

AMAZON WEB SERVICES

Unlock Your Growth Potential With Migration to the Cloud

A Guide and Assessment for Small and Medium-sized Businesses

AWS SMB | MAY 2022

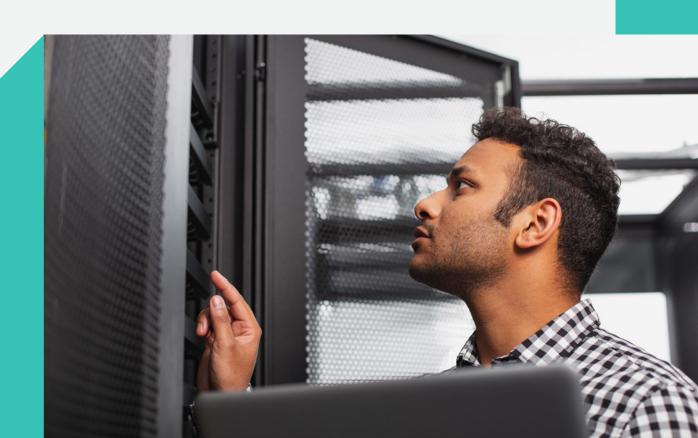


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Fast and Cost-effective Migration with



Introduction

About This eBook

This eBook is intended to help decision-makers in small and medium-sized businesses understand the benefits of migrating data and applications to the cloud.

You'll Learn:

- Why businesses 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



CHAPTER 1:

Limitations of On-premises and Collocated Datacenters

If you're like most businesses, 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 But you're not alone—40 percent of businesses your size cited outdated skillsets in IT as a key barrier to meeting business and technology priorities.¹ When combined with the cost, inflexibility, and lead times to get new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 on-prem datacenter just don't add up anymore. Many small and medium-sized business 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.

IDC, "Worldwide Small and Medium Business Markets." 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 businesses' ability to innovate and stay competitive. Small and medium-sized businesses 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.



CHAPTER 2:

Scalability and Savings for Your Business

Small and medium-sized businesses 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.

Changing the Game for Small and Medium-sized Businesses

The cloud levels the playing field for small and medium-sized businesses by providing you with access to the latest infrastructure and services to run your current workloads, so you only pay for what you need. 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 company'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.

- TechAisle, "2021 Top 10 SMB Business Issues, IT Priorities, IT Challenges," 2021.
- IDC, "Fostering Business and Organizational Transformation to Generate Business Value with Amazon Web Services," February 2018.



CHAPTER 3:

Assessment: Ready to Move to the Cloud?

Considering what challenges lie ahead will help you identify the most critical pain points within your on-premises 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 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. Businesses 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.
- 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.



CHAPTER 4:

Getting Started With the Cloud Migration

With so many pressures on your on-premises datacenter, now is a great time to get started on your cloud migration. Following are simple steps that will help you get started.

1. Identify

Finding the right cloud provider that understands the unique needs of a small or medium-sized business is an important part of your evaluation. IDC recommends businesses of your size consider the following in their cloud provider evaluation:⁴

- 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 businesses 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 needs.
- IDC, "The Definitive Buyer's Guide for Small and Mediumsized Businesses to Evaluate Cloud Providers," October 2021.

2. Assess

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 onprem 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.

3. Partner

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. Work with an experienced system integrator will be a key part of your migration support team. Experts help anticipate challenges and leverage learning over many migrations to ensure you get the results you expect. Cloud-provider certified partners have three main roles:

- **Expertise:** Partners add subject matter experts to your migration team, giving you access to experienced talent from the start.
- Straightforward assessment and implementation planning: Assessment results should be captured in a transparent business case report to further align business and technology stakeholders and provide a prescriptive next step in your migration journey. Review your current workloads and applications and help you simplify your migration, so projects take minutes or hours to migrate instead of weeks or months.
- Migration planning for your all your workloads: You want to be able to migrate
 any workload—applications, websites, databases, storage, physical or virtual servers,
 and whatever frameworks and languages, processor types, or operating systems
 you're using, including Microsoft Enterprise Applications and open source. Your
 support team will help you map the migration of your workloads and set you up for
 future innovation.

4. Mobilize

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.

Working with your cloud provider to develop a Proof of Concept will help you plan and visualize the steps to make your migration happen as quickly and affordably as possible. Part of this effort will be evaluating the skill needs of your team and ensuring you will have easy access to the training and support you need to realize the most from your cloud migration.

5. Migrate and Update

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.

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 business 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.

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 more than 12 years, longer than any other cloud provider.
 We know Microsoft Enterprise Applications, Databases, and Servers. 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.



CHAPTER 5:

Fast and Cost-effective Migration With Amazon Web Services (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

AWS can move any workload to the cloud—applications, websites, databases, storage, and 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, or 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 businesses 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 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: Businesses 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 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 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 databacked insights will help drive a smarter migration.

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

Click here to learn more.