The transformative power of cloud-native modernization and cloud managed services

Simplifying complexity | Enabling agility | Strengthening competitiveness
Content

01 The transformative power of cloud-native modernization and cloud managed services

03 Cloud's impact on today's modern business

04 The agility business imperative

06 Simplifying cloud complexity

08 Emerging cloud trends

10 Competitive advantage and growth

11 Getting started

12 Finding the right partner

14 Take the next step

15 About NTT DATA
The combination of cloud-native capabilities and cloud managed services, offers unparalleled agility, scalability, and flexibility, empowering organizations to manage and use their IT resources with more focus on innovation, faster delivery, and time to market, and improved customer engagement.

When both cloud-native modernization and managed services are combined, organizations can thrive in a rapidly changing business landscape. This Guidebook delves into why clouds continue to be the essential foundation and enabler of an agile, secure and modern business. It explores how cloud is improving business operations, workforce productivity/efficiency and customer engagement. The Guidebook provides business leaders with practical guidance and insights on how to drive improvements in several key areas, including business goal alignment with strategy, where and how to address skill and performance gaps, and how to extend the value of your existing infrastructure inclusion of modern, cloud-native practices and capabilities.

Readers will better understand how, in a relatively short period of time, cloud-native development capabilities and cloud managed services for infrastructure and complex migration projects are both dramatically reshaping how organizations approach and solve business problems.

It is no longer accurate or feasible to view cloud as an infrastructure-only solution. It is now inextricably linked with business disruption, growth and innovation. Today's cloud is both a requirement and a catalyst for businesses to modernize their operations, scale with speed and stand up agile practices to respond to the needs of the market.

Here's a quick reflection on how cloud usage continuously shapes and impacts business strategies:

<table>
<thead>
<tr>
<th>Business area</th>
<th>Today</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agility and innovation</td>
<td>Organizations benefit from improved agility, allowing them to quickly respond to changing market conditions and innovate at a faster pace. Cloud services enable the rapid development, deployment and scaling of applications.</td>
<td>The trend toward cloud-native architectures, microservices and containerization will further enhance agility, enabling organizations to embrace continuous integration and delivery (CI/CD) practices and innovate more efficiently.</td>
</tr>
<tr>
<td>Data management, analytics and AI</td>
<td>Cloud services have facilitated advanced data management, storage and analytics capabilities, allowing organizations to derive insights from large datasets.</td>
<td>The focus on data will intensify, with organizations leveraging cloud-based analytics, machine learning and artificial intelligence to gain deeper insights and make data-driven decisions.</td>
</tr>
<tr>
<td>Cost efficiency and optimization</td>
<td>Cloud adoption has provided cost savings through pay-as-you-go models, reducing the need for significant upfront infrastructure investments. Cost management and optimization have become critical considerations. Related, FinOps as a discipline often includes management and measurement of cloud costs.</td>
<td>Organizations will focus on optimizing cloud costs through application modernization and leveraging tools and services that provide insights into end-to-end performance, usage and spending patterns. The discipline of GreenOps – helping to pursue sustainability initiatives – will grow in the years ahead, associated with goals such as net-zero carbon emissions and energy-efficient servers.</td>
</tr>
</tbody>
</table>
## The transformative power of cloud services to modernize today’s businesses

<table>
<thead>
<tr>
<th>Business area</th>
<th>Today</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hybrid and multicloud strategies</strong></td>
<td>Many organizations operate in hybrid and multicloud environments, combining on-premises infrastructure with services from multiple cloud providers to achieve flexibility and avoid vendor lock-in.</td>
<td>Hybrid and multicloud strategies will become even more prevalent. Organizations will focus on optimizing workloads across different environments based on performance, cost and specific application requirements.</td>
</tr>
<tr>
<td><strong>Sustainability and environmental impact</strong></td>
<td>A growing awareness of the environmental impact of data centers has led to a greater focus on sustainability and energy efficiency.</td>
<td>Organizations and cloud providers will prioritize sustainable practices such as energy-efficient data centers, renewable energy usage and carbon footprint reduction, aligning with broader environmental goals.</td>
</tr>
<tr>
<td><strong>Security</strong></td>
<td>Initially, security concerns slowed down cloud adoption. But today’s cloud providers have invested heavily in robust security measures. Compliance with industry regulations is a priority for enterprises.</td>
<td>Security and compliance will remain paramount. Enterprises will invest in solutions which reduce complexity by bringing multiple security and protection capabilities into a single solution. They will focus on addressing the full lifecycle of cloud-native applications from development to production and enabling developers and operational teams alike to perform remediation.</td>
</tr>
</tbody>
</table>

