them yourself. Today a number of on-demand offerings are being re-labeled and being offered as Cloud Computing and these include:

1. Software-as-a-Service (SaaS): For long, the software industry has been paranoid about increasing the use of ‘Software Components’. These components attempted to provide pre-created and tested application components that reduced the need for developing commonly used software functionality from scratch, and thus reduced the development and testing efforts and time. During the era of mainframes and client server computing, these were offered as libraries, CORBA and OLE Components, and they exposed their functionalities through Interfaces or Application Programming Interfaces (API). With the advent of network and Internet computing, these are being offered as Web services that can be used from a remote infrastructure.

At the 2009 Oracle Open World, Larry Ellison, was asked to comment on Cloud Computing and if it really is the future of computing. He had a hilarious set of comments on people who hype Cloud Computing, and I would encourage you to view his comments on YouTube. The gist of Larry’s answer is that Cloud Computing is NOT the future of computing, but HAS been the past and IS the present of computing.

The IT industry has surely come a long way, from mainframes to client servers and Web-based applications. But the “CLOUD” has been a part of the IT landscape for quite a while now, and most organizations have already been experiencing its benefits. Think about it, didn’t Salesforce.com and Amazon exist a decade ago? Simply put, Wikipedia defines Cloud Computing as ‘Internet-based computing, whereby shared resources, software, and information are provided to computers and other devices on demand, like the electricity grid’. You use a bunch of computing resources as a service, instead of owning

BPO in the Cloud is a much debated and misunderstood business service. The questions we have encountered include - “Will these business critical functions be as available as they are today?”, “Will my data be secure?”, “How will the licensing fees in the Cloud compare to the current costs of software installations and maintenance?” These questions are not new and in fact the same key business drivers and concerns have to be addressed for BPaaS as for IaaS, SaaS and PaaS.

Our clients that have successfully implemented Cloud services have created a realistic and measurable business case; considering key factors like licensing costs based on expected usage, decreasing development and maintenance costs and changes to staffing requirements to name a few. In terms of data security they have ensured transparency in data usage and storage through transparent and stringent service levels and in some cases have insisted on independent penetration testing as a prerequisite to signing the contract. Availability of mission critical services can be dictated in the SLA, however we recommend doing a comprehensive due diligence on the past performance of the service provider, including interviewing present clients using the same services being considered. Past performance does not guarantee future performance and anywhere IT is involved outages are possible, making a clear COB planning a cornerstone of the BPaaS in the Cloud.
2. **Infrastructure-as-a-Service (IaaS):** Few years ago, when many of the large Internet-based businesses started building scale, like Google and Amazon, they had to build a very sizeable infrastructure to manage the volume and scale of users they were servicing. This led enterprises to re-think their business model, as Google and Amazon had succeeded in providing services to their end-customers through virtualized environments. The advent of virtualization technology for servers, storage, desktops and networks, led to a new service offering – ‘Infrastructure as a Service’. IaaS allows customers to rent infrastructure on demand and shed their concerns about managing their computing hardware in their datacenters. IaaS has enabled customers to buy services on tap with limited capex and without worrying about data center maintenance, real estate and rentals.

3. **Platform as a Service (PaaS):** With software components and infrastructure being available on demand and as a service, the next logical step was the provision of application systems as a service. Remember ASPs – Application Service Providers? PaaS allows applications to be rented on variable pricing models with very limited upfront capex. The platform service provider manages the complexity of installing the necessary computing infrastructure, operating system, databases and provides you a customized instance of your application in a virtual environment.

All the three services mentioned above are being offered as stand-alone or a bundle today, and the new name for these is **Cloud Computing**. That brings me to the next set of services that are now being offered in the market by major organizations.
Business Process Outsourcing providers (BPO), and I would like to term them as Business Process-as-a-Service (BPaaS). See Box 1 for the benefits that BPaaS can deliver.

Cloud and the BPO Model

The Cloud is set to revolutionize the way BPO service providers extend their offerings and the benefits that organizations accrue by outsourcing their business processes. Applications will now be made available over the network on demand; with the Cloud operating like any other utility service (turn an application on or off on demand), thereby eliminating the need to invest in IT and thereby reducing costs significantly. The benefit can be seen particularly in organizations with legacy systems that demand high maintenance and upgrades. They can now move to a platform on the Cloud and outsource their business processes.

Wary of the upturn, organizations are looking toward BPO service providers to deliver innovative services, albeit with the significant cost arbitrage that outsourcing has traditionally offered. With the Cloud spurring the delivery engine, BPO service providers are set to move to a higher level of arbitrage and efficiency. The advantages that the Cloud brings to the BPO landscape are:

- **Cost reduction:** The client can do away with legacy IT hardware and reduce energy wastage, costs and subsequent carbon footprint. It does not have to invest in human resources to maintain and support infrastructure. Variable pricing or pay-per-use model is the hallmark of services providers of Cloud-based solutions. This helps align costs with the highs and lows in business.

- **Scalability:** The Cloud, combined with the flexibility that the pay-per-use model offers, allows BPO organizations to scale up or down quickly, without impacting operational efficiency. Organizations can update applications dynamically on the Cloud. By striking a balance between the business need of the day and the required infrastructure, service providers can offer on demand scalability.

- **Agility:** BPO service providers can leverage the benefits of Cloud Computing to bring down processing time for data-intensive business processes. They can now offer data processing workflow, from documentation and image processing to publishing, at a reduced turnaround time.

- **Reliability:** The pervasive nature of the Internet and its high reliability adds to the advantage of hosting applications on the Cloud rather than in complex infrastructure prone to downtime.

However, it's still cloudy in the land of the Cloud! Critics have raised concerns about data security on the Cloud. But this risk can be mitigated by choosing the Cloud vendor carefully. One of the ways to ensure your data is secure is to conduct a security review of the vendor by a third-party assessor. According to Gartner, Cloud Computing has unique attributes that require risk assessment in areas such as data integrity, recovery and privacy, and an evaluation of legal issues in areas such as e-discovery, regulatory compliance and auditing. Undoubtedly, the benefits of Cloud Computing in BPO far outweigh the concerns. A careful examination of the BPO service provider and a transparent policy to build trust with the outsourced partner can go a long way in realizing the benefits of what is being termed as the **next big thing** in the BPO landscape. The other factor that will drive the trend further is the commoditization of Cloud Computing as it becomes more pervasive. It will then become a more widely accepted platform for outsourcing entire business processes using the shared service model.

The Fast-moving Cloud

The adoption of Cloud Computing is slated to increase substantially in the next few years. IDC, a globally known research firm, forecasts an astounding 24 percent Compound Annual Growth Rate (CAGR) for Cloud Computing from 2008 to 2012. By contrast, all software will experience a CAGR of 6.24 percent during this period. The overall market for Cloud Computing is expected to grow to USD 42.3 billion by 2012. The market for Cloud IT services is still minimal, a mere 10 percent of all revenue earned from software, but the future looks brighter.

Gartner has projected an even more promising market for Cloud IT services. It forecasts the world-wide Cloud services revenue to touch USD 68.3 billion in 2010, a 16.6 percent increase from the 2009 revenue of USD 58.6 billion. The strong growth will continue through 2014, with world-wide Cloud services revenue touching USD 148.8 billion. Gartner estimates that over the next five years, enterprises will spend USD 112 billion cumulatively on SaaS, PaaS and IaaS. Most of the Cloud Computing business in the next five years will emerge from the matured markets of North America and Europe.

To learn more, please write to us at marketing@wns.com