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THOUGHT LEADERSHIP | DIGITAL TRANSFORMATION SERVICES

Fueling Growth
With Public Cloud

NTT DATA

Growth is a common goal for nearly every business. And increased market share, revenues and profits are among the most fundamental measures of success. Companies can hit those targets by improving customer service, launching new products or expanding geographically. Historically, however, rapid, unfettered growth has been reserved for ambitious upstart firms. Long-established companies have been content to grow at a slow and steady pace, achieving predictable annual gains to keep shareholders satisfied. But technology — and all the things it makes possible — changes that mindset for even the largest industry players.

While the journey of digital transformation is underway in most sizable organizations, the majority has yet to realize the true growth potential technology enables. Understandably, these firms tend to focus on implementing digital solutions to improve cost, productivity and efficiency. Although certainly worthwhile, as these pursuits ultimately contribute to a higher performing organization, they often provide subtle enhancements in support of long-term incremental growth. What many companies miss are opportunities for near-term, explosive game-changing growth.

Not long ago, infrastructure constraints prevented companies from achieving such rapid growth, for fear of taking on too much, too fast. But today's public cloud solutions provide an on-demand platform that's immediately and infinitely scalable, empowering business leaders to think bigger. They can pursue aggressive growth with confidence, knowing the company's technology infrastructure will be able to keep up.

According to the annual Innovation Index by Oxford Economics and NTT DATA, 51% of respondents say that growing the business is their top organizational goal for the next two years, followed by improving profitability (48%) and increasing process efficiency (45%).[1]

In this paper, we take a closer look at how moving key infrastructure and applications to the cloud can open new doors to growth. We also share some recent success stories from NTT DATA clients and offer advice on how to execute a successful transition.

Making the case for the cloud

In today's fast-moving, digitally enabled business landscape, no company is immune to the threat of disruption. Smaller, younger competitors enjoy the advantages of being technically nimble. These organizations are free from the legacy systems and architecture that tie more established companies to the past. For larger incumbents, innovating and beating competitors to market aren't only keys to growth; they're critical to survival.

Growth, however, doesn't come easily in a hypercompetitive marketplace where technology emboldens competitors and heightens customer expectations. To keep their edge, companies need advanced technologies that empower employees, deliver valuable business insight, enable outstanding customer experiences and provide a foundation for unrestricted growth. For many companies, outdated legacy architecture simply can't meet these demands and moving to the cloud is a good option.

Here are six ways transitioning to a cloud platform can help businesses clear technological hurdles and accelerate growth.

1. Scalability.

Probably the most pertinent aspect of unlocking rapid growth is a business' ability to scale its resources. Traditional, on-premises infrastructure has finite limits to its storage capacity, computing power and networking throughput, which spikes in demand can quickly overwhelm. Cloud-based platforms offer the elasticity to provide as much capability as companies need as soon as they need it.

2. Resilience and flexibility.

Eventually, every business faces disruptive forces, whether from a competitor or an unforeseen event like COVID-19, that test its ability to adapt and overcome. The rigid limitations of physical infrastructure often fall short. With the cloud, companies can quickly react to threats, develop and support new business models, and continue to grow in different directions.

3. Data expertise.

With scalable storage and processing power comes the ability to take full advantage of big data. As companies adopt the right mechanisms to capture and analyze useful data effectively, they can leverage that insight to capitalize on growth opportunities.

4. Shortened time to market.

As new technologies help companies work smarter and faster, the pace of innovation continues to increase, and competitive pressure intensifies. First-mover advantage is incredibly important when developing and launching new products and services. And moving key systems to the cloud can facilitate a quick jump off the starting line. For example, working in the cloud makes it easier to adopt agile and DevOps techniques. It enables development teams to conceptualize, create, test and deploy projects through a central platform.

5. Reduced technical debt.

Outdated legacy systems are like a heavy weight that drags down the company's performance potential. When a firm stops spending valuable time, energy and money supporting old technology and services, it can use the most advanced tools available to meet future demands.

6. Reduced costs.

One of the cloud's most recognized benefits is the avoidance of capital expenditures in favor of subscription-based services. Today's cloud services offer a robust portfolio of cost-optimization tools to help companies pay for exactly what they need — and nothing more.

Visualizing success in the cloud

Although the business case for cloud makes sense on paper, it's not always easy for companies to translate the benefits to complex operations. The following success stories offer a glimpse of how several companies leveraged cloud services to spur growth in various ways. Far from an exhaustive list of use cases, these are merely examples that may serve as inspiration as companies examine their needs.

