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Inspire the Next

Infrastructure Modernization: The Foundation of Your Digital Core

Innovative Uses of Data and Applications Determine Competitive Advantage

Tomorrow's competitive advantage will be determined by how well industry leaders innovate today. But the right foundation must be in place to support that innovation. Without an agile, modernized infrastructure, businesses may face competitive disadvantage – even if the technology and infrastructure they currently rely on have served their operations well in the past. There has never been more urgency for an infrastructure that supports the innovative and strategic uses of data, analytics and applications that drive new business processes than right now.

The right infrastructure makes all the difference when it comes to competitive advantage.

While IT has always faced constant change, little could prepare companies for the accelerated pace of change that now challenges business. The IT solutions that effectively handled the workloads of yesterday lack the flexibility to adapt swiftly to changing markets and business initiatives.

Today, IT is either leading the business into new opportunities and streamlining new business processes, or it's holding it back. IT is the engine of business innovation.

This new pace of change also creates a skills gap. Existing experts quickly fall behind when new IT processes and tools are deployed. This drags organizations further behind in adopting greater automation, predictive analysis and machine learning (ML).

Speed is essential in modernizing your business and business processes. Capitalizing on technology-dependent opportunities, anticipating changes in customer preference, and responding to competitive threats — these all require IT to be the company's innovation engine that gets the company there in time. Infrastructure modernization is the foundation for this innovation engine.

Modernizing your infrastructure before your competitors is key to digitalizing your business, accelerating your cloud strategies, harnessing the power of analytics, ML and artificial intelligence (AI), and out-maneuvering your competition.

The Key Trends Driving Infrastructure Modernization

The three most disruptive trends impacting your current infrastructure investment are the expanding digitalization of business operations, the exponential growth of data, and distributed cloud transformation. These trends will do more to challenge and stress the capabilities of your current infrastructure than anything else, so you'll need to consider where your organization stands with each of them.

Digitalization

Automated, digital business-process goals such as customer support or employee analytics require new types of applications. Is your infrastructure agile, flexible and scalable enough to accommodate a tidal wave of these automated digital-business-processing applications?

Data Growth

Data has been growing on an enormously steep curve for decades. What is different today is that it has been turbocharged by new analytics and ML-type apps. Plus, enormous amounts of data that was dark — archived or inactive — is now actively being used. Not only does this heighten the data deluge, but active use of the data also increases costs.

Current approaches to managing data will be overwhelmed by today's data growth. Are you able to add more and more capacity and still maintain efficient operations? What will impact your data ownership and costs when cloud-native applications and cloud datasets change the trajectory of data growth?

Distributed Cloud

Cloud projects have matured from simply moving select applications to the cloud to more advanced and sophisticated cloud strategies that involve hybrid cloud, multicloud, private cloud and even distributed cloud. These projects often place enormous stress on infrastructure put in place before cloud technologies were ever considered. Silos, redundancy and duplication must be avoided while ensuring that on-premises resources are part of that cloud strategy to provide a consistent and consolidated view of data.

The greater reliance on cloud infrastructure and platforms challenges IT to determine the right cloud strategy for each app or data type. But there is added pressure: Will the best choice now still be the best choice in three months? Are there places where all of the apps put in place are not being used or are underused? Is everything working together?

Together, these trends are accelerating the pace and magnitude of change in infrastructure requirements. They drive a new sense of urgency in such areas as application modernization, cloud migration, new cloud-based datasets, and real-time and predictive analytics.

The Problem With Cloud Workloads for Traditional Infrastructures

Even if your infrastructure is solely on premises, within your data center, you've no doubt experienced rising IT operations costs and longer response times for changes and updates. In addition, the process of acquiring new infrastructure and getting production workloads up and running can take time — even more so when your IT department doesn't have the time or skills to keep up with new technology.

> Don't let your infrastructure be an obstacle to change. Let it be a foundation for your competitive advantage.

Underperforming Infrastructure

Your current infrastructure was deployed at a time when it was the best choice with best practices. The issue now is that compelling events are demanding more from it. New business directions — changes in the market, changes in business strategy, and changes in the field — all demand greater agility. Your old data warehouse functions perfectly as a data repository, but can it handle massive growth? Can new applications access the data within to support new ideas? Further, as new solutions are added to assist old infrastructure elements, more staff time is needed to monitor and administer each new element. Are you spending more than you are saving?

