERS

If you're like most organizations, as your data expands and your reliance on it increases, your on-premises or collocated datacenter has become a challenge to maintain. Aging infrastructure stretches capital expenditure budgets, remote work is becoming increasingly common, and adequately protecting your business with reliable backup and security is stretching your team's limits.

Chances are that the constraints of the on-premises datacenter already are, or will soon be, impacting your ability to support key business goals. But you're not alone—forty percent of organizations your size cited outdated skillsets in IT as a key barrier to meeting business and technology priorities.¹ When combined with the cost, inflexibility, and lead times to get new hardware, the initial benefits of the onprem datacenter just don't add up anymore.

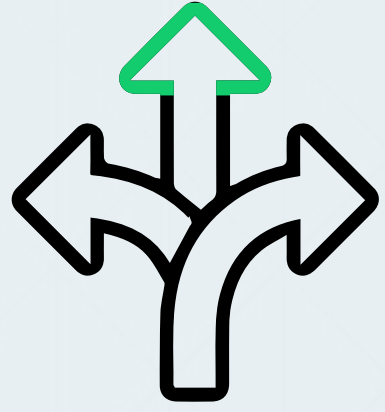
Many organizations find the on-prem datacenter is:

Difficult to scale: On-premises datacenters offer limited flexibility to scale rapidly with your business. Adding more storage means buying new hardware. Without regular capital investment to expand and a steady increase in space and resources to provision and manage new hardware and software, the datacenter quickly becomes a limitation and eventually a risk to the business.

1. IDC, "Worldwide Small and Medium Business Markets,"

https://www.idc.com/getdoc.jsp?containerId=IDC_P26370

Published October 2020.



Inflexible

There is little flexibility built into on-premises capacity and new hardware can quickly become a sunk cost when your capacity needs change. Owning and managing your own infrastructure makes it challenging to adapt to changing business conditions, implement business continuity or develop new value-add applications.



A burden on scarce IT resources

Instead of using IT resources on projects to differentiate your business, you are increasingly focused on finding the skills required to efficiently manage your infrastructure. The advantages of deep organizational knowledge unique to an internal IT team take a back seat to the blocking and tackling of everyday maintenance.



Less reliable

You alone are responsible for business continuity and staying ahead of any security threats to prevent downtime that will slow the business. It is increasingly challenging to proactively address security issues and avoid productivity losses in a flexible work environment.

Today, the burden of managing infrastructure, particularly as it ages, fundamentally limits many organizations' ability to innovate and stay competitive. Organizations are under increasing pressure to do more with less and use valuable IT resources to create differentiation through applications that support your unique business needs.



SCALABILITY AND SAVINGS FOR YOUR ORGANIZATIONS

Small and medium-sized organizations today are adopting new working models and shifting to flexible IT platforms. This enables them to respond faster to customer needs and proactively improve products and services while reducing costs and freeing up resources for critical projects.

In cloud computing, large volumes of storage, compute, and other IT capabilities are available via the Internet to organizations in a pay-as-you-go model. The cloud services model essentially allows businesses to outsource the buying, integration, upgrading, patching, and management of server, storage, and communications equipment.

With the cloud, you pay for IT resources as you use them. You eliminate the equipment, software, tools, power, and real estate costs associated with building and managing your own infrastructure. Because the cloud gives you the ability to rent storage and eliminate costly on-site solutions, it provides an affordable way to unlock new possibilities for business efficiency and growth.

Meanwhile, in addition to the above, large organizations can also take advantage of advanced cloud architectures, including multi-region or multi-AZ setups, global load balancing (GSLB), and high-availability configurations.

Changing the Game for Small and Medium-sized organizations

The cloud levels the playing field for organizations by providing access to the latest infrastructure and services to run current workloads. With the rise of more flexible work environments, the access to IT services and network capacity through the cloud is providing an affordable way to unlock new possibilities for efficiency, reliability, and expansion.

Moving your datacenter to the cloud helps you:

- ◆ Reduce up-front investments: Manage your business needs more efficiently and cost effectively in a pay as you go model rather than having to make large capital expenditures.
- ◆ Use internal resources more effectively: Automate tasks such as monitoring, security and back up and leverage custom reports to analyze and manage costs and usage. This frees your team to work on initiatives that could be more mission critical to your organization's growth.
- ◆ Improve productivity: Provide remote teams reliable access and eliminate performance issues. Add resources with the click of a button and quickly deploy applications globally without the risk or latency that comes with on-premises infrastructure
- ◆ Secure your business: Protect, detect, respond, and recover from threats to your business faster and more reliably. You benefit from knowing that underlying hardware and software stays up-to-date and that your increasingly flexible work environment can be easily supported, secured, and recovered if necessary..

The cloud has become the number one IT priority in 2021 for companies with fewer than 1,000 employees, according to Techaisle.² And companies that subscribe to cloud services, on average, say they save 31 percent using the cloud compared to running infrastructure on-site themselves.³

Regularly procuring, testing, deploying, and managing on-site equipment yourself puts you at a disadvantage— especially if your competitors have cloud-flexible capabilities. With real business issues such as aging infrastructure, remote workers, business continuity and limited IT resources, there is a clear ROI for the move to the cloud. The most important question is no longer if you should move your datacenter, but when.