Empowering a sales force

A global provider of health and wellness products and services wanted to equip its sales force with powerful digital tools to accelerate growth. The client's internal software development team had already built a full-featured sales enablement platform. It gives sales agents a single, unified view into customer data, sales metrics and product information. It's also a simpler and more efficient way to manage their independent businesses. But the client knew that the demands of the system were too much for the company's on-premises database infrastructure to handle.

NTT DATA helped the client transition its platform to a cloud-based data warehouse and analytics architecture. The platform's back end is on the Amazon Web Services (AWS) Cloud and uses Amazon Redshift as the data warehouse. It gives the company as much on-demand storage and data-crunching power as it needs. And the company no longer has the massive expense of building out additional infrastructure.

Sales agents eagerly adopted the application, using it to facilitate faster, more targeted and more profitable customer engagements. The platform helps these agents grow their businesses as part of a multi-level marketing network. They enlist and manage new agents in new locations to encourage additional sales. Since the new platform launched, the network has doubled in size to more than 80,000 sales agents. It currently supports more than 4.5 million customers. Such massive growth would have been impossible without the scalability of the cloud.

Cloud plus automation equals ultra-efficiency

Moving systems to the cloud comes with its own set of advantages. But companies gain even more powerful benefits when pairing cloud technologies with automation. Skilled IT practitioners use automated tools to streamline the many manual processes that optimize architecture and applications for the cloud environment. Once established, a cloud environment can auto-scale, so resources like storage and data processing can ramp up and down based on demand.

As cloud platforms mature, an increasing number of companies are deploying robotic process automation (RPA) in the cloud. RPA bots perform high-volume, repetitive tasks that require little decision-making but are nonetheless important. These jobs might include extracting and formatting raw data or managing workload distribution across IT infrastructure.

Whether it's a ready-built solution from the cloud provider or a piece of custom code, automation can amplify the cloud's advantages. Doing in seconds what used to take days frees IT staffers from mundane, time-consuming tasks so they can focus on more value-added work. And, most importantly, businesses can speed up the delivery of resources to employees and customers, fueling the company's growth engine with remarkable efficiency.

Accelerating innovation

A major U.S.-based investment company sought help to modernize its expansive applications portfolio and migrate it to the cloud. It wanted to easily scale applications to meet fluctuating demands, increase speed to market for new digital services, and reduce its data center footprint and operational costs.

The client's goals were a perfect fit for cloud migration. NTT DATA helped conduct an in-depth portfolio analysis of the company's 180 applications. The team determined it would migrate 55 front-office applications to the AWS Cloud; 12 of those were considered ideally suited for microservices modernization. NTT DATA leveraged the Cloud Migration Factory on AWS to streamline the migration process. This approach enables companies to coordinate and automate many of the manual tasks involved in large-scale migrations.

With the smooth migration to the AWS Cloud, the client exited its data centers in less time. This reduced data center costs and mainframe MIPS consumption by a third. With 70% of its application delivery management pipelines automated, the company can bring new and exciting digital capabilities to customers ahead of its competitors. No technical debt and a 19% year-over-year efficiency improvement positions the client to meet customers' evolving needs and pursue new growth opportunities.

Supercharging analytics

A global pharmaceuticals leader recognized that it could grow its business using data analytics. But as its volume of available data and corresponding storage and processing needs grew, the company knew it needed a more robust analytics platform.

The client worked with NTT DATA over several years to architect and roll out an upgraded analytics platform. It used a spectrum of AWS services, such as Redshift, S3, Glue and EMR. Today, the platform has unlocked several important benefits that help the company grow. Automation in the AWS platform enables on-demand scaling. Now, user groups always have access to the powerful analytics capabilities they need, without the operational costs of a permanent data center.

With fewer data capture and analysis delays, the business can make informed decisions quickly, seize critical opportunities and build its competitive advantage. The new solution also offers rapid deployment of new environments. AWS automations such as CloudFormation make it possible to onboard a new application in a single day. The old data platform typically required several months.

Its fast, flexible and cost-effective data analytics platform better equips the company to anticipate the world's most pressing medical needs. It can accelerate new product innovation and quickly bring life-improving drugs to market.

Double down on growth with digital twins

As technology continues to advance, the physical and digital worlds increasingly overlap. One example of this merging reality is the growing use of digital twins. A digital twin is a virtual representation of something else; for example, a piece of machinery, a person, an entire factory or an end-to-end business process. The digital twin collects data (often via physical sensors or digital logs) from the real-world version of itself. It's monitored in real time throughout the original entity's lifecycle.

