IT is Moving to the Cloud. Are you Ready?

The growth of the Cloud is changing the way organizations experience IT services. Do you understand what this means? Are you ready to move to the Cloud?

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IT is moving to the Cloud

The way organizations procure and deploy IT infrastructure is undergoing a significant transformation. Traditionally, businesses have had to be responsible for purchasing every piece and managing the entire process. Often they would work with a value-added reseller to buy the necessary hardware and software. A systems integrator or managed service provider would be brought in to assist or take over deployment and management of the systems. These systems would then reside on-site, with the organization also responsible for managing both the network and the facility housing the infrastructure.

This model is steadily giving way to outsourced hosting, or what is commonly referred to as Cloud computing. In a Cloud environment, a third party service provider sets up IT infrastructure in an off-site facility. The service provider operates the datacenter, leases the network, and procures hardware and software to host content and run applications. The service provider is responsible for maintaining the integrity and performance of this entire infrastructure – everything from monitoring and management to maintenance, upgrades, security, and support.

The businesses using the service have no role in setting up or managing the infrastructure. They simply lease the infrastructure and the application as a monthly service. Any management tasks to be handled by the business customer are done remotely through an automated Control Panel tool. In most cases, the service provider takes over the lion’s share of management tasks. If users have questions or need help, they work through the service provider’s support structure. At the end of the day the organizations do not need to own any IT assets. They simply purchase access to the applications they need as services in the “Cloud”. The service provider takes care of everything else.

The value proposition

While on-premise infrastructure and datacenters continue to exist, the value proposition of the Cloud is compelling enough that organizations are now moving certain applications and workloads to the Cloud. It is a trend in its early stages of development but there is little question that the momentum is accelerating.

The value proposition of Cloud computing is multi-faceted and presents a well-rounded case for why organizations should consider shifting to this model. It is not just about saving money. It is also about efficiency, optimization, quality, and expanded options.

Cost: The cost savings of using a Cloud service versus running in-house IT are substantial and simply cannot be ignored. In the accompanying chart we compare
the cost of setting up a Microsoft® Exchange server on-premise versus the cost of buying 10 seats as a Cloud service. The contrast is stark. In the in-house model, an organization has great difficulty achieving economies of scale and is over-buying. It cannot align costs with the consumption level. This model does not even account for the fact that in 5-7 years the organization will have to refresh the hardware and also consider upgrading the software. All this requires significant capital expenditure. In the Cloud, the service provider takes cares of upgrades and initiates the capital expenditure. The end user just pays the monthly fee.

<table>
<thead>
<tr>
<th></th>
<th>IN-HOUSE (5 users)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software and licenses</td>
<td>$600</td>
</tr>
<tr>
<td>Implementation, consulting</td>
<td>$1,500</td>
</tr>
<tr>
<td>Hardware, infrastructure</td>
<td>$3,000</td>
</tr>
<tr>
<td>Anti-virus software</td>
<td>$400</td>
</tr>
<tr>
<td>Annual maintenance</td>
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<tr>
<td><strong>Sub-Total</strong></td>
<td><strong>$5,700</strong></td>
</tr>
<tr>
<td>IT personnel</td>
<td>$7,500</td>
</tr>
<tr>
<td><strong>Total In-House Cost</strong></td>
<td><strong>$13,200</strong></td>
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</tbody>
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**vs.**

| Cloud-based Hosted Services (10 users x 12 months) | $1,320 |

**Benefits of scale:** Scale is what makes the price structure of Cloud so attractive. A service provider can take advantage of volume purchasing and pass down hardware and software cost savings to customers. Scale extends to human resources and facilities as well. Service providers hire support staff, developers and system
administrators that are leveraged across multiple customers, while wholesale datacenter space can deliver cost savings on power. All this translates into cost and operating efficiencies.

**Planning:** The Cloud allows organizations to be more judicious in their deployment of IT. Buying and installing gear is a significant commitment. If it is done for a project that gets cancelled or delayed for several months, the capital outlay can severely impact available resources. Paying for a Cloud service is a monthly commitment that can be shut down at any time and does not result in the loss of a substantial investment.

**Best practices:** While there is no doubting the capabilities of in-house IT staff, Cloud service providers employ specialists with a highly tuned skill set. Service providers have one job and they are laser-focused on it. They have gained unique experience that comes from dealing with hundreds to hundreds of thousands of customers. They have built control panels and management systems that are based on this perspective and repeated trials. This naturally leads to a level of sophistication and expertise that is difficult if not impossible to replicate. Service providers literally do a better job when it comes to managing infrastructure.