Within the cloud, large organizations are far better equipped to manage data at scale and delve into the use of data pipelines, big data technologies, data governance, and security, as well as real-time analytics.

2. TechAisle, "2021 Top 10 SMB - Business Issues, IT Priorities, IT Challenges,"

<https://techaisle.com/research-reports/216-2021-top-10-smb-business-issues-it-priorities-it-challenges-infographic>

Published 2021.

3. IDC, "Fostering Business and Organizational Transformation to Generate Business Value with Amazon Web Services,"

<https://pages.awscloud.com/rs/112-TZM-766/images/AWS-BV%20IDC%202018.pdf>

Published February 2018.

ASSESSMENT: READY TO MOVE TO THE CLOUD?

Considering what challenges lie ahead can help you identify the most critical pain points within your on-premise data center. In the below assessment, check off which factors impact your business to help assess whether moving to the cloud is right

for you:

- ◆ I have aging infrastructure that needs to be replaced
- ◆ I have an increasing number of remote employees accessing the network
- ◆ We struggle to keep up with security and other required patches
- ◆ I am concerned about our ability to back up and quickly restore our data
- ◆ We frequently have unplanned downtime
- ◆ Increasing complexity makes it difficult to identify network, security or capacity problems before they impact the business
- ◆ I have limited IT resources and can't hire to meet business demands
- ◆ My development resources are busy maintaining existing applications, not developing apps to respond to the needs of either internal or external customers

If you checked any of the above, a cloud migration can be a critical component of enhancing your IT team's positive impact on your business.

The cloud provides an environment that can be optimized to meet your specific needs. Selecting the right provider offers you:

A solution that fits your business:

Size doesn't matter when it comes to cloud migrations. Organizations with networks and workloads of all sizes are making serious strides in becoming more competitive by moving their on-premises data center to the cloud. Cloud migration strategies can be designed based on the unique characteristics and goals of each enterprise.

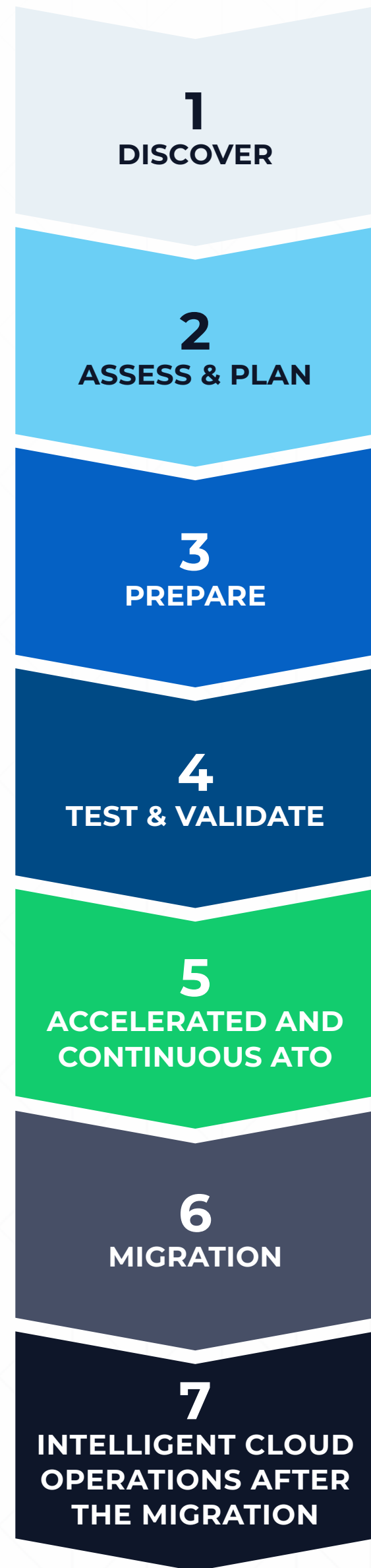
Flexibility to assess and move your workloads at your pace:

Every organization is different. A customized solution provides you with the ability to move workloads without disruption to your business.

Savings that add up:

Consider how the flexibility of paying only for what you need and adding the capability to rapidly develop applications could enable you to quickly respond to both internal and external customer needs. Additional cost management strategies can be leveraged by large organizations, including reserved capacity planning, cost allocation, budgeting, and optimization techniques for complex, multi-faceted environments.





THE CLOUD MIGRATION ROADMAP

With so many pressures on your on-premises datacenter, now is a great time to get started on your cloud migration. The following is an overview of the cloud migration roadmap.

1 DISCOVER

Finding the right cloud provider and systems integrator who collectively understand your organization's unique needs is an important part of your evaluation. IDC recommends organizations of your size consider the following in their cloud provider evaluation:

- ◆ **Differentiation:** Look for providers that have a platform that enables differentiation and facilitates the quick adoption of new technology.
- ◆ **Security and uptime:** Assess for security and uptime commitments that are best-in-class in the industry.
- ◆ **Experience:** Look for experience, particularly with organizations like yours.
- ◆ **Innovation:** Ask about future proofing and technology leadership— your cloud provider should be heavily investing in the latest innovations.
- ◆ **Support:** Hands-on support and expertise will position you to best assess the migration strategy that meets your need.

