

# Simple is beautiful: How cloud can become beautiful for enterprises

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Companies need to know how to evaluate cloud services and determine the qualities and hallmarks of a proficient cloud. They should have a clear understanding of their own information resource requirements to discern whether they can benefit from customizable and tailor-made solutions. But they should realize that deploying a cloud environment does not mean abandoning conventional infrastructure.



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When Leonardo da Vinci uttered the famous line “Simplicity is the ultimate sophistication”, he surely could never have imagined that this grandiose vision would be embodied in the advanced technologies that have become an integral part of daily life in the 21st century. From digital music players, to online search engines, to data storage facilities, ‘simplicity’ has become a central concept of almost every successful business venture.

In recent years, the concept of easily accessing data and resources from pools of servers, on demand, via a network infrastructure, dubbed ‘cloud’ computing or simply, ‘the cloud’, has been widely embraced and adopted by businesses due to the fact that it offers companies simplicity

in managing complex information resources. As cloud gains popularity and prevalence, it is important for companies to understand this cutting-edge technology by knowing how to evaluate cloud services and what are the qualities and hallmarks of a proficient cloud. The question that management needs to ask today is not whether the company’s information resources should migrate to the cloud, but how can the company best identify needs that the cloud could help address and problems and/or issues that it will solve.

## How cloud came to be

Born from symbols used in schematic diagrams symbolizing the Internet, ‘cloud computing’ originated in the 1990s when

telecommunications firms began to offer Virtual Private Network (VPN) services. Another major step was taken in the evolution of the cloud with the launch of the Amazon Web Service on a utility computing basis in 2006. Next, Google, IBM and several universities undertook a large-scale cloud computing research project - paving the way for the ‘modern cloud’. Since then, the cloud - both the cloud concept itself as well as the networking and storage infrastructure that enables its development - has continued to evolve and mature. Today we find ourselves at a stage where all essential technologies for the cloud, be it the network backbone, the operating systems, accessibility, or some other aspect, have reached a level where the cloud is ready and affordable for

users on a large scale. Cloud computing is now recognized by IT visionaries as the next, mainstream technology that will be utilized by users worldwide - both by individual users, but more importantly, by business enterprises.

For the cloud to truly make a difference in an organization, however, management must realize that timing is perhaps the most critical aspect of cloud deployment. It is important for business users to ensure that the entire ecosystem, whether it is the setup of the organization, human resources, all relevant stakeholders and delivery process, are fully ready for the deployment and consumption of cloud services across the company.

#### Cloud helps businesses stay competitive with customizable offerings

In 2011, to say that business should consider adopting the cloud is an understatement. The cloud is a result of businesses dealing with the rising costs of handling ever-growing volumes of data across networks, the need to share information resources, and both ease and speed access to those information resources. Those increasingly complex user demands are forcing businesses to make the biggest shift in the computing environment since the PC invaded the office in the 1980s. Corporate IT users are demanding simplicity and agility in terms of accessing information on demand. In addition to ease-of-use and speed, enterprises also want a cost advantage from utilizing the cloud. In an ultra-competitive modern business environment, enterprises face an ever-increasing pressure to manage costs effectively. The growing complexity and constantly changing business model and IT infrastructure all call for a more simple and agile approach to managing information resources. Not surprisingly, cloud technology is in a position to meet these demands since its inherent nature is to allow the sharing of resources and thus deliver a high level of scalability for users. Businesses can scale their cloud infrastructure to meet their own needs.

More specifically, when a company adopts cloud services or engages with cloud service providers, it should be clear (or at least have a good deal of understanding) as to what added value cloud can provide them with. Whether it be reducing the Total Cost of Ownership (TCO), offering a simpler and more user-friendly system for management

or for disaster recovery purposes, companies should be well aware of what they stand to gain and what they are looking for when utilizing cloud.

The cloud's close-knit, end-to-end characteristics can also reduce the need for additional equipment and technology to cover the needs of the enterprise. Simply stated, the cloud environment is almost universally simple and user-friendly, which means that it's easily deployed, easily adopted and, most importantly, easily managed and maintained. All of these attributes point to cost reductions for the enterprise. Enterprises considering a move to the cloud will find that the initial investment in networking equipment will be big, as well as discovering the high costs associated with adapting the company to a new business environment. However, once the cloud concept is incorporated into the corporate DNA, and management accepts that information resources stored in the cloud will be protected in case of disasters, that those resources will be united across the entire enterprise, and that cost benefits over time can be significant, the argument to move migrate corporate resources to the cloud is won.

#### Cloud best helps those who know how to use it

Given the benefits that operating in a cloud environment offers an enterprise, it's not surprising that more and more organizations are beginning to move to the cloud computing environment. First, however, any company considering a move to the cloud should have a clear understanding of their own information resource requirements. Enterprises should be able to answer the questions of what challenges they face, and how migrating the company's information resources to the cloud can solve these challenges. The company should also be able to separate its business into functional areas and packages and identify or focus on functions and packages that feature a high frequency of interaction because these are the areas that will benefit the most from migrating to the cloud.

Enterprises should also be able to discern whether they can benefit from customizable offerings - there currently exists a wide range of cloud-related services and using customization properly will allow companies to maximize their investment and scale to meet every business need. It is important that management understands the need for customizable and tailor-made

solutions and the benefits it will bring such as increased time to market. Management should understand that in today's world, they should and need to make every effort to ask for services which meet their demands at the lowest cost possible. In addition, they should realize that deploying a cloud environment does not mean abandoning conventional infrastructure. There should be no hesitation in moving to the cloud in that regard. The cloud will only improve the existing, overall infrastructure and bring cost benefits rather than render the current backbone useless. If necessary, enterprises can utilize a 'hybrid' form of the cloud in terms of hosting.

Another issue every manager will wish to address is risk. It is important for the corporate user to have a high level of confidence in the cloud service provider. The user should trust that the cloud provider will not unexpectedly cut the service and disappear in the case of an accident or disaster. A good cloud service provider should be able to show proof of a strong financial basis, a stellar reputation and a global presence that will allow it to provide outstanding cloud-related services that will not simply go away in some unforeseen case. A good cloud service provider should be able to honour its service level agreement (SLA) - particularly Availability SLAs and Reliability SLAs.

The cloud is a trend. It is the latest 'it' technology that can be utilized wisely by enterprises of all sizes due to the benefits it offers. Moving forward, cloud technology will continue to drive the advancement of other, related technologies and will spur innovation by providing a vast platform where information resources can be stored, accessed and manipulated. Today's cloud services are experiencing growth in many aspects of the technology, but not all components of the cloud are advancing at the same pace. Processing power, storage density, network capacity, data centre efficiency, and virtualization are all advancing at a fast rate while the cloud's programming is showing slower progress by comparison. From a purely business perspective, the cloud will offer corporate users significant flexibility in managing their business, and will enable companies to manage their resources in a much more simple and direct way - offering them the flexibility to maximize their company's true potential. ●