* **ECPI University**

**Cloud Solution:**

**"Implement A Cloud Based Collaborative Solution”**

**CIS 142**

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**Introduction**

Cloud has revolutionized technology to a more centralized computing age and many companies are now interested in learning about cloud services. Many providers believe that 3rd party organizations can benefit a great deal by migrating their services to a hosted cloud environment. Given the many advantages of cloud computing, top companies are now asking the big questions to make their move to a cloud hosted environment. what challenges must a company over-come to migrate their services to the cloud? When is it the right time to move to a cloud hosted environment? What risks should a company consider when migrating to the cloud? Which provider should a company consider?

So, what is the big deal about Cloud Computing and what’s all the hype? Recent studies conducted by “global IT decision-makers," **88%** percent said that cloud computing would be a priority within the next 18 months as companies explore the benefits of cloud computing **(Oracle, 2018)**. Just to give a brief overview, cloud providers allow dynamic flexibility to their services, including tools to build services from. Cloud offers many layers of the IT infrastructure to migrate over to the cloud, including SaaS, PaaS & IaaS layers of hosted services. To describe these services in summary, cloud offers between a hosted application to an entire virtualized server and other hardware resources. Cloud can be hosted in different privacy domains, including: public, private, community or a hybrid mix.

Looking into blog written, “10 Commonly asked questions About Cloud Computing,” How do companies know if moving to the cloud is right for their business? The top answer for this question, provided by glorifying all the common benefits of shifting into the cloud hosted environment, including: scalability, flexibility and savings. When a company is noticing that their IT cost is reducing as the business is growing, they should consider moving into the cloud environment **(Boman, 2018)**. Another good reason to move into the cloud is when a company demands rapid growth of the business but contain limited assets. Cloud answers this concern by describing the benefits of providing automated scalability and reduced cost for maintenance. Oracle also hypes their cloud environment by gloating the speed of deploying new services into the cloud service, providing faster development **(Oracle, 2018)**. Companies can also consider the security of cloud computing as data integrity & encryption are a competitive advantage given by Cloud providers.

Even with the number of benefits included by cloud providers, further analysis of this discussion includes challenges that are involved with moving to the cloud service. These challenges include considering the importance of security, reliability and flexibility of business **(Bowman, 2018)**. Consider the number of business users & the needs of the business, if a business requires certain technological resources like VPN access into an intranet **(Bowman, 2018)**. Thorough research needs to be included for how these technologies can be migrated. Sometimes, the opposite is true and it is better not to migrate certain services. To answer these questions, a company must provide continuous research and analyze the pros and cons of service provided by different vendors. It is also the responsibility of the company to provide good documentation and detail on how to migrate the service to a cloud, implementing new back up procedure, employee training & back out procedures in-case of failure to meet expectations from the provider. Also, it is wise for a company to move their services in small migrations and monitor the changes. Many of these cloud migration management tactics are discussed by Cengage, Cloud computing **(Kris, 2013, ch. 1).**

Another good question that is raised by researchers is “What are the risks of migrating to the cloud?” Realistically speaking, companies will run into many risks of distributing a service to the cloud, correctly. Each technology, provided in the cloud, is vastly different in configuration management by vendors. There are multiple layers of the cloud architecture, integration requirements of different service providers & training for different technologies in the cloud. With all these different services available, any misconfiguration from lack of knowledge can result in a potential security flaw. Companies will have to consider the downtime & changes in functionality to their services when hosting to a cloud. They have to consider the increase in network utilization from making requests outside their internal network. Other considerations include the restrictions that a provider has made to their service. In many cases, companies to some degree, will have to consider working around the limitations of cloud providers.

In summary, companies are going to face many challenges when migrating to a cloud environment. There are many advantages that are associated with cloud computing but along with, comes challenges and knowledge transfer on how to use these services in the most efficient way. Companies can overcome these challenges by conducting thorough research, documentation & training to move their services in small migrations. Although the challenges are present, why not try it?

**References**

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**(3)** Boman, Sydney. (2018). 10 Commonly Asked Questions About Cloud Computing. Retrieved on: <https://blog.newcloudnetworks.com/10-commonly-asked-questions-about-cloud-computing>