

Cloud Technologies for Presales Consultants

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Abstract- Today IT (Information Technology) teams want to do more with less resources and with less budget. Cloud adoption is the best approach to handle this scenario. With the advent of lot of cloud technologies, there is a great advantage and opportunities for the presales consultants to promote better business decision across the enterprise.

Index Terms- Cloud, IT

I. INTRODUCTION

Cloud model enables users to request software environments by choosing from a predefined service catalog using a self-service provisioning framework. The key benefits of these clouds are agility and faster deployment of services. As software are provisioned and de-provisioned, the associated computing resources are consumed and then released. Computing resources can be consumed for the duration of a project, and then be automatically de-provisioned and returned to the resource pool. Computing costs can be tracked and charged back to the consumer.

II. FACTORS DRIVING ORGANIZATIONS TO DEPLOY CLOUD ENVIRONMENTS

Organizations are drawn to cloud service because it can simplify IT infrastructures, making it easy to deliver business functionality to many users and multiple divisions from the same hardware and software infrastructure, while automating manual provisioning processes. Provisioning new databases in traditional environments can take days or weeks. Cloud services can get this done within minutes.

III. FINANCIAL MOTIVATION

One of the most appealing aspects of Cloud service is that consolidation of software results in a smaller hardware footprint, which lowers costs. In addition, many users and departments share the infrastructure while paying for individual resource as services, which drives down the unit price of those services.

IV. BENEFITS TO IT DEPARTMENT

IT is continually asked to do more with less. IT leaders are looking for ways to increase agility while reducing cost and risk. Demonstrating the performance and resource requirements associated with running various application loads can help them realize the value of Cloud services.

V. BENEFITS TO MANAGEMENT

Capital Expenditures (CapEx) are incurred to create future benefit i.e. acquisition of assets that will have a useful life beyond the tax year. Operational expenditures (OpEx) are those expenditures required for the day-to-day functioning of the business. Cloud services generally follows the OpEx model, enabling consumers to avoid large upfront investments in hardware, software and services. This cost structure especially resonates with line of business managers

PRIMARY PLANNING CONSIDERATIONS

Thorough capacity planning to ensure cloud services can meet user needs and uphold the service level agreements that are established, especially as more applications are deployed and the environment gets more popular. Carl Olofson, a research director at IDC says to be overly generous with capacity. "Instead of doing planning and analysis from the inside out, and then trying to fit everything within those choices, ask yourself: what do users need? what are their performance requirements? then figure out what kinds of technology you need to meet their future requirements. Once you have cloud service capabilities and people can request them, the demand may be higher than you initially expect." Eytan Dallal Vice President of IT at Land of Lincoln Health Insurance briefs on ten considerations to cloud.

1. Security: Do cloud services offer a higher level of security/protection than your current environment? Can they provide 3rd party audit reports on their security?
2. Risk: Is my organization willing to house mission-critical data off-premise? What's the likelihood of bankruptcy / likelihood of failure / likelihood of negligence? Who has input into the cloud decision and did they take into account the risks? In the end, who is accountable for the decision? Is the cost of downtime greater than the savings achieved by moving to the cloud? This will make a big difference when up against a risk averse culture.
3. Legal/Compliance: Does a cloud environment meet compliance requirements (HIPAA, PCI, CJIS, SOX, retention, etc) that your current environment does not support, or would otherwise be too expensive to build? Who owns the data? What's your access to the data? Most providers will provide auditable information that their systems meet compliance standards, but the accountability is generally on the customer to report and prove compliance to a governing agency. Providers will generally not indemnify customers when it comes to the customer's lack of compliance.
4. Personnel: Management and Technical: Does the cloud provider have a strong management / account team? Do they

offer technical expertise you don't have within your organization?

5. Cost/Savings: Does cloud computing and all its features offer a significant net savings to your organization over 5-10 years; if not, can you justify the increase in cost? Have you factored in all costs to the organization (people, energy, space, insurance, downtime, training, etc)? The term "significant" is defined by your business -- spending \$1 million but saving \$1.1 million over 10 years may not be significant enough. Consider the opportunity costs with the cap-ex dollars.

6. Backup and redundancy: Does the cloud provider offer better/faster backup and recovery of your data, and geo-redundancy for immediate recovery points? Is going to the cloud part of your disaster recovery / business continuity solution?

7. Service Level Agreements: Can the provider deliver on your service level requirements? Can they provide a history of outages, recovery times, and impact to the customer? Don't rely on the contract and credits. Your downtime is far more devastating financially than the credits you'll get back from the provider for missing an SLA. Do the research yourself to find out if they have the infrastructure to support you and respond to issues in a timely way.

8. Location: Is the facility physically secure? Located on a fault line? High risk area/coast? International locations? Geographically diverse? Do they have data centers offshore and will data be replicated to those data centers?

9. Exit Strategy: Or, the "pre-nup" as I like to call it. How long would it take you to move out of the cloud, or to another provider? Will the provider be cooperative and deliver a seamless transition when it's time to separate from them?

10. New Features: Does the cloud provider offer the following benefits, if needed:

Accessibility: Does your corporate strategy and technology strategy require that users have 24/7 access to data, regardless of geography and platform?

Compatibility: Will your apps work in the cloud? Does the provider have the compatible systems to work with your organization, users, and customers?

Reliability: Is a cloud environment more reliable than your current environment?

Storage and Expansion: Like Moore's Law, data storage requirements double every 2 years. Can your data center accommodate this growth?

Speed to Deliver: Will cloud deliver a faster method of delivering/deploying services (infrastructure, platform, apps, services, etc)?

Your CIO, CTO, IT Director, or technical engineer should be able to articulate all these considerations in plain English. He or she should also be able to demonstrate a solid governance process for cloud operations (adding, removing, changing) and should be prepared to describe the changing role of IT once the organization moves to the cloud.

VI. CONCLUSION

This research paper is an attempt to evangelize the cloud technology that presales consultants can use for today's business and management. Cloud technology has been discussed under different heads so that presales consultants can take this to customers and provide a different area of expertise and technology shift for the customers.

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