



The digital revolution has led to an increasing number of organizations adopting cloud to meet their needs.

More than 90% of respondents to 451 Research's <u>Voice of the Enterprise</u>: <u>Cloud, Hosting & Managed Services</u>, <u>Budgets & Outlook 2022 survey</u> said they were at least considering a digital transformation strategy – with more than half actively executing such a strategy. They also rated cloud platforms routinely among the most transformational technologies.

This has generated opportunities for independent software vendors (ISVs) to sell their applications on a subscription basis – as software as a service (SaaS) or platform as a service (PaaS). To give their customers reliable and secure cloudbased offerings, ISVs need to choose the right cloud infrastructure provider. We explore what they need to consider when selecting a partner that can support their business growth.



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Why ISVs are developing cloud-based, as-a-service solutions

Cloud-based solutions have become popular among ISVs due to their accessibility from anywhere, cost savings, and flexibility. Additionally, these solutions allow for tailoring products to meet specific needs, making them an attractive option for both developers and users alike. Let's take a detailed look at why ISVs are developing cloud-based, as-a-service solutions.

Customer demand

Today's customers demand more flexible and scalable solutions that can be deployed quickly and easily. As-a-service solutions offer several benefits over traditional software applications, including ease of use, scalability and accessibility from anywhere.

According to NTT's <u>2022–23 Global Network Report</u>, more than 9 in 10 organizations agree that most of their network functions will move to the cloud, while our other <u>research</u> suggests that 80.4% of users say cloud solutions have helped future-proof their technology infrastructures.

So, customers will increasingly demand as-a-service delivery or new solutions, and ISVs that fail to adapt may risk losing market share to competitors.

Business growth

One of the most significant advantages of as-a-service solutions is that they expand the addressable market for ISVs. Because these solutions are accessible from anywhere, ISVs can reach customers globally.

In addition, SaaS solutions are designed to be agile and responsive, allowing ISVs to easily modify and update their as-a-service solutions to meet changing customer needs and market trends. This agility can help ISVs gain a significant advantage – 80.3% of organizations say cloud solutions have improved their flexibility and 76% report that cloud solutions have increased their uptime and reliability, according to our research.

With traditional software sales, ISVs would often need to invest in additional infrastructure and support personnel as their customer base grew. With as-a-service, however, the infrastructure is typically cloud-based and can be scaled up or down as needed. This means that ISVs can more easily accommodate growth without incurring significant expenses.

Recurring revenue

With traditional software sales, ISVs would typically sell a license to a customer, then wait for them to upgrade or purchase another product. This approach can be unpredictable and difficult to plan for.

With as-a-service, however, customers pay a monthly or annual subscription fee, which provides a predictable stream of revenue. This makes it easier for ISVs to plan for growth and invest in new features and functionality.



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NTT's 2022-23 Global Network Report

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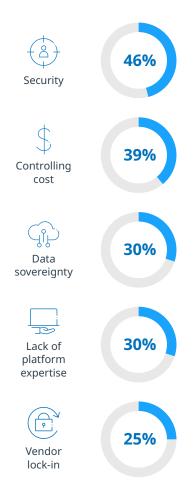
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Starting strong

Why choosing the right cloud provider is so important

Moving to the cloud to adopt the as-a-service model is not easy, particularly if you don't have the required expertise.

Respondents to the 451 Research survey cited concerns about security (46%), controlling cost (39%), data sovereignty (30%), a lack of platform expertise (30%) and vendor lock-in (25%) as factors limiting their use of cloud.



For some ISVs, the difficulties start with assessing the many cloud providers in the market, each with their own strengths and weaknesses, and selecting the right one to take their products to the next level. It is important to consider factors such as cost-effectiveness, scalability, data security, and reliability in making this decision, as they all play a crucial role in determining the overall success of the product. Budget is always a critical consideration.

ISVs may need to choose a platform that provides a balance between cost and performance. While cloud platforms like Amazon Web Services (AWS) or Azure may provide the most extensive set of features, they may also come with a higher price tag. Other, more cost-effective platforms could fall within budget while still providing adequate performance and scalability.

ISVs must also consider the potential cost implications of moving to the cloud. While the pay-as-you-go model of cloud computing can help to save costs, there are expenses associated with migration, training and the ongoing management of cloud infrastructure to consider.