As for the migration itself, your organization needs a systems integrator that is focused on building an accurate understanding of the as-is environment, including architecture, technologies used, applications, inventory and configurations, topologies, dependencies, stakeholders, security practices, ITSM (Information Technology Service Management), processes, service level requirements, resources and workforce skillsets, organization constructs and business workflows.

2 ASSESS & PLAN

Use an assessment, like Migration Evaluator, that is thorough but noninvasive to get started without monopolizing your team's time. A migration assessment and discovery process provides you with a total cost of ownership model within hours to build business justification for your migration project. Up-front, data-driven analysis can help you identify the optimal lowest-cost option for each workload and provide a license analysis. For example, if you are using Microsoft Enterprise Applications, you will want to identify the Microsoft workloads you have on-prem and run a cost comparison between bringing the licenses for those workloads over to the cloud. Using a data-driven online tool can provide a projected cost estimate of potential savings within hours.

Your systems integrator can also leverage FinOps, Organizational Change Management, data security, and artificial intelligence capabilities to help your organization thoroughly assess application cloud readiness, workforce and organizational readiness, as well as business needs, priorities, constraints, risks, and challenges in the context of defined business strategies and objectives. Based on the assessment, your migration partner can design appropriate migration plans for each application, including plans for development, testing, migration, security, and operation, and plans for project management, communication, training, and service management.



3 PREPARE

Exiting your on-prem datacenter can be daunting. Having the right team to help you can be the difference between meeting or missing your goals. Your systems integrator can deploy a cloud landing-zone based on security and operation requirements, as well as implement Dev, Test, QA, and Production cloud environments. All plugins related to operations, observability, ITSM, FinOps and security will be deployed during this phase.

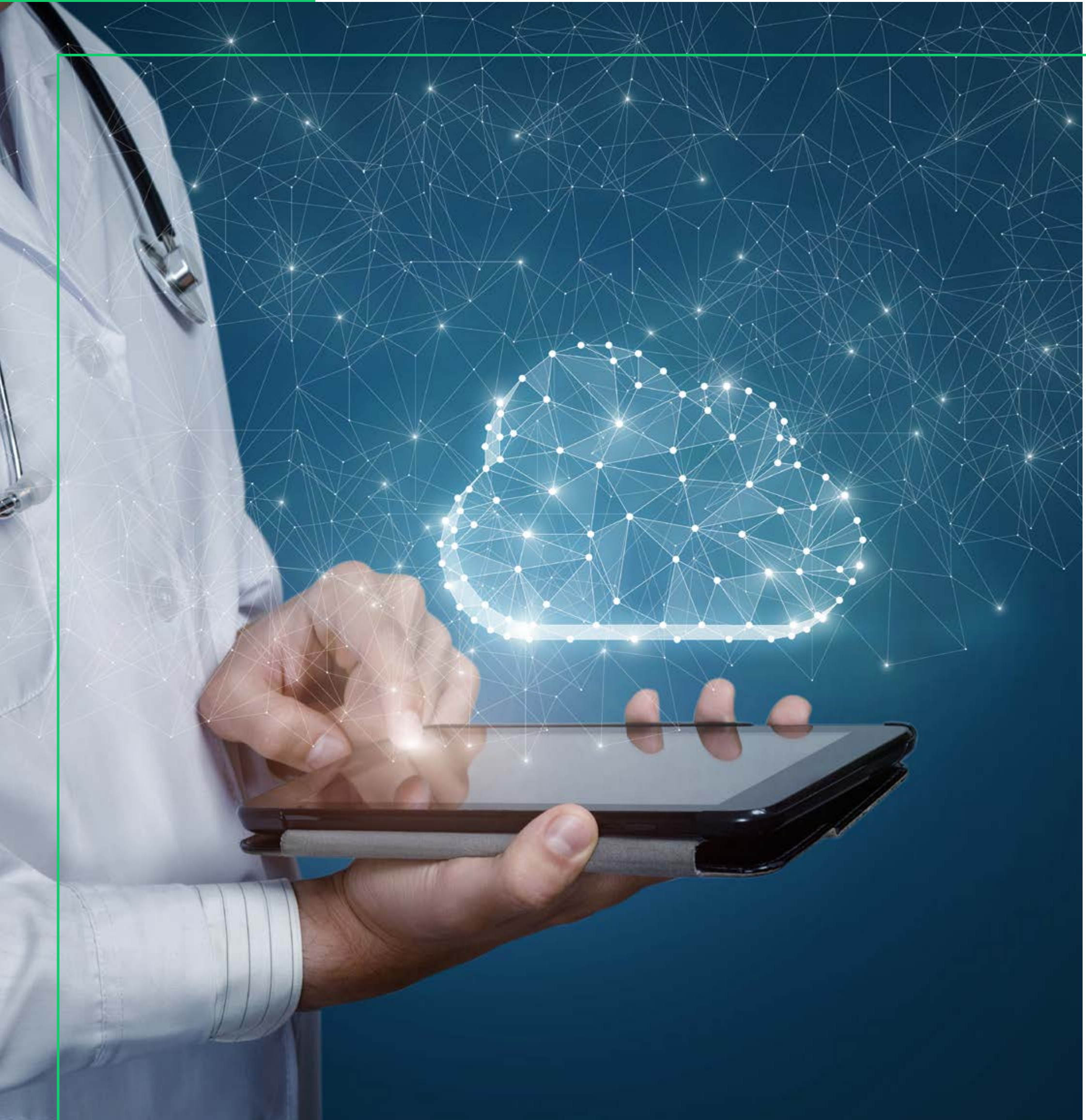
4 TEST & VALIDATE

Once you have completed an initial assessment and have your cloud provider and partners identified, you will then be able to address any gaps identified in the assessment that might impact the success of your migration.