The explosive growth of cloud usage has positioned the cloud as a fundamental component of modern enterprise IT. Looking ahead, organizations will continue to harness the power of the cloud to drive innovation, optimize costs, enhance security and navigate the evolving landscape of technology and business. Modernization requires flexible, dynamic, on-demand and agile environments that allow organizations to quickly respond to emerging threats and new opportunities. The cloud will remain and continue to grow as a strategic asset, enabling organizations to adapt and thrive in a dynamic and increasingly digital world.

## The agility business imperative

**Cloud-native modernization as a competitive-advantage enabler**

**The business value of cloud-native architectures, apps and microservices**

When cloud-native modernization is aligned with the needs of the organization, it enables transformation and improved experiences for customers, employees and other stakeholders.

Rearchitecting applications to use cloud-native platforms, containers or microservices is the essential ingredient in gaining a competitive advantage. It results in faster releases, improved margins and greater customer satisfaction.

How fast a product or service can get to market reliably, how quickly and accurately an organization responds to a customer or how it disrupts a business process are more and more dependent on the strength of its cloud-native modernization efforts and microservices.
**Microservices: the linchpin for enhancing business agility**

By breaking down applications into smaller, independently deployable services, microservices empower organizations to respond swiftly to market changes and innovate iteratively. The flexibility and modularity inherent in microservices enable businesses to pivot quickly, reducing time to market for new features and updates.

Cloud-native applications and microservices represent a departure from an exclusive reliance on monolithic architectures, allowing organizations to build, deploy, evolve and scale applications more efficiently. Each microservice is a self-contained unit, fostering agility by enabling independent development, testing and deployment. This approach ensures that changes in one microservice do not disrupt the entire application, facilitating continuous delivery and rapid adaptation to evolving business needs.

These services contribute significantly to business agility by enabling rapid development, deployment and updates. Adopting the principles of continuous integration and delivery (CI/CD) in conjunction with microservices architecture allows development teams to respond nimbly to changing customer needs.

The **continuous benefits of cloud-native modernization**

Cloud-native modernization improves the overall performance, efficiency and security of an organization.

Some of the major benefits are:

- **Stronger business performance**: By continually optimizing workloads and moving them to the best cloud-based execution venues, organizations gain agility and can enhance system availability and performance.

- **Lower total cost of ownership**: Cloud migration and application modernization typically lead to savings by eliminating operational overheads and resource inefficiencies – freeing up budgets that can then be invested in innovation.

- **Improved security posture**: Legacy applications can pose security challenges and compliance risks. With security and risk management built into their core, cloud-native services enhance cybersecurity and help organizations to comply with regulatory mandates.

- **360° view**: Comprehensive observability, monitoring and analysis enable organizations to optimize and safeguard their entire cloud environment, network and applications.

- **Immediate and ongoing value**: Organizations no longer need weeks to test a new version of an application before it can be deployed. Once they’ve gone cloud-native, their application maintenance also becomes faster and easier.

- **Improved customer engagement**: By enhancing the speed, quality and value of their digital customer interactions, organizations can retain and expand their customer base.

- **Talent recruitment and retention**: Organizations that demonstrate their commitment to innovation and continuous improvement can be attractive to employees who are looking for a dynamic and forward-thinking work environment. Additionally, cloud-native approaches can provide employees with the tools and resources they need to work more efficiently and effectively, which can lead to increased job satisfaction and retention.

- **Simplified data management**: The cloud simplifies maintaining complex data sets derived from analytics, machine learning and AI.

- **Reduced environmental footprint**: API and DevSecOps approaches enable more sustainable, energy-efficient operations. Moving to the public cloud also shifts some of the organization’s carbon footprint to a hyperscaler.