**Ease of management:** Using a Cloud service makes the management of IT infrastructure much easier. An organization can hand over all the difficult or mundane management tasks to the service provider and focus on limited self-management with the help of a tried and tested delivery platform and control panel interface.

**Adding value:** A Cloud service and the automated toolset that comes with it is an extremely conducive environment for procuring value-added services. These value-added products and services can be added to a core infrastructure offering very easily and with no long-term commitment. For example, an organization utilizing Cloud-based email could add complementary services like spam filtering, archiving, extra security, mobility, and backup through the same online interface used to manage the core service. It can literally be as easy as point, click, and deploy. Billing is just an additional line item that appears on the customer’s existing bill.

**Free up and optimize internal resources:** Outsourcing to the Cloud is a way to get more out of existing IT resources. Infrastructure management can be a relatively tedious task at many levels. Handing this over to a service provider is a way to free up IT resources and re-deploy them to areas with more business value.

**Compliance:** Being in compliance is a complex and nuanced requirement that necessitates specialized knowledge. Using an outsourced service shifts that burden to the service provider, who can more easily devote resources to compliance measures. In some instances, moving to a Cloud service provider can bring an
organization in line with important regulatory compliance requirements without having to go through the auditing process.

**Technology-agnostic:** One of the primary benefits of using Cloud is the agnostic position of service providers. Service providers can provide whatever combination of products and services they want. They have the freedom to evaluate and choose technologies – a process that would take up a considerable amount of in-house resources. This enables service providers to deliver a truly best of breed portfolio.

**Avoiding the IT refresh cycle:** Buying and managing IT infrastructure is no easy task. Making things more painful is the fact organizations have to do it all over again every few years as IT assets become outdated. IT staff has to depreciate and sunset everything they purchased and migrate everything over to the new systems. Using the Cloud takes the IT refresh cycle off the table. The service provider is responsible for updating software and upgrading hardware. Customers just continue to consume the infrastructure as a monthly service. If they need a whole new specification, they simply switch plans or providers.

**CAPEX to OPEX:** The Cloud lets organizations turn capital expenditure to operating expenditure. In a time when budgets remain tight and large capital outlays exceedingly difficult to come by, Cloud and outsourcing models for business services suddenly become very attractive options. The risk profile is also desirable for many organizations.

**Efficiency:** The Cloud is all about efficiency. It is about offloading monotonous and time-consuming tasks. It is about optimizing operations and deploying resources in a more effective manner.

**What kinds of organizations can benefit from use of Cloud services?**

The answer: all of them. The reasons differ, but the fact is any organization can benefit from the value proposition of Cloud computing.

**SOHO and SMB:** For smaller organizations, Cloud computing is very much a no-brainer. Small organizations have limited resources and this ensures there will be serious gaps in IT skills and capabilities. Cloud services provide best of breed technology at the fingertips at an affordable price point. Small organizations also can’t afford the risk that traditional IT presents. A large capital expenditure outlay can be devastating if a project is cancelled or things change. They will be stuck with the bill and the business will suffer. The Cloud model eliminates that risk by offering on-demand services with minimal commitment. In fact, it is in the SMB space where we are beginning to see the emergence of the all-Cloud enterprise, as many small organizations now run all of their IT in the Cloud. Expect that trend to accelerate going forward.
**Mid-market and enterprise:** For enterprises with plentiful resources the Cloud is more of a strategic decision that is typically made at the departmental level. In certain cases a department may want to lessen the burden on existing IT resources by outsourcing to the Cloud. This would be more of a cost savings measure. In other cases the Cloud would be an option because of the speed and flexibility compared to traditional IT. A short-term project of a few weeks or months is a good example. Being able to turn things on and off enables capacity to align with demand. In addition, provisioning is faster. Instead of going through what can be a very elongated internal IT procurement process, Cloud services are simply monthly expenses – and the services are available within hours or even minutes. Cloud-based applications can also be used to augment and enhance internal IT departments. Sometimes an enterprise may lack specialization in areas like security or archiving or could be unfamiliar with new technologies like unified communications. Using Cloud computing to fill gaps in knowledge makes perfect sense. Along these same lines, enterprises turn to the Cloud to optimize what they are doing internally. Using the Cloud can free up internal IT resources or make certain tasks a lot easier. The toolsets organizations and IT departments get from a service provider can make life considerably easier.

