Accelerating Your Journey to the Cloud

The right cloud approach can drive innovation and deliver business results
The question is not whether to adopt cloud technologies, but rather when and how to make the journey to cloud faster with less risk. Why is this so, when the major ERP providers are offering support for on-premises solutions for the next five years or so? One reason is the threat of falling behind to competitors who are already reaping the business benefits of cloud. It’s no exaggeration to say that companies are adopting cloud technologies at a staggering pace. According to a report from IDC, at least half of IT spending by 2018 will be cloud-based. By 2020, cloud will reach 60 percent of all IT infrastructure, and 60 to 70 percent of all software, services, and technology spending.¹

The advantages of cloud

What’s driving the rapid take-up of cloud technologies? Several factors are especially important:

Responding to rapid change. Companies face increasing pressure to respond quickly to a changing marketplace. They can’t afford to be weighed down under legacy systems that take years to change. One analysis reports that for ERP implementations where the customer adopts out-of-the-box business processes and functionality, SaaS takes about 60 percent of the time to implement compared to an on-premises system implementation.²

Dealing with a complex application landscape and skills shortages. The application landscape is growing in volume and complexity. The IT skills needed to keep an organization constantly up to date are increasingly in short supply.

Increasing simplification and speed. Cloud significantly simplifies the steps and effort to take an application or business service global. For example, cloud takes more of an “out-of-the-box” approach to business processes, so less customization is required. This means that even a small start-up company can quickly deliver an application or service that is available globally, without the massive costs and complexity of the past.

For example, consider the cloud experience at highspeed rail operator, Eurostar. The company’s traditional data center agreement was about to expire, so they had to respond quickly and transfer dozens of applications to avoid incurring huge additional contracting costs. Eurostar wanted to transfer key systems to the cloud, migrate nearly 30 databases with terabytes of data, and turn on new features to enhance performance for users—all within six months. Hitachi Consulting helped Eurostar evaluate cloud options. The company decided on an Amazon Web Services platform to make key systems faster and easier for users and give development teams the ability to launch new internal applications quickly to make the business more efficient. Hitachi Consulting and Eurostar worked together to deliver the cloud migration in just five months with no impact on mission-critical work flows. Performance issues are now a thing of the past, and Eurostar has the IT agility it desires to remain at the forefront of its industry.

Creating a more flexible environment. Companies want scalability and flexibility. They want to ramp up their application and infrastructure needs when it’s necessary, then scale them back when it’s not. A retailer, for example, might need additional computing and storage capacity to meet seasonal demands without significant investment in additional infrastructure.

A second reason is that on-premises architectures have reached the end of their useful life and now are impeding business change and the ability to react quickly to marketplace events. The on-premises approach is now leading to higher costs and greater complexity for many organizations and often limits growth. Cloud offers the potential for flexible services that scale up and down with the organization’s needs, enabling digital transformation and benefits such as rapid entry into new markets, new product development in parallel systems, and easier acquisition integration. Yet cloud comes with its own set of complexities, and most companies are looking for ways to both simplify and accelerate their journey to cloud with less risk.
Unlock new capabilities. The cloud can unlock new capabilities that drive innovation within the business and provide the ability to operate in ways not possible in the past. In the cloud, new solutions can be deployed quickly without having to make large upfront investments.

For example, FairfieldNodal—a leader in ocean bottom seismic technology serving customers in the oil and gas industry—was struggling to adapt to declining oil prices and was looking for ways to transform its business and reduce costs.

Hitachi Consulting applied industry skills and business process experience to design an Oracle SaaS cloud solution that allowed FairfieldNodal to more effectively manage its business. The solution covered sales forecasting, planning, budgeting and finance functions. The cloud solution enables FairfieldNodal to drive sales strategies, sell new product offerings, and facilitate processing services to create 3D and 4D images of geological structures. Thanks to the cloud solution, FairfieldNodal lowered IT maintenance costs by 15 percent and reduced month-end and quarter-end processes from 15 days to two days.

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Begin with business objectives. Ironically, the technology itself should not be the initial focus of the discussion but rather business objectives and implications. That is, before you start any journey, it’s always good to know where you are heading and what you will experience when you arrive. You don’t often book a vacation without some research, an understanding of typical travel times or the facilities when you arrive. However, all too often cloud is the suggested destination for an organization with too little pre-planning, and with an insufficient understanding of the implications when it arrives.

Industry considerations. Companies need to consider various aspects of a cloud platform depending on their industry. For example, a great deal of attention is being paid right now to the public cloud. But if you’re an aerospace and defense company or a financial services firm, for example, various regulations might preclude you from adopting a public cloud solution. In this case, a hybrid model of both on-premises/private cloud and public cloud could be the answer.

Similarly, a manufacturer would need to choose a platform that makes sense for its business. The volume of transactions in terms of order processing may be very high—hundreds of thousands if not millions of transactions a day. A manufacturer typically has applications and physical pieces of equipment that all talk to each other. So, pushing all those transactions over a public cloud may not be particularly effective. And most companies have a kind of “secret sauce” that differentiates them in the marketplace. These systems of differentiation can be retained locally through an on-premises or private cloud approach and integrated with public cloud services to create a hybrid cloud architecture.