Choosing which of these opportunities to pursue in more depth will depend on an organization’s specific needs and the stage of their cloud journey.
Realizing value from cloud managed services

Cloud managed services have emerged as indispensable tools for businesses navigating the complexities of cloud. These services are designed to alleviate the operational burden on businesses, allowing them to focus on their core competencies while leveraging external expertise for optimized cloud management.

When businesses offload the complexities of day-to-day cloud management to specialized, skilled and certified providers, they can concentrate on strategic growth initiatives and core business functions.

As we discuss later, these growth initiatives typically rely on cloud-native services to stand up agile apps and services tied to customer engagement.

More organizations are increasingly recognizing the value of outsourcing cloud management, placing greater importance on the role of the cloud service provider (CSP) in ensuring and delivering a seamless and secure cloud experience.

What value does cloud managed services bring to a business?

Cloud Managed Service Providers help organizations meet and accelerate their business outcomes by providing comprehensive solutions to modernize and manage their cloud infrastructure and applications.

By partnering with the right CSP, organizations quickly benefit from consolidating operational and cloud management expertise. Clients are able to take advantage of economies of scale, benefiting from investments in development such as automation, integration, security and observability.

Skills augmentation

Skills augmentation through cloud managed services addresses immediate operational needs and is recognized as a strategic investment to build long-term proficiency in cloud technologies.

To start, a cloud managed service provider brings skills that complement and enhance internal capabilities. Typical focus areas include simplifying cloud architectures, ensuring security and optimizing environments through managing complex migrations and evaluating the cost-effectiveness and performance of cloud workloads.

By leveraging the skills of partners like NTT DATA, organizations can overcome the challenges of recruiting and retaining in-house talent and ensure that their cloud environments are expertly managed and in line with industry best practices to avoid disruption or downtime.

Cloud managed services focus areas: Look beyond infrastructure services

While each enterprise has unique business challenges and a different level of cloud maturity, all should expect a CSP to offer reliable, secure and scalable services that cover the full spectrum of the cloud lifecycle.

From initial setup and configuration to ongoing monitoring, optimization and security management, a trusted managed cloud service provider will ensure a high-performing cloud environment aligned with the company's business priorities.

While there is tremendous value in the ongoing management of cloud infrastructure such as virtual machines, containers, serverless functions, storage and networks, CSPs that are focused on business outcomes also assist businesses with the service-line growth areas covered below.

Service line growth areas: compliance, security and observability

The reality is that no two organizations are the same and their needs change as they mature.

Some may require full support in infrastructure management, including the provisioning, scaling and maintenance of cloud resources. Others may have the talent and time for infrastructure but seek out specialized services for strengthening security measures to protect data and applications. Some may need leadership and talent to better manage risk and avoid costly fines.

Today, a growing number of organizations are looking for assistance with performance monitoring or observability, which strengthens their ability to monitor and troubleshoot cloud-related performance concerns. Observability provides real-time insights on cloud health and enables proactive issue resolution before a problem occurs. By outsourcing these types of functions to cloud managed service providers, businesses not only offload operational complexities but also ensure their cloud environments are optimized for performance, security and compliance.
Cloud managed services: business-aligned capability areas

- **Application-level management**: Automating the deployment and maintenance of software and services running in the cloud
- **Security**: Round-the-clock monitoring and security to detect and respond to potential risks across the development lifecycle and of application runtime and their associated infrastructure
- **Cost optimization**: Identifying opportunities to reduce expenses through resource optimization, rightsizing and implementing cost-saving strategies
- **Compliance and governance**: Helping organizations comply with regulatory requirements and governance policies while enabling teams to have self-service deployment options
- **Performance optimization**: Fine-tuning cloud resources for better performance and scalability by continuously monitoring and making adjustments as needed
- **Continuous modernization**: Hyperscalers develop and release new features almost daily; to improve business, the ongoing evaluation of each release and how it might apply to applications outcomes is key
- **Industry clouds and accelerators**: Tailored to the needs and requirements of a particular industry, an industry cloud facilitates integration with the software and systems commonly used in that industry and may include specialized applications, data analytics tools or infrastructure, or be designed to meet strict data, security and compliance requirements

A closer look: increase agility with middleware management

Middleware acts as an intermediary between different software applications or components, providing a way for these applications to communicate, share data and interact with each other. Regardless of whether middleware is self-hosted or provided by a hyperscaler as PaaS, the value of the CSP is to manage the middleware as well as the continuous integration and delivery of an organization’s cloud-native applications. This provides a better end-to-end service because the CSP manages the cloud solution holistically.

