

The transformative benefits of Cloud Computing



“Cloud adoption will only accelerate as cloud offerings evolve and new security enhancements and service improvements are introduced.”

Cloud computing and the rise of hybrid IT.

Research shows that in the next two years 57% of organizations will consider a move to the public cloud. However, 33% of organizations prefer a private cloud model.

It is clear that with the cloud, it is not a question of if, but what type.

Cloud computing has proliferated so rapidly because, when compared to a dedicated IT environment, it delivers businesses higher levels of agility, and increased efficiency, at a lower cost.

With a virtualized infrastructure that is scalable and reliable, an organization gains the benefits of a shared IT infrastructure without having to implement and administer it directly, taking the pressure off IT staff. For corporate IT departments immersed in the struggle to control cost, execute daily maintenance responsibilities, and support mission-critical activities, this efficiency has been the key selling point. It took years for virtualisation to gain wide business acceptance. Cloud computing, by comparison, is showing a much swifter ramp-up. That's in large part because so many organizations already rely so heavily upon virtualization — and because the business benefits of cloud are more immediately clear.

Trend: Outsourcing Infrastructure

Across the business landscape, companies have been seeking greater efficiency by tapping into the investments that IT service providers continue to make in infrastructure, automation, and technology. These organizations want to get out of the business of owning and maintaining their own infrastructure, and cloud computing has been picked up in the current.

“Gartner estimates that total spending on cloud services will increase from \$110 billion in 2012 to \$210 billion in 2016.”

Cloud adoption will only accelerate as cloud offerings evolve and new security enhancements and service improvements are introduced. The varied cloud solution technologies and standards will continue to converge, as well, to better address customer needs.

The IT benefits of moving to cloud computing

As an organization considers migrating to a cloud environment, it should note the following benefits that its IT department can realize:

Simplified Cost and Consumption Model. One of an IT department's fundamental objectives is to align its initiatives with core business needs, which include both cost reduction and support for mission-critical activities. Because cloud computing has a cost structure that functions in many ways like a utility billing model, IT infrastructure becomes an operating expense. This allows the organization to reduce capital expenditures and spending on hardware and applications to support non-core activities.

Enterprise-grade Services and Management. Typically, between 70 and 80% of IT budgets are devoted to the maintenance of existing infrastructure. Cloud computing offloads the burden of this massive overhead, freeing core IT resources to focus on initiatives that drive revenue growth.

Faster Provisioning of Systems and Applications.

Traditional approaches to buying and configuring hardware and software are time consuming. Cloud computing provides a rapid deployment model that enables applications to grow quickly to match increasing usage requirements. It can accommodate peak usage periods when a company needs to scale up dramatically, such as a holiday season or special event.

Right-sizing to Address Business Changes. Cloud is elastic, and can contract as necessary to meet changing business needs. If a company over-provisions its in-house data center, it can't scale back. With cloud, an organization can quickly and easily right-size its environment.

Ease of Integration. An increasing number of enterprise applications require integration with third-party applications that are often hosted outside the enterprise firewall. With configuration flexibility, integrated security, and a choice of access mechanisms, cloud has a natural ability to serve as both platform and integration fabric for these applications.

The benefits of cloud are transformative because, by replacing in-house infrastructure with a scalable and efficient service, they allow an IT organization to move out of a functional role based on procurement and maintenance and toward a leadership role founded on guiding and participating in core business initiatives. At the same time, the infrastructure is stronger and more resilient, the IT organization is leaner and more efficient, and the core business scores a major financial, operational, and strategic win.

Key considerations

When developing a cloud strategy, there are six key areas organizations should closely consider:

1 Business Assessment

Cloud will not replace everything in a computing environment. Just as many companies have a mix of Software as Service like salesforce.com and internal systems like ERP, organizations will take a blended approach to infrastructure, as well. A good starting point is for the organization to conduct a cloud readiness assessment to determine which applications have the best business and technical reasons for moving to the cloud. Next, the organization should develop a roadmap for efficient migration that mitigates operational risks.