Your systems integrator will conduct application and services testing and validation, application performance validation, and operational readiness validation. This phase also involves prototyping for planned migrations (rehost, re-platform, refactor, or re-architect), configuring security controls and operation management; testing and evaluating the effectiveness of the migration approach selected and solutions of cloud operations.

5 ACCELERATED AND CONTINUOUS ATO

For federal government organizations, your systems integrator should provide a set of proven modern solutions to achieve FedRamp ATO (Authority to Operate) for the target cloud environment and migrated applications. This includes applying Infrastructure as Code, SSP (System Security Plan) as code, Compliance as Code, and Automated Documentation as Code. These code sets are stored in the OSCAL (Open Security Controls Assessment Language) format. This allows federal organizations to achieve security ATO in a much shorter timeframe after the 3PAO (Third Party Assessment Organization) audit.



6 MIGRATION

The best cloud migrations offer two key elements that allow you to leverage the cloud at the pace that works best for your business:

- ◆ **Migrate with minimal changes:** This is the first step with the fastest results. Often called “re-hosting,” we “Lift and Shift,” so you can begin seeing benefits sooner. Often fully automated, this migration doesn’t require changes to the underlying architecture.
- ◆ **Future Proof:** Adopting cloud-native technologies can help you fully realize the benefits of the cloud transition, reducing operational costs as applications are re-envisioned and become managed cloud services.

Your systems integrator should help your organization manage the migration with rigorous change management practices that involve comprehensive testing, communication, documentation, time management, and quality management. Data services migration solutions such as cloud data virtualization and cloud data replication can also help organizations complete the migration without down time.

7 INTELLIGENT CLOUD OPERATIONS AFTER THE MIGRATION

At the end of a migration, the environment will be handed over to the Operations team to manage the day-to-day operations. Your systems integrator should help you design a well-planned service transition process to transition the support of the migrated environment to the Operations team.

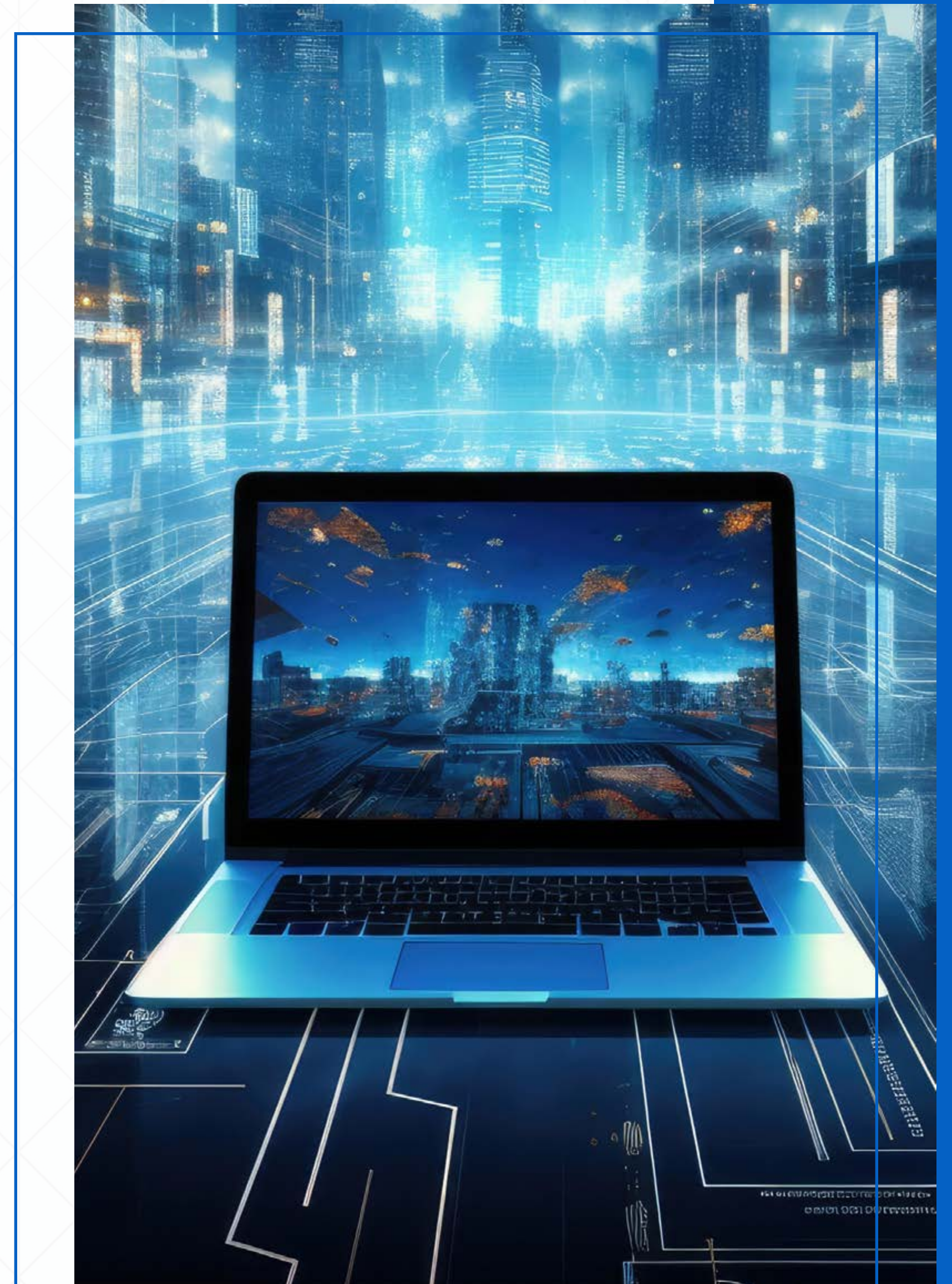
Maximizing the long-term benefits of moving to the cloud