Availability affects revenue

Downtime can be disastrous for organizations, and a single outage can negatively affect an ISV's reputation and revenue. To mitigate these risks, ISVs should choose a cloud provider that offers more than just basic infrastructure services. The provider should also have thorough disaster recovery and business continuity plans in place. Such measures ensure the seamless availability of applications even in the face of unforeseen events, providing the necessary resilience to bounce back quickly from disruptions. Workload requirements

dictate the platform.

Depending on the workload, ISVs may require a cloud platform with high scalability, performance, and availability. For a high-traffic application that needs rapid scaling, a cloud platform such as AWS or Microsoft Azure could be the ideal choice. For an application with a more data-intensive workload requiring high-performance computing capabilities, a platform such as Google Cloud Platform (GCP) might be more suitable.

In addition, for ISVs that need greater control over their data and infrastructure, a private cloud solution, which provides dedicated resources and infrastructure, may be a better option. Private cloud solutions can be hosted internally or externally and managed by the organization's IT staff or a third-party provider.

Regulatory and compliance requirements must not be neglected

Data protection laws, privacy regulations and industry-specific compliance standards are another consideration.

If the cloud provider doesn't adhere to regulations that apply to the ISV, the ISV itself may face penalties and reputational damage.

These regulatory and compliance requirements differ from country to country and from industry to industry, and it's important for ISVs to choose a cloud platform that can help them meet these requirements and provide adequate data security measures. For example, ISVs in the healthcare industry may require a platform that meets Health Insurance Portability and Accountability Act (HIPAA) compliance standards, while those in financial services may need a platform that meets PCI compliance standards.



Choosing the wrong cloud service provider can lead to unnecessary expenses, poor performance and lost revenue.

5 things to look for in a cloud provider

Choosing the right cloud service provider can make all the difference in the success of an ISV's business. But with so many options available, it can be overwhelming to determine which provider will best suit their needs.

Here are five key factors ISVs should consider when evaluating cloud infrastructure providers.

1. Reliability and uptime

The first and most important factor to consider is the reliability and uptime of the provider's infrastructure. Downtime can be costly for any business, but it can be disastrous for ISVs whose customers rely on their software to run their businesses. Look for a provider with a reputation for high uptime and a proven track record of reliability. It's also wise to research their historical performance and look for evidence of consistent uptime over a long period. Additionally, assess the provider's infrastructure design and redundancy measures. A dependable provider will have backup power supplies, multiple data centers, and network redundancy to reduce the risk of single points of failure. They should also have a solid disaster recovery plan in place, including regular backups, data replication, and failover mechanisms.

2. Scalability

As an ISV's business grows, they will require a cloud provider that can keep pace with their expansion and provide the necessary resources to support their increasing customer base. A reliable cloud provider should offer flexible scaling options that automatically adjust capacity to ensure consistent and predictable performance, all while keeping costs at a minimum.

3. Security

As an ISV, it's important to choose a provider that takes security seriously and follows a secure-by-design approach to safeguard your customer's valuable information. This approach ensures that security measures are integrated into every aspect of the cloud provider's infrastructure and processes from the ground up. Look for a provider that employs industry-standard practices such as access

controls, firewalls, and intrusion detection systems to protect their physical data centers, networks, and hardware. Make sure the provider offers comprehensive identity and access management solutions, including multi-factor authentication and user activity monitoring. By partnering with a cloud provider that follows this approach, ISVs can have peace of mind that their customer's sensitive data is protected at all times.

4. Performance

Customers expect fast, responsive software, and an ISV's cloud infrastructure provider plays a key role in delivering that performance.

Look for a provider with a high-performing infrastructure that can handle the demands of your software. Additionally, consider the provider's track record for uptime and reliability, as well as their ability to quickly address any performance issues that may arise. By carefully evaluating these factors, you can choose a provider that will help ensure that your software delivers the performance that your customers demand, and they will continue to keep coming back for more.

5. Cost

Cost is always a consideration when evaluating cloud infrastructure providers.

A provider should offer transparent pricing and a variety of pricing options to fit your budget. Look for comprehensive information on the services they offer and how they are priced. Determine if they offer flexibility in choosing the pricing model that aligns with your budget and usage patterns. A transparent provider will provide a granular breakdown of costs, allowing you to understand the cost drivers and make informed decisions.