90%

By the end of 2023, more than 90% of infrastructure and operations (I&O) organizations will have the majority of their staff working remotely.

Source: Smarter with Gartner®, Gartner Top 6 Trends Impacting Infrastructure & Operations in 2021, February 22, 2021.

Migration to Cloud

The initial approach of moving all workloads to one cloud invariably turns to migration to several clouds because a single cloud rarely fits the requirements of all workloads. As a result, you'll find you're managing multiple cloud solutions and providers, which leads to more tools, complexity and data duplication. And across all of these cloud silos you'll be charged with ensuring data protection and system-wide business continuity, as well as complying with regulations and corporate policies.

Use Case

Having worked with Hitachi, a trusted partner, for 30 years, a Swiss insurance provider chose infrastructure and services from Hitachi Vantara to improve customer services. The results: an effective storage capacity ratio of 1.85:1, approximately 12% higher than expected, with a path for easy expansion over the next five years.

A New Way

These challenges have led many organizations to recognize that they need a new approach for IT infrastructure. They recognize that their current infrastructure may be unable to deliver what's required.

They want infrastructure that will scale and optimize from edge to core to multicloud. In addition, it must meet service level requirements for new applications and complex cloud environments, achieve cost and resource targets, automate IT operations and adapt to new approaches to IT.

We believe what's needed is a modernized infrastructure leading to a distributed cloud that enables agility, efficiency and resiliency.

"Thanks to help from the Hitachi Vantara team, we've been able to access the skills and resources we need to create a secure, robust platform for our open banking solutions."

— VP, Research and Development at Canadian Financial Services Provider

Modern Infrastructure for Agility

A modernized infrastructure means on-premises infrastructure delivers the same qualities you value in cloud. This agile and flexible infrastructure must react to change and deliver services from edge to core to cloud, at any scale, anytime. It must go beyond what you expect from cloud when it comes to accelerating a distributed cloud infrastructure, managing workloads on premises or in the cloud, moving and accessing data, and optimizing resources across clouds.

Modern Infrastructure for Efficiency

A modernized infrastructure is automated and will streamline operations and optimize resources. It goes beyond automating operational tasks and automates insights into workload and application placement and how you conduct compliance audits. It not only automates what you've done in the past but also uses automation to achieve levels of effectiveness and efficiency that have been unattainable before. A modernized infrastructure supports "everything as a service" to help address skill shortages and budget requirements, lowers total cost of ownership (TCO) and improves return on investment (ROI).

Modern Infrastructure for Resiliency

A modernized infrastructure is resilient: It enables data security and protection for all data types across the distributed cloud and safeguards from ransomware attacks. It has the agility to avoid obsolescence. It responds to new applications and workloads, as well as changing requirements of applications. It enables governance to keep your organization in compliance with existing and new regulations. Finally, it means your infrastructure will keep going no matter what, reacting quickly and efficiently to changing demands.

"Hitachi Vantara helped us standardize our product and make it more robust, reliable and scalable. By working with a partner who has spent many years innovating its product sets and service offering, we knew we were in good hands and could focus more on our business goals and less on the infrastructure."

— Principal Engineer, Food and Drink Industry Technology Provider

When approaching infrastructure modernization, be sure that your strategy and partner address these criteria:

- Enable distributed cloud strategies.
- Support new applications and workloads.
- Revamp inefficient operations: reduce costs and staff numbers.

The Hitachi Vantara Approach

At Hitachi Vantara, we believe that today's infrastructure must be engineered to support your digital innovation, accelerating your cloud, your applications, your data. Modernized infrastructure is needed to provide the agility, efficiency and resilience required for new workloads, applications and requirements that are part of your future.

We take a holistic approach to infrastructure modernization, backed by 55+ years of information technology innovation, 25+ years of consulting expertise and 700+ cloud migrations. We apply best-in-class technologies, methodologies, experience and IP to achieve the outcomes that are important to you. We also offer a flexible consumption model for infrastructure, allowing cloud-like pay-per-use infrastructure.

Our experts will guide you on your infrastructure, application and data modernization journey so that you can make smart modernization decisions and build Your Cloud, Your Way.

Learn more about how Hitachi Vantara can help you with infrastructure modernization and all aspects of modernizing your digital core.

We Are Hitachi Vantara

We guide our customers from what's now to what's next by solving their digital challenges. Working alongside each customer, we apply our unmatched industrial and digital capabilities to their data and applications to benefit both business and society.

Hitachi Vantara