An even closer look: security services management

When it comes to managed services, security is an area you want to understand deeply before you engage with your service provider.

Robust security capabilities are a critical line of defense, so organizations must carefully explore and understand a CSP’s security capabilities. Everything deployed in the cloud needs to have security baked into it. Cloud-native security impacts applications, architectures, platforms and networks. It’s found throughout the application architecture to cover identity and access management, API security, container security, workload security and more.

5 security questions for your CSP

1. Does your security capability include security operation centers?
2. Can you provide solutions to detect, prevent or respond to potential security incidents?
3. Can you help us improve our response times to security threats?
4. Can you help us minimize wasted time on false alerts?
5. Should a serious security breach occur, can you quickly offer deep threat intelligence to investigate the breach?
Emerging cloud trends

More recently, organizations are seeking assistance with emerging areas of cloud-native and managed services.

**Site reliability engineering (SRE) services**
As businesses embrace cloud-native services, SRE emerges as a critical component ensuring that there is a strong link between the product owners and the technologists, allowing faster business outcomes. SRE is a discipline that combines software engineering and systems administration to create scalable and reliable software systems. In the context of microservices, SRE ensures the continuous reliability and performance of a company's products or services. Emerging trends in SRE include the use of automation to manage cloud-native infrastructure, the application of chaos engineering to proactively identify weaknesses, and the incorporation of observability tools for real-time monitoring and troubleshooting.

**DevSecOps**
As microservices use grows, the need for secure development practices becomes increasingly critical. DevSecOps is crucial for today's microservices architectures. To ensure the resilience of modern applications, DevSecOps practices will play a pivotal role in maintaining the security posture of microservices-based systems as they continue to evolve. DevSecOps, an evolution of traditional DevOps practices, integrates security into every phase of the development process. In microservices architectures, where multiple services communicate with each other, securing each service becomes imperative.

DevSecOps aims to embed security practices early in the development cycle, ensuring that security considerations are not an afterthought but an integral part of the development and deployment processes.

**FinOps in cloud management**
FinOps represents a paradigm shift in cloud cost management, emphasizing collaboration and transparency. Historically, cloud costs were often viewed as an IT concern. FinOps recognizes that cloud spending impacts the entire organization and involves stakeholders from finance, IT and business units. This collaborative approach aligns cloud expenditures with business goals and makes cost optimization an integral part of decision-making processes. FinOps as a practice is often aligned with cloud-native modernization, as savings derived from legacy cloud spend can be understood and then reinvested in cloud-native innovation.
Improved measurement of KPIs to demonstrate value to business

Measuring the success of cloud investments and the impact and value of cloud services goes beyond financial considerations, encompassing various operational, performance and strategic metrics. Businesses must continually evaluate and adapt their cloud strategy to align with evolving organizational goals and industry best practices. The measurement of success should be intrinsically linked to business products or service metrics, reflecting the changing landscape of technology and business requirements.

Here are some best practices for measuring the success of your investments:

1. **Return on investment (ROI)**
   - **Cost savings:** Evaluate the cost savings achieved through reduced infrastructure expenses, improved resource utilization and operational efficiency gained from cloud adoption.
   - **Revenue generation:** Measure how cloud services contribute to revenue generation through enhanced agility, faster time to market and improved customer experiences.

2. **Performance and efficiency metrics**
   - **Application performance:** Assess the performance of applications running in the cloud, considering factors such as response times, latency and overall user experience.
   - **Resource utilization:** Monitor and optimize resource utilization to ensure the efficient use of computing resources, minimizing costs while maximizing performance.

3. **Agility and time to market**
   - **Development speed:** Evaluate the speed of application development and deployment, comparing it to precloud service processes to measure the impact on time to market.
   - **Innovation metrics:** Track the number and success of innovative projects or features brought to market as a result of increased agility.

4. **Security and compliance**
   - **Incident response metrics:** Measure the effectiveness of the cloud provider’s incident response and security measures by tracking the number and severity of security incidents.
   - **Compliance adherence:** Assess how well the organization meets industry-specific and regulatory compliance standards in the cloud environment.