We work closely with you to determine the optimal cloud platform(s) and deploy the right as-a-service landscape, enabling you to focus on your business priorities, stay competitive and meet your customers' evolving needs.

The value of expert support

Managing cloud infrastructure can be complex and timeconsuming, and many ISVs may need help to handle it effectively. That's why partnering with professionals who specialize in cloud infrastructure management can be a smart move. It allows ISVs to focus on their core competency of developing innovative software solutions while delegating the responsibility of infrastructure management to experts. Seeking expert advice also ensures that the cloud infrastructure is optimized for performance and efficiency, provides valuable insights into emerging technologies and industry trends, and contributes to cost optimization. Ultimately, partnering with experts empowers ISVs to navigate the complexities of cloud environments effectively and achieve success in the digital landscape.

NTT's approach

At NTT, we understand the importance of seamlessly integrating software offerings with a cloud service landscape. We also get that each ISV has their own unique set of requirements and constraints. That's why we work closely with them to determine one or more optimal cloud platforms, considering factors such as workload requirements, regulatory compliance and budget.

Choosing the platform

With a strong focus on reliability, security, scalability, cost transparency, and performance, NTT empowers ISVs to build and deliver resilient, secure, scalable, and cost-effective solutions to their customers. Our solutions for public, private and hybrid cloud allow us to help ISVs deploy the appropriate cloud solution for the business and application's sensitivity, regulatory requirements and budget. For example, public-cloud solutions such as AWS, Azure or GCP provide a flexible and scalable environment, while private



cloud solutions based on VMware offer more control and customization. Hybrid cloud solutions combine the best of both public and private cloud environments.

Scaling the solution

Once the cloud solution is deployed, it's essential to ensure that it can be easily scaled as business needs change. Our team provides guidance on how to do this by using the resources available in the cloud. This includes recommendations on autoscaling, load balancing and resource management. We also assist in designing an architecture that can adapt to everchanging business requirements.

Supporting ongoing performance

We understand that deploying a cloud solution can be complex, and that's why we provide ongoing support around the clock to troubleshoot any issues that may arise. We also provide guidance on optimizing the cloud environment for performance and cost. Our proactive monitoring and management services ensure that your cloud solution is always up to date and secure.

By partnering with NTT, you can benefit from our expertise and experience in building a cloud service landscape that is optimized, scalable, compliant and aligned with your business needs. This approach ensures that your software applications can be seamlessly integrated with our cloud platform, allowing you to deliver a comprehensive solution to your customers without sacrificing performance or security.

Making a difference

We applied this approach to deliver agility and optimization to one of India's leading fintech ISVs.



<u>Intellect Design Arena</u> offers the world's largest cloud-native, microservices-based multiproduct platform for organizations in banking, financial service and insurance.

However, their infrastructure did not support the development, testing and deployment of their apps for their customers following agile methodologies. Costs were a concern, too, as they operate in a competitive market, and they lacked the in-house expertise to move forward.

We helped Intellect Design Arena to adopt a modernized, cloud-native approach by deploying containers and microservices on Kubernetes and Openshift. This has led to greater efficiencies that boosted the organization's time to market and, importantly, cut costs by more than 30%.



India-based **Mobicule**, which offers a debt-recovery platform for organizations that want to recover outstanding debts quickly and easily, faced similar challenges. They wanted to scale their operations in a more agile way while managing their sprawling costs.

We devised a cloud and technology roadmap that would allow them to architect their application knowing it would run on a stable, scalable cloud platform. Our cloud discovery, solution and implementation sprints allowed Mobicule to take their offerings to market quickly and retain their first-mover advantage.

Now, our cloud strategy allows Mobicule to grow quickly on a public-cloud platform seamlessly integrated with private cloud as part of an optimal hybrid-cloud strategy, which has helped to contain their costs and boost their business performance.

Why NTT



Global experience

More than 15,000 security engagements with clients spanning 49 countries across multiple industries



Track record

Decades of experience in providing professional, support, managed and fully outsourced security services to over 6,000 clients



Expert skills

Highly certified security consultants with expertise across various infrastructures, systems and application technologies



Proven approach

Pragmatic, client-centric approach using proven assessments, methodologies, frameworks and best practices to deliver consistent, highquality engagements



If you want to learn more, email us at India-Marketing@global.ntt or give us a call at 1800 103 3130



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