

## ADDING CLOUD TO THE SERVICE DELIVERY MIX

# Business Drivers and Organizational Considerations

Stanton Jones, ISG & Kalyan Kumar, HCL

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## INTRODUCTION

Large global organizations today are pursuing increasingly aggressive strategies to reap the benefits of cloud computing. SMBs, meanwhile, have already found that the barriers to a "go to cloud" strategy are minimal. With the advent of cloud computing, true "IT and Business alignment" is being achieved, as IT is at last becoming sufficiently agile to meet business needs. What began as Boardroom discussions have rapidly evolved into project plans now reaching execution stage. In today's "show me" environment, identifying specific workloads and matching them to appropriate cloud-based services and deployment models that achieve rapid results is imperative.

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Cloud Capabilities are being integrated into the existing service delivery framework to form a journey of adoption While recognizing that cloud computing is the future of IT, enterprises are taking a pragmatic approach of gradual adoption. Indeed, traditional IT delivery models remain highly relevant, and businesses are by no means discarding their existing systems to move lock, stock and barrel to "the cloud. "Successful cloud deployments tend to be discrete initiatives focused on specific business requirements and workloads. Clients, moreover, perceive correctly that implementing cloud solutions is not as easy as cloud suppliers suggest. Enterprises seek pragmatic adoption, focusing on business continuity and other associated risks, and are demonstrating readiness to adapt to cloud solutions. As such, cloud capabilities are being integrated into the existing service delivery framework to form a journey of adoption – which typically is a mix of in-house, managed service, captive, and offshore operations.

This jointly authored white paper examines how organizations are confronting the challenges of integrating cloud-based services into a traditional managed services model. General considerations around industry- and company-specific objectives are outlined, and case studies are used to illustrate a range of scenarios, strategies and benefits achieved.



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#### **CLOUD MYTHS**

Let's examine common myths and mis-perceptions surrounding cloud computing and try to clear the fog.

#### **MYTH1: Cloud computing always results in cost savings**

**Reality:** Whether cloud computing can save money or not depends on how the solution is implemented and managed. Most companies do not adequately consider the hidden cost of cloud adoption – costs that include migration, handling workload complexity (elements like size of instance), data center selection, operating system and bandwidth costs, etc. When comparing the cost of a cloud deployment to a traditional initiative, the costs of power, cooling, administration, staffing, and data center real estate for deploying the same application in-house or in traditional hosting must also be considered. Ultimately, cloud implementation costs are recovered through significant benefits in terms of business agility and responsiveness. The key to cost-effectiveness in the cloud is to align cloud implementation and management to business requirements.

#### **MYTH 2: Virtualization is Cloud Computing**

**Reality:** Virtualization is integral to cloud computing but the two are not synonymous. Specifically, automation and management around virtualization results in the ability of cloud-based services to deploy and scale infrastructure rapidly, on-demand, on a pay-asyou-go basis from a shared pool of resources.

#### **MYTH 3: Cloud is Insecure**

Cloud-based services are generally designed and built to be more secure than traditional large enterprise data centers. **Reality:** Because cloud security threats are very well documented and clearly understood, cloud-based services are generally designed and built to be more secure than traditional large enterprise data centers. Specific security and compliance requirements can also be addressed. Customers must focus on a deep dive approach into contracts and SLAs to ensure that they meet their organizations' data location, control, and security requirements. Cloud providers and customers must be able to segregate between security, regulatory compliance and other considerations. For example data can be secure in cloud but not comply with certain compliance norms. This requires candid discussion and clarity from both the sides.

#### MYTH 4: Cloud leads to Vendor lock-in

**Reality:** Once a customer is tied to one vendor's platform, moving to another vendor (e.g., VMware to Citrix to Microsoft) can potentially be very difficult due to design constraints. One way to address this issue is to work with a service provider that can manage a multi-vendor hybrid cloud solution and eco system. The ability to manage multi-vendor Service Level Agreements, avoid lock-in and ensure flexibility at different levels is essential, and should be discussed in advance and documented in contractual obligations.



#### **CLOUD OBJECTIVES**

HCL surveyed over 40 customers over the past 12 months and identified four factors driving an increased focus on cloud adoption:

- 1. Cost Reduction
- 2. Scalability
- **3.** Consolidation
- 4. Service Improvement

Recent client experiences illustrate how businesses are using cloud adoption to address these objectives.