2 Security

Just as in the early days of managed services when providers had to prove to customers they could address both physical and logical security, cloud providers must demonstrate multiple layers of data protection for enterprise-grade security and application availability. For example, organizations should look for cloud environments that provide dedicated virtual machines that are logically isolated and protected to secure data. Service providers should also have a multi-layered approach to security, addressing platform security, physical security and access, as well as offering additional security services to address data protection and compliance concerns. Next, the organization should develop a roadmap for efficient migration that mitigates operational risks.

Case in point Case Study

Tourism Ireland

"We wanted a private cloud because it gave us the control and level of security we felt was important. We wanted a service that went from basic support to more complex services, delivered by someone who could become part of our IT department. BT offered the best value but it was their technical knowledge and range of services that swung it."

Conor Marshall, Head of ICT and Product Strategy
Tourism Ireland

BT provided consultancy, design and delivery services that culminated in a private cloud implementation at its Citywest data centre in Dublin. An agnostic provider, BT brought together disparate suppliers to cover the server, storage and network requirements. Its skilled team focuses on the customer's business need rather than proscriptive solutions. One size definitely doesn't fit all with BT, which was important to Tourism Ireland because it was looking for a long-term partner rather than a one-off service provider.

Cutting costs has been one benefit of going with BT; increased efficiency is another. Downtime and outages are no longer an issue. If a problem occurs, restoring systems now takes minutes rather than hours. The virtual environment provides new levels of resilience to protect business critical applications and there's a disaster recovery plan in place to mitigate operational risks. BT's private cloud has given Tourism Ireland the security and resilience it needed as well as the ability to scale. Provisioning new servers to drive new services is fast and easy, as recently demonstrated by the launch of the Ireland.com web site, following the acquisition of the domain name from the Irish Times.

“The need to deal with Hybrid environments gives rise to the Hybrid IT process models.”

3 Compliance

Providers must demonstrate they have embedded the appropriate services, controls, and procedures to support a customer’s compliance requirements and to help customers gain the confidence they need to move applications to a cloud environment. Compliance standards are both universal, like Sarbanes-Oxley, and industry-specific, like PCI DSS and HIPAA. A service provider should demonstrate its cloud environment and processes address customer needs for both types. One of the reasons 33% of organizations consider private clouds over multi-tenant public cloud offerings is due to compliance challenges. If your company has regulatory needs, private cloud should be part of your evaluation.

4 Hybrid IT

Organizations rarely move 100% of their IT infrastructure into cloud. For the next three to five years organizations will need to adopt a hybrid IT strategy, one that allows them to integrate legacy environments while leveraging new technologies such as cloud. When considering a potential cloud service provider keep in mind legacy environments and evaluate how they can support ALL of your requirements — from traditional dedicated environments to public cloud to hosted private clouds.

5 Services and Service Level Agreements

Cloud computing is only truly beneficial when the right services are part of the solution. While many mainstream providers offer an unmanaged, do-it-yourself cloud, some

organizations require managed services, backed by the appropriate service level agreement, to be part of the overall solution. An organization has to evaluate its specific needs as they relate to managed services and consider service a key criterion when evaluating vendors.

6 Availability

Managing availability of critical applications requires understanding their uptime and performance requirements and architecting your cloud solution with multiple layers of protection and failover. In addition to high availability, enterprises must also understand and address their business continuity and disaster recovery needs.

Conclusion

As indicated earlier enterprises will not wholesale convert to cloud. They still must maintain more traditional IT models, while leveraging new technologies such as Enterprise Cloud Services. These traditional environments still have all the same challenges — security, availability, patching, and resilience. Enterprises must deal with new application delivery and application interdependencies that exist between these hybrid environments. All while employees, partners, and customers demand access anywhere, anytime. Cloud, although full of advantages, brings additional complexity to an already complex IT model.

Understanding hybrid IT and how to integrate cloud into your current IT infrastructure is challenging. Look to BT Ireland to provide proven and reliable guidance in developing and implementing a sound strategy.



Offices worldwide

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