Security and privacy. Security and privacy are common concerns among companies making the move to cloud. A global company must deal with different, often complex laws in specific countries and regions—such as the European Union’s General Data Protection Regulation (GDPR), which regulates the export and processing of personal data outside the EU. With respect to security, cloud enables data to go where it is needed, when it is needed. This means that security needs to be there in advance to...
detect threats quickly, protect the organization, and correct attempts to compromise data. As cloud services mature, so do security capabilities such as better integration, reduced complexity and enhanced security visibility.

For example, international law firm Taylor Wessing works with clients in some of the world’s most dynamic industries including technology, life sciences, and media. A few years ago, it became clear to the firm that its technology infrastructure needed investment to remain robust and fit for purpose. Its dedicated data center was state of the art but its failover data center had become out of date and was struggling to keep pace with the fast-changing landscape of cyber threats and security issues.

Taylor Wessing turned to Hitachi Consulting to assist with an adaptable solution with greater resilience and tighter security. After close collaboration, Taylor Wessing chose Microsoft’s Azure cloud platform for complex data management. Hitachi Consulting seamlessly migrated Taylor Wessing’s test and development environments to virtual machines in an Infrastructure-as-a-Service (IaaS) environment. Hitachi Consulting also successfully deployed device management and improved mailbox management. Together, these solutions laid the foundation for an agile and progressive IT strategy and have revolutionized the way Taylor Wessing does business.

Keys to a successful journey to cloud

How can your cloud migration be accelerated safely with less risk and less disruption to your organization? Here are some important considerations.

**Provider capabilities.** Platform independence is important when it comes to the cloud—solutions that support private, public and hybrid cloud architectures along with traditional hosted infrastructure. Strategic alliances with all major cloud players are also critical, as is the ability to deliver at scale with an industrialized, proven approach in an industry-tailored manner. Look for tools and assets that increase speed with less risk. For example, tools exist that can extract configurations from an on-premises application and automatically migrate them to a cloud-based, SaaS solution.

**Integration.** Integration or re-integration is also a key consideration. If an organization is currently running everything on-premises and then moves a certain percentage of applications or transactions to the cloud, those may not “talk” to each other anymore, so the connections need to be reestablished. For example, a manufacturer may wish to move its purchasing environment to the cloud but then that environment needs to connect back to an on-premises inventory system. Performing that re-integration quickly is one way to accelerate cloud adoption and minimize business impact. Relying on proven tools can mitigate the risks of integrating disparate applications and platforms.
The next generation of cloud computing will support other technological innovations that will drive business performance improvements: Machine learning, artificial intelligence, blockchain-as-a-service, and Internet of Things (IoT) solutions will be some of the most important technologies and tools to drive business change. Companies should expect cloud providers and integrators to adopt and adapt these new technologies into cloud solutions.

The use of machine learning and artificial intelligence, in particular, will drive major waves of innovation and will reshape most industries and organizations. Further, the integration of machine learning with artificial intelligence solutions will unlock rich user experiences with natural language, digital assistants, and new mobility experiences.

The importance of a comprehensive assessment. Whether a company is planning a complete cloud migration or deploying a hybrid model, ensuring that a solid foundation is in place can help avoid future costly issues. A holistic top-down and bottom-up assessment of the enterprise can provide critical data points to support any future strategic decision. Examples include:

- Technical feasibility towards migration
- One-time costs
- Migration complexity
- Running cost comparisons
- Recommended cloud architecture

The outcome of any assessment should be the right platforming whether that is a private or public cloud, or a hybrid model. Special consideration should be given to the wider impacts of any cloud adoption on aspects of the organization including:

- Business processes and people
- Data integration
- Governance, risk and compliance
- Security, data jurisdiction and privacy
- Ongoing management and SLAs
Conclusion: Reaping greater strategic value from the cloud

The case for moving to the cloud is strong. Cloud offers organizations more flexibility along with services that can scale with the enterprise's needs and promote rapid deployments while providing access from anywhere with an Internet connection. Cloud can unlock new capabilities, enable digital transformation and provide greater efficiency, helping companies enter new markets, launch new products, or change business models faster with lower infrastructure or maintenance costs.

Choosing the right guide to assist you in the journey is vital. Look for an optimal combination of tools, methods, experience and skills. Cloud is important, so it’s important to get it right. In the midst of dramatic business and technology change, enterprises can look to cloud service providers to manage the underlying infrastructure, enabling a greater focus on growing the business by leveraging the most up-to-date technologies.

2 http://www.chainlinkresearch.com/media/docs/original/The%20Cost%20of%20Delay.pdf
About Hitachi Consulting

Hitachi Consulting is the global solutions and professional services organization within Hitachi Ltd., a global innovation leader in industrial and information technology solutions and an early pioneer of the Internet of Things. Hitachi Consulting is a business integrator for the IoT era and a catalyst for digital transformation. Using our deep domain knowledge, we collaborate with clients to help them innovate faster, maximize operational efficiency and realize measurable, sustainable business and societal value. As a consulting-led solutions company, we can help you leverage data as a strategic asset to drive competitive differentiation, customer loyalty and growth.