#### **Objective 1: Cost Reduction**

While the economy is improving, cost reduction is always an imperative; indeed, the HCL survey shows that cost reduction remains the dominant objective driving cloud adoption globally. In addition, cloud platforms provide the option to cost efficiently pilot new processes and applications, freeing up critical capital to invest in growth areas.

HCL is currently working with a major North American roadside assistance company to achieve a 40 percent cost reduction of in-scope activities through implementation of a hybrid cloud solution for specific elements of both infrastructure and applications. In addition to cost savings, the client's objectives include increased agility through standardized solutions to speed deployment, as well as process improvement through transitioning to a fully ITILcompliant operational framework.



ISG, meanwhile, recently worked with an operating group of a large media conglomerate, which owns more than 15 business-to-business information services, electronic databases and publications that are organized into multiple business units. By consolidating its production application hosting to an integrated managed hosting and Cloud IaaS environment, the company is anticipating a 50 percent reduction in hosting management costs year-over-year, in addition to now having access to world-class hosting capabilities to match its needs for both growth and agility.

#### **Objective 2: Scalability**

Scalability is one of the key potential benefits of cloud-based service delivery. For example, in a traditional service delivery environment, provisioning of server resources can take weeks, resulting in a significant business constraint. An infrastructure-as-a-service (IaaS) cloud-based delivery model, meanwhile, enables self-provisioning on-demand. In this instance, a customer can realistically renegotiate an existing service level around provisioning time and use an IaaS service delivery model to address a real business issue. The solution, however, by no means requires a full-scale transition to cloud computing.

In practice, this approach can help a business manage the vagaries of business cycles. A major European industrial manufacturer engaged HCL to provision a highly flexible laaS solution to accommodate variations in demand that frequently spike 30 percent up or down. The infrastructure was characterized by:

- **1.** Over 200 server instances ramping up to 1000 instances.
- **2.** A "SAP on demand" Infrastructure starting from over 2250K SAPS and ramping up to 850K SAPS covering the entire SAP estate.
- 3. Storage/Backup capacity ranging from over 100 TB going up to over 500 TB.

The solution – implemented over 30 months – yielded cost savings and provided flexibility in catering to ad hoc server build requests, as well as flexibility and transparency in pricing and volume scalability to respond to frequent changes in demand.

#### **Objective 3: Consolidation**

Cloud platforms – or, more specifically, IaaS and SaaS models – enable operational consolidation by eliminating the connection between physical servers and the applications that run on these servers. Workloads also become more flexible, and are more easily able to move in between service delivery models, like traditional managed hosting and cloud infrastructure-as-a-service.

Operational consolidation enabled by cloud has many benefits, chief among them service improvement and cost reduction.

For example, ISG recently helped a leading global learning company assess how external hosting of its infrastructure using cloud might enhance its IT service delivery model. Committed to providing strategic and technologically innovative offerings that help assess, extend and enhance classroom learning, the company is increasingly dependent on an IT infrastructure that allows reliable access to its products and services.

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Following years of growth, the company's infrastructure had become fragmented and unwieldy. A multitude of physical and virtual systems was dependent on many server hosting locations. ISG assisted in developing a new infrastructure strategy that enabled migration and consolidation to a single externally-sourced provider that offers a hybrid environment composed of traditional server hosting plus cloud IaaS services.

The consolidation of global infrastructure not only provided the company improved service levels, but will produce a 10% reduction in operating costs over the course of the five-year contract. Cost reductions are driven by the consolidation of infrastructure, the retirement of its corporate data center, and the provider's economies of scale and greater process automation.

#### **Objective 4: Service Improvement**

While a relatively low priority among clients surveyed, cloud solutions have the potential to drive significant gains in service improvement.

A major North American insurer faced several challenges in managing and tracking day-to-day sales and business functions. Specifically, manual processes forced sales representatives to use individual contact management tools for their relationships. This process was unwieldy and inefficient but also meant that the company lost valuable relationship history every time a rep left. Management sought an automated approach through a CRM system to manage information to support the sales process and to increase collaboration with field agents.

A public cloud solution for the sales function addressed these objectives by streamlining manual processes and delivering easy access to required information on the same platform. Management achieved real-time visibility into key sales metrics and comprehensive, consistent sales information. The cloud also made it possible to retire legacy application in a few months, thereby reducing the need for new IT staff and complex training.