5. **Scalability and availability**
   - **Scalability metrics:** Evaluate the ability of the cloud infrastructure to scale based on demand, ensuring that resources are available to handle peak workloads.
   - **Uptime and availability:** Monitor system uptime and availability to ensure that services are consistently accessible to users.

6. **User experience and satisfaction**
   - **User feedback:** Gather feedback from users regarding their experiences with cloud-based applications and services.
   - **Customer satisfaction metrics:** Assess how overall customer satisfaction and loyalty are influenced by the improved features and performance delivered through cloud technologies.

7. **Innovation and business impact**
   - **Innovation index:** Track the level of innovation within the organization by monitoring the number and success of new products, features and services delivered through cloud technologies.
   - **Business impact assessment:** Evaluate the broader impact of cloud investments on the organization’s competitive positioning, market share and overall business strategy.

8. **Operational efficiency**
   - **Automation metrics:** Measure the degree of automation achieved through cloud services, assessing the impact on operational efficiency and the reduction of manual processes.
   - **Resource management:** Assess the efficiency of resource management, considering factors such as the ability to scale resources dynamically and optimize costs.
The powerful combination of managed services and cloud-native modernization

Improve time to market
Cloud services play a pivotal role in accelerating time to market for products and services. Organizations leverage cloud infrastructure to streamline development processes, reducing the time it takes to bring new offerings to market.

Strategically evolved cloud adoption practices in both managed services and cloud-native services often result in shorter product-development cycles, allowing businesses to respond swiftly to market demands and gain a competitive edge.

The combination of managed services and cloud-native services enable organizations to deploy and iterate on new features quickly, shortening development cycles. Consider the example of Salesforce and its CRM platform. Salesforce's agile development approach, powered by cloud services, allows the company to introduce new features and updates regularly. This rapid innovation not only keeps Salesforce at the forefront of the CRM market but also showcases the transformative impact of cloud services on time to market.

Focus on personalization and engagement
Cloud technologies are instrumental in creating personalized and responsive customer experiences. Cloud-savvy businesses can deliver seamless interactions, improve customer satisfaction and gain a competitive edge in the market through cloud-native services.

The retail, manufacturing, ecommerce, telecommunications and finance sectors have disrupted their business models by providing cloud-enabled customer experiences.

Companies in these industries are able to scale infrastructure based on demand to ensure that the platform remains responsive, even during peak seasons or periods. This focus on customer-centricity powered by cloud technologies underscores the pivotal role of the cloud in gaining a competitive edge through enhanced customer experiences.

Build competitive advantage through data analytics
The ability to harness data for actionable insights is a key component of modern competitiveness. Cloud-based analytics empower organizations to derive meaningful information from vast datasets, informing strategic decisions and gaining a competitive advantage.

Businesses can leverage cloud services for big data analytics, illustrating the transformative impact of data-driven decision-making on overall competitiveness.

Data analytics has evolved from being a support function to a strategic differentiator for businesses. Cloud services provide the scalability and processing power required to analyze large volumes of data in real time.

The future is here: AI and machine learning in the cloud
The integration of artificial intelligence (AI) and machine learning (ML) into cloud services will further redefine competitiveness.

Use cases from various industries showcase the transformative potential of AI and ML in enhancing competitiveness through predictive analytics, automation and personalized user experiences.

Cloud service providers are increasingly offering AI and ML services, allowing businesses to harness the power of these technologies. As AI and ML become more accessible through cloud services, businesses across industries will have the opportunity to leverage these technologies for competitive advantage.
Getting started: How to maximize investments in managed services and cloud-native practices

**Keep business goals in sight, always**
Make investments that will help the organization achieve its business goals.
Aligning technology and services to meet business needs is step one. But the reality is, understanding how cloud-native and managed services can improve processes and applications that support business goals can be a daunting and complex task for many enterprise and mid-size businesses.

A cloud service provider can step in and offer valuable assistance in discovering where and how to get started. Perhaps there is a business need to improve customer satisfaction (Net Promoter Score) or quantify cost savings from a cloud migration project. Maybe there’s a new requirement to build and manage a cloud-native architecture with new microservices to get to market faster.