What do digital twins have to do with cloud-enabled business growth? The detailed data of the digital twin, collected and accessible to disparate teams via the cloud, provides deep insight into the entity's behavior. It also serves as a virtual test subject on which to run simulations risk-free. A digital twin can be a medical patient, sports car or telecom network. Industry professionals can use the digital twin to ideate and validate improvements, and then apply them in the real world.

It's yet another way the cloud enables businesses to speed better products and services to market at lower costs. And it's a winning formula for growth.

Migrating to the cloud successfully

Despite widespread recognition of cloud's benefits and a growing sense of urgency to capitalize, migration can present challenges. To increase the odds of a fruitful transition, consider the following tips from NTT DATA's cloud transformation team.

Align technical projects with the business growth agenda. For many large enterprises, identifying opportunities for cloud-enabled growth isn't the problem; it's deciding where to begin. To understand the company's growth strategies, technical and operational leaders should consult with senior executives. They can then examine the possibilities for how cloud transformation could support those goals. Management usually approves projects that are relatively low-cost, easy to implement and produce a near-term return on investment (that is, low-hanging fruit) first. Demonstrating some quick wins can often help the technology team build support for more complex initiatives.

Focus on the user experience. The ultimate beneficiaries of enhanced technologies are people, whether they work for the organization or buy from it. The more cloud transformation projects serve to empower users, remove friction and speed up processes, the more satisfied and engaged those people will be. When employees easily understand a new cloud-based analytics platform, they're more successful in generating indirect growth through insight and innovation. Similarly, customer-facing improvements like cloud-based applications can open entirely new revenue streams, but only if they provide an intuitive, seamless customer experience.

Explore all the options. People often use the phrase "moving to the cloud" generically, but there are many different paths to migration. Choosing the best one will depend on the company's business goals, existing infrastructure and investments, and security needs. Some companies aspire to host nearly the entire operation in the cloud. Others, especially larger enterprises, settle on a hybrid infrastructure of on-premises, private cloud and multiple public clouds. In such cases, each component serves a different purpose. A company's approach to migrating certain applications to the cloud can be a simple rehosting (also known as lift and shift). It can also make significant modifications to completely rebuild or replace an application. Weighing these alternatives will help a successful transition yield the desired benefits.

Acknowledge the human side of change. Our clients often say that the top challenges of migrating applications to the cloud are training — and keeping — existing staff on cloud skills; hiring external cloud experts; and implementing a lasting work culture that embraces change and encourages agility. In other words, these human-centered hurdles are more of a concern than the technical challenges of migration. That's why companies mustn't overlook the importance of change management activities that properly train and motivate employees to embrace new technologies. Without their buy-in, any technical improvements are far less impactful.

Assemble a strong team of experts. Many organizations discover that finding the right skills and talent is the most challenging aspect to a cloud migration project. Cloud migration is a worthwhile endeavor, but most companies need help to do it right. A common and battle-tested approach is to establish an internal program to upskill employees. Companies can also hire from the outside. Another option is partnering with an IT services provider like NTT DATA and selecting a primary hyperscaler like AWS as a preferred platform for digital transformation.

Public cloud adoption is up by almost one-third, from 58% in 2021 to 76% in 2022.[1]

Claiming a stake in the future

The digital transformation journey can involve a wide spectrum of technology upgrades. For most companies, a move to the cloud will be the most important enabler of business growth. As competitive pressure mounts in every industry, the need to make proactive and aggressive moves in the market grows more critical. Business agility and flexibility are essential attributes of tomorrow's leaders. Companies can claim those qualities by breaking free of restrictive architecture and sluggish systems. With a more empowered workforce, data-driven decision-making and the freedom to grow without constraints, proactive companies can be leaders in the cloud-enabled future.

Let's get started

See what NTT DATA can do for you.

- Deep industry expertise and market-leading technologies
- Tailored capabilities with your objectives in mind
- Partnerships to help you build and realize your vision

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Sources

1. Oxford Economics and NTT DATA. "Innovation Index: Shifting From Disruption to Growth." December 12, 2022. NTT DATA partnered with Oxford Economics to conduct a survey of 1,000 business and IT executives across 16 industries in North America to find out how organizations prioritize digital transformation and innovation initiatives. https://us.nttdata.com/en/engage/innovation-index

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