Ultimately, migrating your datacenter is about much more than the near-term efficiency gains. It is a long-term investment that will help you grow your business and make IT part of your business success and differentiation.

When you migrate to the cloud, you give your organization the advantage of increased agility by lowering the time to build, deploy and maintain applications that can automatically scale to the needs of the workload. Updating your applications and having access to the best development tools and resources, will help you continue to reduce your costs over time. Cloud-enabled organizations are also best-positioned to begin exploring the integration and application of Artificial Intelligence and Machine Learning.

A key benefit of your cloud migration is the flexibility to make incremental or transformational change cost effectively, with proven applications. A cloud marketplace offers you development options to shift from costly licensing to subscription-based metering and billing. This translates to tangible benefits as you migrate and update your workloads:

- ◆ **Microsoft Enterprise Applications.** Customers have been running Windows workloads on AWS for over 12 years, longer than any other cloud provider. We know Microsoft Enterprise Applications, Databases and Servers. DMI alongside AWS can help you get the most out of Microsoft Applications on AWS.
- ◆ **Path to open source.** Maximize the full capabilities of the cloud and benefit from the agility, performance and cost savings of open source. For example, use common programming languages to run your applications on AWS container services.
- ◆ **Reduced development time.** Leverage AWS services to rebuild monolithic applications into a collection of microservices, which break applications down into optimized, specialized, reusable functions. A microservices approach can radically reduce your development time for new applications and significantly cut operating costs.





FAST AND COST-EFFECTIVE MIGRATION WITH DMI ALONGSIDE AWS

With more than a million active customers and a global cloud presence since 2006, AWS has the most experience helping organizations of all ages, industries, and geographies benefit from the cloud. We offer the tools to assess, plan and support your migration, including skillset training and a complete software, services, support and partner ecosystem.

Migrate any workload

DMI alongside AWS can move any workload to the cloud – applications, websites, databases, storage, physical or virtual servers – and AWS Cloud supports all frameworks and languages, all processor types, and all operating systems, including Microsoft Enterprise Applications and open source. You can also easily run SQL on AWS and manage your new and existing SQL Server licenses, run VMWare Cloud and SAP on AWS. AWS gives you access to more than 200 native services to fuel innovation. We have more experience than any other cloud provider and offer solutions for organizations of your size that offer:

Real savings you can see and measure: Moving to the cloud provides the ability to reduce costs while increasing efficiency—and migrating with DMI alongside AWS leads to an average cost savings of 31 percent. We offer free tools and calculators to assess your workload and costs and measure your migration ROI, taking the guesswork out of operational costs and identifying new opportunities to save. Further, we have reduced costs more than 100 times over the last decade.

The highest level of cloud security: Your cloud is only as strong as its security. AWS security infrastructure is built to satisfy the highest requirements of the world's leading financial, educational institutions, and governmental institutions that rely on it—ensuring you have the same level of security they do. Comprehensive and constantly improving, AWS compliance programs place 230 security features and services at your command, while still ensuring you maintain full control and access to your data. The benefit is real: Amazon customers report on average 43.4 percent fewer monthly security incidents, and 69 percent reduction in unplanned downtime.

Capacity and scalability that grows as you need it: AWS automatically adjusts cloud capacity to meet demand, while only charging for what you use, ensuring you have the space to grow without paying for more than you need. We constantly monitor activity to balance loads, scaling compute power and storage up or down to meet fluctuations in demand and reduce unnecessary costs, ensuring you always have enough capacity, visibility into what you are spending, and no concerns that you're wasting money.