**What should you look for in a Cloud service provider?**

**Track record:** A service provider should have a strong track record and a solid reputation, with the data to back up their claims.

**Transparency:** Service providers need to be as transparent as possible. They ask organizations to hand over mission-critical and sensitive business data. This is no small undertaking and without transparency there can’t be trust.

**Support:** A high level of customer support quality is crucial. This is a big part of what customers are paying for. Many organizations move to the Cloud because they want to be efficient and make things easier for internal IT. Support that is available on-demand is a key driver of that. Service providers must be knowledgeable and responsive. If they are not, credibility and trust is jeopardized.

**Portfolio:** Service providers that offer a full portfolio of services have proven that they have a delivery platform that scales. This translates into more offerings, which leads to higher ARPU and enhanced stickiness. Customer growth and retention is the backbone of the Cloud business.

**Certifications:** Service providers working in the Cloud should be fully up-to-date when it comes to their compliance requirements. Certifications are proof and validation that facilities are up to specification and that processes and procedures conform to recognized industry standards.
What should get moved to the Cloud?

The Cloud is home to content, servers, various proprietary and third party applications, and disaster recovery infrastructure – with new ideas being generated daily. So far, the journey has been incremental and gradual, with web presence content and email among the first applications that get moved to Cloud by most organizations. However, many services are following closely behind as Cloud adoption continues to accelerate.

- E-mail has made its way to the Cloud, and organizations are also using other hosted tools for their daily communications. They are using VoIP for telephony and web-based tools for web conferencing and presentations. The end game is unified communications – the unification of the inbox, web conference window, and VoIP in a single integrated experience and user interface.

- Customer-relationship management within the Cloud has a great deal of potential, as Salesforce.com has demonstrated. Organizations use CRM to manage their customer base and sales operations.

- Collaborative tools are another application moving to the Cloud. Hosted Microsoft SharePoint is a popular tool that is widely used in the market.

- Backup and storage is an increasingly common use case for Cloud. Every organization has data that it needs to backup, and every organization has data it can’t destroy but needs to archive somewhere. In many organizations this means dozens of tape and file servers that are manually managed. The more data that moves to a digital format, the more demand there will be for Cloud storage and backup, a cost-efficient and automated alternative to traditional storage methods.

- Infrastructure for proprietary applications and content is another big category that the Cloud addresses. Applications for accounting, project management, human resource planning, enterprise resource management and billing all run on infrastructure that can move to the Cloud. They can run on physical or virtual servers. They can run in public or private Cloud infrastructure.

Scope of the Cloud

The Cloud is going to fundamentally change the way organizations consume infrastructure, and IT organizations will have no choice but to respond. Organizations must be a part of the Cloud value chain or risk losing market share.
There is no way around it. The good news is that while transformation is the order of the day, it is unfolding incrementally. There is plenty of time for others to get into the game. IT has never been a one-size-fits-all solution so there is plenty of room for new players that demonstrate value, innovate, build a track record and develop strong relationships with customers.

The key to the Cloud opportunity is efficiency. And efficiency is driven from the ground up by the automated platform. For the Cloud to work to its full potential everything from billing, procurement, service provisioning and delivery, infrastructure management and support must originate from a single platform. The platform maximizes operational efficiency and defines the end user experience by providing visibility and control through a single pane of glass. At the end of the day it is platform that ties everything together and makes Cloud a reality. It is the foundation of which any successful Cloud delivery model must be built.

**Conclusion**

Businesses of all sizes in all industries will be impacted by the rise of the Cloud, as IT departments increasingly embrace the efficiency, security, compliance, and cost benefits of hosted business solutions. Organizations that seize the opportunity early will have an advantage in freedom from infrastructure investments, IT staff that can focus on revenue-generating activities, and overall efficiency and productivity that is unmatched by on-premise architecture. IT is moving to the Cloud – are you ready to move along with it?
Philbert Shih is the Founder and Managing Director of Structure Research, an independent research and consulting firm devoted to the hosting and cloud infrastructure services market. Philbert has covered the hosting infrastructure space for over a decade. Prior to founding Structure Research, Philbert spent six years at Tier 1 Research as the Senior Analyst for Hosting.

Structure Research is an independent research and consulting firm with a specific focus on the hosting and cloud segments within the Internet infrastructure market. We are devoted to understanding, tracking and projecting the future of hosting and cloud infrastructure service providers.

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