#### INDUSTRY AND ORGANIZATIONAL CONSIDERATIONS

Businesses seeking cloud-based solutions must develop a strategy based on an introspective analysis of requirements. The strategy must address a range of critical areas that include application availability requirements, pricing/cash flow/ROI, service management and technical complexity.

A clearly defined roadmap on cloud adoption/ migration is another critical success factor and may require prioritizing applications to transition to the cloud.

A clearly defined roadmap on cloud adoption/migration is another critical success factor and may require prioritizing applications to transition to the cloud. This process involves a portfolio assessment as an initial step followed by evaluation of various criteria such as criticality, technology and architecture. Typically, generic or non-critical applications for messaging and collaboration are early movers to the cloud.

Enterprises must respond to specific business requirements when defining cloud service and deployment models. Industries with particularly stringent security requirements – such as financial services, healthcare, and defense – have traditionally viewed hardware-based physical separation of data as a necessity; the idea being that physical separation of customer data not only providers better security, but also limits collateral damage should a breach occur.





Many IT organizations seeking to adopt cloudbased services are currently constrained by outdated regulations. In many industries regulatory requirements have failed to keep up with technology advances. As a result, many IT organizations seeking to adopt cloud-based services are currently constrained by outdated regulations. For example, cloud options and benefits are limited for customers requiring hardware-based separation of critical data. An offering characterized by "shared" or "multi-tenant" deployment can't be considered, since that offering uses software at some level to segregate data on shared resources. While customers today do have the option of selecting which components of the offering are shared and which are dedicated, these options tend to be limited to a select number of Infrastructure-as-a-Service (IaaS) providers.

The requirement to separate data with hardware narrows the set of alternatives to some form of a private cloud in a client's data center or a dedicated private cloud in a service provider's data center. While these options address the security and data segregation issues, they dilute the key benefits of cloud delivery, such as reduced capital spending and highly scalable applications enabled through resource pooling.

At the other end of the spectrum, customers deploying green-field applications and emerging businesses less burdened by legacy applications or regulatory requirements are more open to the concept of shared infrastructure, and are therefore able to leverage additional cloud benefits. Indeed, using the cloud to establish or enhance market positioning is an area of opportunity for companies seeking to leapfrog the barriers that market leaders create through deep cash balances.

Besides this, other considerations that CIOs must address when cloud decisions are made include:

- **1.** Current IT investments
- 2. Cloud integration and migration
- **3.** Hybrid cloud management
- 4. Applications and data compliance in the cloud
- 5. Service management in the cloud
- 6. Multi-vendor evaluation and management
- 7. Security in the cloud
- 8. Monitoring and control

A strong need exists for virtual infrastructure management, cloud life-cycle management, policy-based management and orchestration applications. Vendor-agnostic cloud management platforms go beyond the capabilities of hypervisor-based element managers to solve many of the problems associated with fast-growing virtualization and cloud environments.

Organizational culture is another critical but often overlooked consideration. Specifically, is the organization adaptable to changes associated with cloud-based service delivery?

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#### CONCLUSION

Recent experience shows that market hyperventilation regarding the potential benefits of cloud computing is giving way to a more reasoned approach, whereby clients are picking and choosing specific business problems, identifying the workloads that support these business issues, then identifying the appropriate cloud service and deployment model to adopt. A state of cloud computing maturity is achievable by following a pragmatic adoption approach. Enterprises focusing on consolidation and virtualization have already started their cloud journey.

The results are positive, in terms of the benefits we observe being achieved in terms of addressing critical business issues.

## ABOUT THE AUTHOR

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#### STANTON JONES



#### ISG

Stanton helps enterprise IT and sourcing leaders rationalize and capitalize on emerging technology opportunities in the context of the global sourcing industry. He brings extensive knowledge of today's cloud and automation ecosystems, as well as other disruptive trends that are helping to shape and disrupt the business computing landscape. Stanton has been with ISG for more over a decade. During his tenure he has helped clients develop, negotiate and implement cloud infrastructure sourcing strategies, evaluate and select software-as-aservice platforms, identify and implement best-in-class service brokerage models, and assess how the emerging cloud master architecture can be leveraged for competitive advantage. Stanton has also guided a number of leading service providers in the development of next-generation cloud strategies. Stanton is a recognized industry expert, and has been quoted in CIO, Forbes and The Times of London. You can follow Stanton on Twitter: @stantonmjones.



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