**Find where you can improve speed, quality and performance**
Application performance issues and unexpected downtime are two strong indicators of a need for cloud-native modernization and managed services support.

Are there frequent application or cloud performance slowdowns, especially when demand is high? Is there extended downtime when resolving application issues or restarting an application?

With cloud-native modernization and managed services, you can strengthen business resilience through specialized skills and staffing augmentation to ensure platforms stay up and running and perform at optimized levels.

**Understand the value of your legacy systems**
An important step along the discovery process is assessing the value of legacy systems and their impact.

“Legacy” does not necessarily mean “old”. It can refer to technologies or applications that have been surpassed by more advanced versions. Their core functionality remains relevant, but they may need to move to a platform that offers better support.

Approach each project with a transformation mindset rather than focusing on lift-and-shift or transition. Any business needs to think about the value the legacy system is bringing and how to bridge the gap between legacy systems and cloud-native services for a smooth transition and integration.

This is often a complex task. Cloud service providers can help to first identify what makes sense for the business, then assist with migration projects. Look for service providers who have strong references in executing migration projects with no downtime.
Look for experience, from discovery to delivery

CSPs start with discovery and assessment, gathering critical information about your existing systems. From there, they look at your business objectives in order to create a modernization plan that maps to your desired outcomes. Depending on the needs of the business, discovery may go deeper into one or many of the following areas:

- Cloud architecture strategy and design
- Migration assessment for application workloads
- Migration execution: app deployment, data migration, IaaS transition
- Incident management: tracking, issue resolution, workload analysis
- Resource optimization: storage/compute, IaaS rightsizing
- Security services: governance, risk and compliance, zero trust and security remediation
- Business continuity and disaster recovery services
- Identity management: access control, single sign-on, security policies

Your managed cloud service provider will have a significant impact on your organization's performance, so you will need to choose wisely.

While the CSP's reputation and track record in the industry are important, also consider their range of services and capabilities. These should align with your organization's specific needs, whether you're looking for infrastructure as a service (IaaS), platform as a service (Paas) or software as a service (Saas).

The CSP should also have expertise in areas such as data analytics, machine learning and security, signaling its ability to directly serve you with more complex or future-based project support.

Lastly, it is not just the CSP's own abilities that matter but also their certifications and collaborative track record with strategic partners such as hyperscalers, network services and ERP providers, all of which will benefit an organization along their cloud journey. A highly certified CSP is more likely to have a deep understanding of the current cloud landscape and be able to purpose-fit solutions based on your organization's specific business profile.

Select the right partner: best practice guidance

Partnering with a CSP is a strategic decision that significantly impacts a organization's operational efficiency, security posture and overall success in the cloud. To ensure a successful collaboration, consider the following best practices:

1. Define clear objectives and requirements
   Clearly articulate your business goals, expectations and specific requirements to the managed cloud service provider. Establish a shared understanding of key performance indicators (KPIs) and success criteria.

2. Align with business strategy
   Ensure that the CSP aligns with your overall business strategy. The partnership should contribute to your organization's goals, whether they involve cost optimization, scalability, security enhancement or a combination of these factors.

3. Evaluate provider expertise
   Assess the provider's expertise in the specific cloud platform (for example, AWS, Azure or Google Cloud) that aligns with your organization's needs. Look for certifications, case studies and relevant experience in managing similar environments.

4. Prioritize security and compliance
   Ensure that the managed cloud service provider has robust security measures in place, adheres to industry standards and can help your organization meet regulatory requirements.

5. Establish clearly defined service level agreements (SLAs)
   Establish comprehensive SLAs that clearly define the scope of services, performance expectations and responsibilities of both parties. Include metrics such as uptime guarantees, incident response times and resolution procedures.

6. Foster effective communication and collaboration
   Establish open communication channels to promote a collaborative relationship. Regularly engage in discussions about ongoing needs, changes in business objectives and emerging challenges to ensure alignment.
7. **Evaluate scalability and flexibility**
   Ensure that the provider is able to scale with your organization's growth. Evaluate the provider's ability to adapt to changing requirements, accommodate increased workloads and support the introduction of new technologies.

8. **Implement continuous monitoring and optimization**
   Implement continuous monitoring of your cloud environment to identify potential issues and optimize resource usage. Work with the managed cloud service provider to implement cost optimization strategies and ensure efficient cloud operations.