Built-in reliability and resiliency: Organizations like yours cannot afford a breakdown in IT availability—that's why we have applied more effort than anyone else to ensure cloud resiliency. With DMI alongside AWS, customers can achieve a 69 percent reduction in unplanned downtime, and our extensive investment in global availability zones and redundant networks, storage, and compute help ensure that you always have access to your critical data and applications. In addition, we bring experience and frameworks to ensure business continuity, including dedicated teams and partners who can provide on-demand expertise and support.

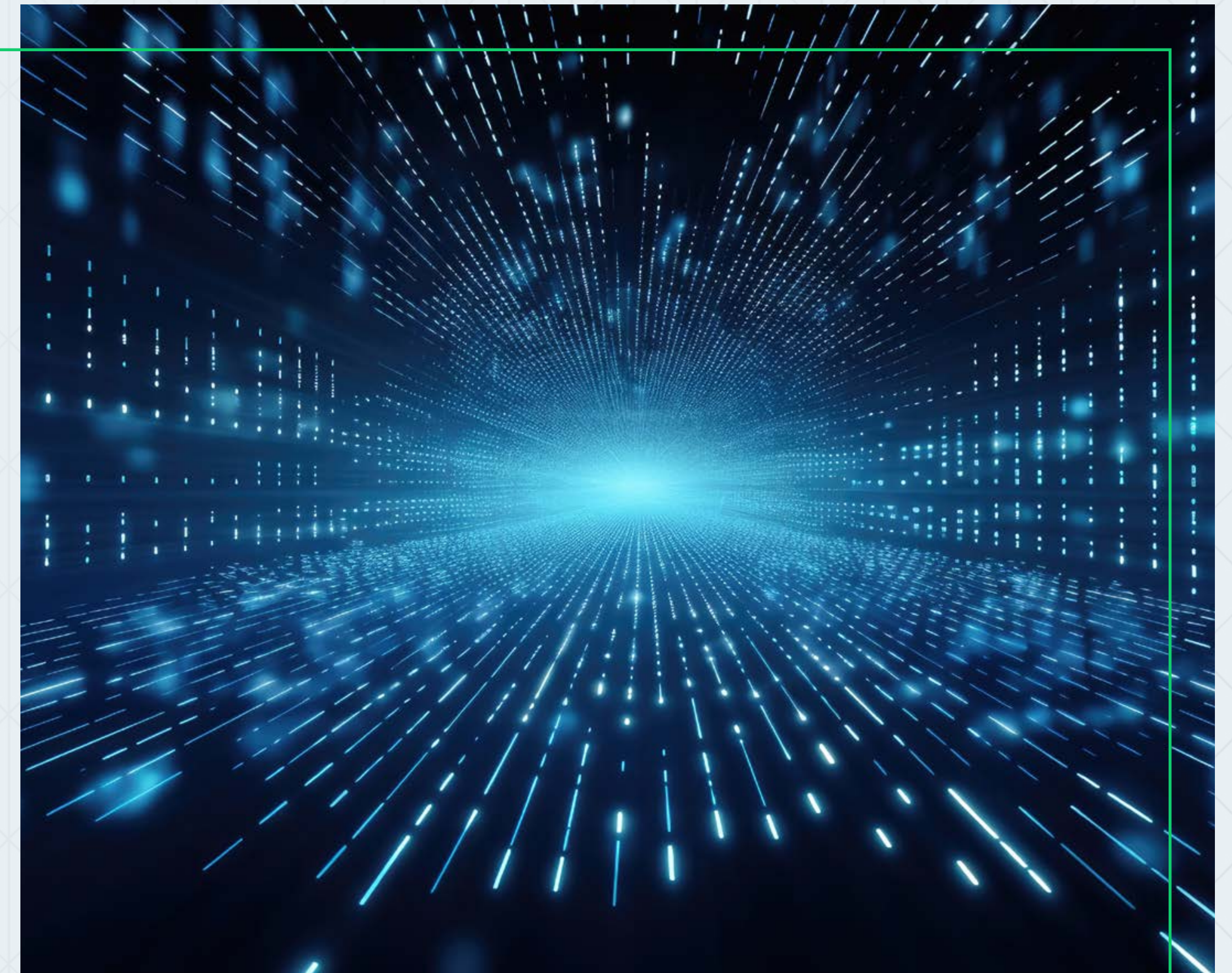


Support through best-in-class partners, programs, and training: You need to maximize IT performance with limited budgets and resources. With AWS, help is always close-at-hand. Our partners can help you plan, scope, and size your migration, as well as reduce risk and complexity by automating shifting workloads to the cloud. We also offer a free, comprehensive library of digital, self-paced training courses and a range of skill certifications, workshops, and immersion days for your team. AWS certified partners and consultants are available to provide you with premier service—no matter your budget.

A broad, deep, and constantly growing set of capabilities: AWS has been continually expanding its services to support virtually any cloud workload, and it now has more than 200 fully featured services for compute, storage, databases, networking, analytics, machine learning and artificial intelligence (AI), Internet of Things (IoT), mobile, security, hybrid, virtual and augmented reality (VR and AR), media, and application development, deployment, and management. When you collaborate with us, you continuously gain new, simple, trusted, and accessible solutions that enable you to store and protect your data, empower your workforce collaborate securely from anywhere, build websites and applications, better serve customers throughout their lifecycle, and gain new insights from your data and more—without having to make your own investments in capital and talent.

Innovation that accelerates growth: Developing new products, services, and experiences that resonate with customers requires deep understanding of their needs and an ability to react swiftly to new data. When you work with DMI alongside AWS, you gain access to solutions that help you innovate more swiftly, and experts who can share insights into and learn from Amazon's unique history of innovation. Our teams can share specific examples from Amazon's

consumer/retail and other businesses on how we raise the bar on customer experience, while improving efficiency, increasing speed, and lowering cost—and help you bring such capabilities to your business as you grow. Our exclusive events, roundtable discussions, and access to methodologies will provide you with models to help bring products to market faster, delight clients, and accelerate growth.





TAKE YOUR FIRST STEP

Today, you don't have to put your business at the mercy of aging hardware and applications, or play catch up with the demands of increasingly flexible work environments. Organizations of your size are already seeing the return from making the move to the cloud through reduced costs in terms of both infrastructure and staffing.

By taking advantage of a pay as you go model, you get exactly what you need, when you need it. You can sleep better knowing your data is backed up and can be quickly recovered. Cloud allows you to re-invest in high value IT that is specific to differentiating your business and increasing competitiveness.

Let us help you get started. Doing an evaluation on your own can be overwhelming, and you may not have access to all your options. Getting data backed insights will help drive a smarter migration.

Contact us today for a free and fast assessment of your migration needs.

ABOUT DMI

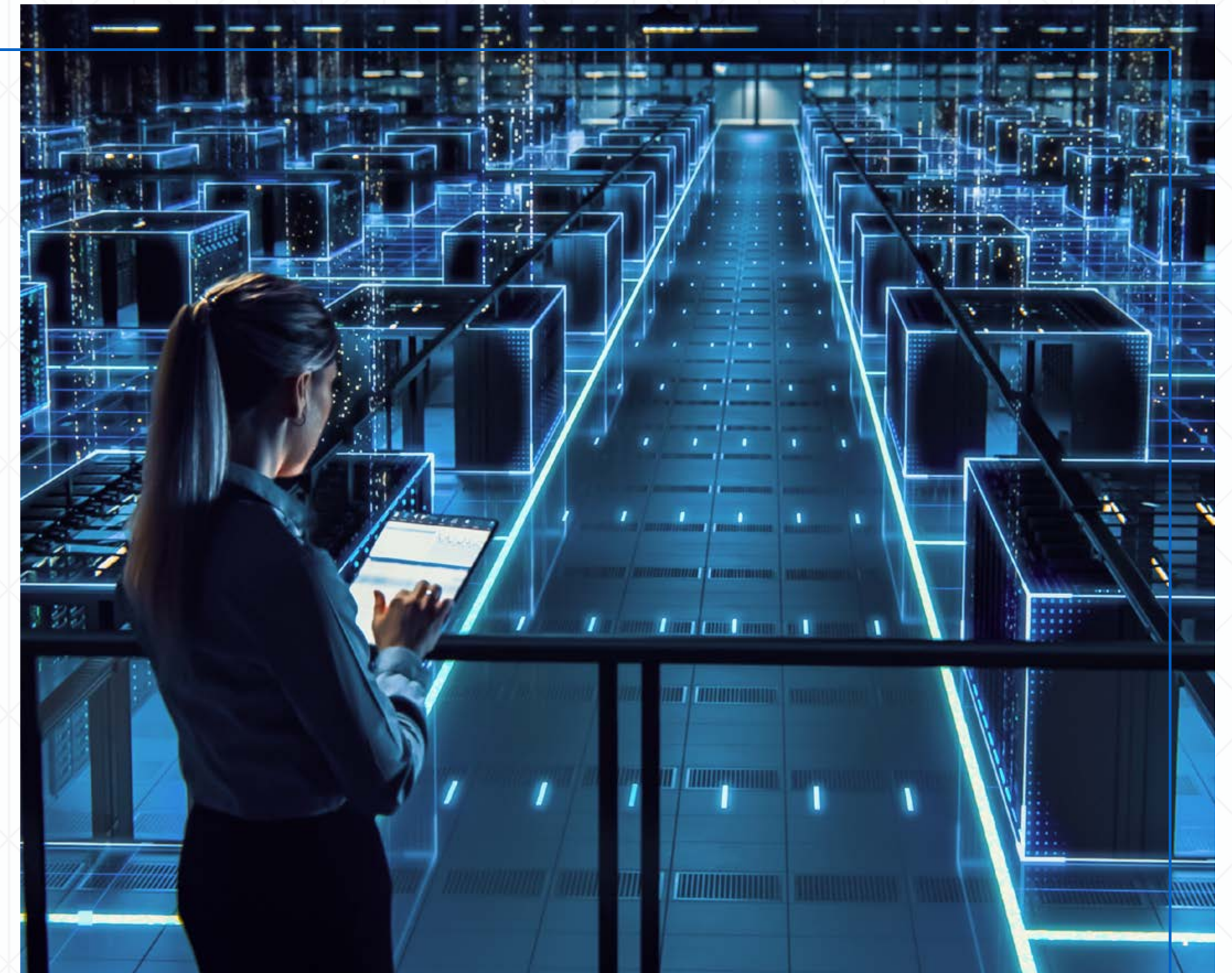
DMI is recognized as an Amazon Web Services (AWS) Advanced Tier Services Partner helping companies enable, operate, and innovate in the cloud. From data migrations to operational excellence and digital transformation, DMI is a full spectrum AWS integrator with capabilities that span the commercial and public sectors, empowering organizations to succeed in their evolving landscapes. Whether you're transitioning your workloads to a cloud or hybrid cloud environment or seeking to revamp your on-premises infrastructure, our expert team will serve your organization as a true partner.