9. **Test disaster recovery and business continuity**
   Confirm that the managed cloud service provider has robust disaster recovery and business continuity plans in place. Test these plans regularly to validate their effectiveness in mitigating potential risks.

10. **Request transparent reporting and analytics**
    This will give you insights into the performance, security and cost efficiency of your cloud environment. Regularly review reports to identify opportunities for improvement and optimization.

11. **Keep learning**
    Promote knowledge transfer between your internal teams and the managed cloud service provider. Invest in training sessions to ensure that your staff are familiar with the cloud environment and can collaborate effectively.

12. **Seek financial transparency**
    Make sure you understand the pricing model, potential additional costs and methods for optimizing spending. Regularly review billing statements and engage in discussions about cost-saving opportunities.

13. **Document everything**
    Ensure that all processes, configurations and policies are thoroughly documented. This documentation serves as a valuable resource for both your internal teams and the managed cloud service provider, fostering clarity and consistency.

14. **Conduct regular performance reviews**
    Conduct regular performance reviews and check-ins with the managed cloud service provider. Evaluate whether the partnership is meeting expectations, discuss any challenges and identify opportunities for improvement.

By adhering to these best practices, organizations can establish a strong and collaborative partnership with their cloud service provider, ensuring that cloud environments are optimized, secure and aligned with the company's strategic objectives. Regularly reassess the partnership to adapt to changing business needs and emerging technologies in the cloud landscape.

**Embarking on modernization or implementing managed services without clearly defined goals and objectives linked to core business outcomes can lead to directionless efforts and on-the-spot decisions, resulting in wasted resources, scope creep and missed opportunities.**
Realizing the value of cloud starts with the right understanding of cloud. When you view cloud as the enabler of your business outcomes, great things happen to your business.

Here are seven steps to get you started:

1. Start a process of discovery and assessment ahead of building a broader business case that includes a plan to monitor the success of each phase of your cloud transformation journey.

2. Conduct a detailed assessment of your technology needs and your organization’s technology footprint to develop an evolution roadmap that avoids creating a siloed technology landscape.

3. Understand the level of security and data protection that CSPs offer and how this compares with or could enhance your current security controls.

4. Instead of upskilling and reskilling in-house, explore how a CSP could help you move to a cloud-native architecture and pass on skills to your IT team, too.

5. Adopt a highly agile, product-centric operating model with an increased focus on DevSecOps and SRE.

6. Align your organization’s leadership with your long-term cloud goals.

7. Drive these projects with a phased approach instead of basing your strategy on an immediate return on investment.
About NTT DATA

NTT DATA, part of NTT Group, is a trusted global innovator of IT and business services. We help clients transform through consulting, industry solutions, business process services, IT modernization and managed services. NTT DATA enables clients, as well as society, to move confidently into the digital future. We are committed to our clients’ long-term success and combine global reach with local client attention to serve them in over 50 countries. In addition to being named a top employer in over 20 countries in 2023, we collaborate and have strategic relationships with market-leading technology and cloud service providers, including Microsoft, Google, Salesforce, SAP and Cisco. We are committed to help you create competitive advantage through IT innovation. We recognize you need partners who can help you distinguish and differentiate – fast.

Unrivaled capabilities to support client outcomes

Financial services  Healthcare  Insurance  Life sciences & pharma  Higher education & research  Travel, transportation & logistics
Public sector  Automotive  Retail & CPG  Telecom, Media & Technology  Energy & utilities  Manufacturing
Application services  Digital workplace  Data & intelligence  Network services  Business consulting
CX & Design  BPO  Cloud & IT infrastructure  Cybersecurity  Technology solutions & integration
Climate & Nature  Corporate Sustainability  Sustainable Value Chain  Sustainable IT  Smart in Sustainability
Digital backbone
#5 largest IP backbones by CAIDA
#3 global data center provider (100 data centers in 30 cities)
>16Tbps global submarine cable

Connect

Secure & sustainable by design

Create

Digital business innovation
Driving profitable growth & disruption
Redesigning the customer experience

Platforms

Achieving business agility with intelligent distributed clouds and digital fabric

Digital backbone

Connect