Solving Critical Business Challenges: We partner closely with our clients to tackle their most pressing business challenges. Our end-to-end services encompass envisioning, designing, creating, and maintaining enterprise software solutions that pave the way for the digital transformation journey. This includes helping clients with migration strategy, roadmaps, implementation and O&M. DMI conducts extensive user research, defines user personas, analyzes customer journeys and dives deep into the systems, applications and technologies that support legacy solutions.

Cloud-Native Application Development: DMI is at the forefront of cloud-native application development. We blend design, engineering, deployment, and monitoring services to create scalable, elastic, high-performance, and cost-effective systems secured with DevSecOps methodologies. Our expertise in cloud-based PaaS, serverless, and container technologies ensures that your applications are optimized for the cloud environment.

Government Digital Transformation Expertise: DMI brings an automation-led digital transformation approach that leverages business process modernization,

low risk cloud migrations, intelligent automation using Robotic Process Automation (RPA) and Bots, Artificial Intelligence (AI), and customer-centric methodologies to achieve our clients' goals and objectives and enable a seamless transition to a modernized cloud architecture.



BENEFITS OF MIGRATING TO AWS WITH DMI



As an AWS Partner Network Advanced Tier Consulting Partner for cloud migration we offer a multitude of benefits that significantly enhance the efficiency and success of the migration process. We possess extensive expertise in AWS services and cloud migration best practices, ensuring that organizations can seamlessly transition their workloads to the cloud while minimizing disruptions and risks. DMI's experience allows for tailored migration strategies that can optimize cost savings, scalability, and performance, ultimately accelerating time-to-value. Furthermore, we have access to advanced tools and resources, along with direct support from AWS, enabling customers to deliver innovative solutions and comprehensive support throughout the migration journey, thereby ensuring a smooth and well-executed transition to the cloud.

Decreased Costs

Migrating to the AWS Cloud – along with prioritizing a customer-centric approach to application modernization – will enable your organization to realize a reduction in monthly IT operations costs. Organizations are saving up to 66% by migrating from on premises to AWS Cloud Infrastructure.

Improved Customer and Citizen Experiences

By harnessing the power of AWS, organizations can offer seamless, secure, and highly available solutions that not only meet but exceed customer and citizen expectations, fostering trust and loyalty while driving overall CSAT scores and engagement for superior user (Customer and Citizen) experiences.

More Secure Systems

By leveraging AWS services, organizations can bolster their defenses, proactively detect and respond to security threats, and establish a solid foundation for building and maintaining more secure systems in an ever-evolving threat landscape.





CASE STUDY

HHS OFFICE OF THE INSPECTOR GENERAL

CHALLENGE

Systemic, technical deficiencies within the HHS Office of the Inspector General's business applications development practices and on prem infrastructure required tedious manual activities that lengthened the time to delivery. Public-facing portals had security vulnerabilities and upload restrictions. And the size and complexity of the organization's System Security Plan (SSP) led to delays in the Authority to Operate (ATO) process and increased security risks for the OIG.

SOLUTION

DMI facilitated the Enterprise Digital Transformation at HHS OIG to execute plays from the US Government Digital Services Playbook specifically focusing on Agile/DevOps processes, adopting open-source technologies and automating the development pipeline. DMI also architected, designed, implemented and ATO'd HHS OIG Hybrid Cloud General Support System (GSS) to promote cloud-first future solutions.

Additionally, DMI architected, advised, and facilitated OIG's cloud migration implementing modern software solutions to deliver enterprise capabilities and services to save cost, reduce redundant work, and have centralized control. DMI also helped OIG develop and enhance a proactive security stance, providing ISO services and sound DevSecOps practices and processes.

BENEFITS

- ◆ The organization now has modern applications and a cloud-enabled approach that can securely meet constituent demands today and for years to come.
- ◆ The organization has realized a 33% reduction in monthly IT operations costs.
- ◆ Employees are now producing working code faster, at higher quality, and at lower cost, all within a more secure environment that improves the citizen experience.



"DMI has provided exceptional quality to our 1,800 users overseeing approximately \$1.3B in federal spending. They have delivered a hybrid-cloud platform utilizing modern cloud technologies from Amazon Web Services."

- CONTRACTING OFFICER



LEARN MORE

Unlock the Future of Cloud Transformation with DMI and AWS:

<https://dminc.com/strategic-partners/aws/>

Explore DMI's Cloud Services:

<https://dminc.com/services/cloud-services/>

Read about DMI's work with a Leading Global Pharmaceutical Company:

<https://dminc.com/wp-content/uploads/2022/01/Cloud-Pharma-Migration.pdf>



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