Seven Critical Decision Points for the Introduction of Cloud Computing into your Organization

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ABSTRACT

In the first quarter of 2012, more than half dozen cloud related companies have gone public. According to Gartner, by 2014, we may see personal cloud that will provide us with a new level of flexibility with the devices that we use for daily activities, while leveraging the strengths of each device, ultimately enabling new levels of user satisfaction and productivity (Linthicum, 20125). In 2011 and 2012 several major cloud infrastructures have experienced technical difficulties and temporary shutdowns (Lane, 2011, Miller, 2011, Prigge, 2012). This paper first examines the opportunities and challenges in cloud computing environment and then offers seven decision points for managers to consider before adopting this technology (Bidgoli, 2013).

Keywords


INTRODUCTION

Cloud computing is the fastest area of application within the information systems field. Most computer and networking companies are trying to either enter into this area or increase their existing market share. Even during the economic down turn, cloud computing related jobs have been in high demand (Krill, 2010). Some experts believe that cloud computing could save the economy. In a survey conducted by CRN, 68% of the respondents indicated that cloud computing will help their businesses recover from the recession. More than 600 IT and business decision makers in the United States, the United Kingdom, and Singapore participated in the survey (Linthicum, 2010).

The adoption of cloud computing by businesses and academic institutions is on the rise. Cloud computing platforms could reduce cost and increase the information systems responsiveness for those companies that are properly adopting it (Bidgoli, 2013, Linthicum, 2012):

This paper presents seven decision points that if followed should increase the chances of success when introducing cloud computing into your organization. These decision points provide managerial literacy as well as checklists that organizations could use before introducing this technology into their organizations. The decision points include:

Decision Point #1: Understanding Grid Computing
Decision Point #2: Understanding Application Service Providers
Decision Point #3: Understanding Utility (On-Demand) Computing
Decision Point #4: Understanding the Components of a Cloud Platform
Decision Point #5: Understanding Public, Private, and Hybrid Clouds
Decision Point #6: Understanding the Security Issues in Cloud Computing
Decision Point #7: Preparing a Cloud Computing Plan for Implementation
**RESEARCH QUESTIONS**

Is cloud computing ROI justified?  
How to choose cloud vendors?  
How to increase chances of success while introducing cloud platforms into your organization?

**CONCLUSION**

This paper first examined the opportunities and challenges in the cloud computing environment and then introduced seven decision points for introducing cloud computing into your organization. The seven decision points include: (1) understanding grid computing, (2) understanding application service providers, (3) understanding utility (on-demand) computing, (4) understanding the components of a cloud platform, (5) understanding public, private, and hybrid clouds, (6) understanding the security issues in cloud computing, and (7) preparing a cloud computing plan for implementation. If these decision points are carefully analyzed and followed, they should increase the chances of success for the introduction and utilization of this fast growing technology.

**REFERENCES**


Krill, Paul (November 03, 2010, VMware exec: Cloud computing is a certainty, InfoWorld,  

Lane, Patrick (Aug 29, 2011), Cloud failures: The downside,  

Linthicum, David (July 27, 2010), Will cloud computing save the economy?, InfoWorld  

Linthicum, David (March 16, 2012), Gartner: Forget PCs, the 'personal cloud' will rule in 2 years, InfoWorld  

David Linthicum (August 14, 2012), Wake up, IT: Even CFOs see value in the cloud,  

Miller, Claire Cain (April 21, 2011), Amazon Cloud Failure Takes Down Web Sites, The New York Times,  

Prigge, Matt (March 05, 2012), Learning from the cloud's failings, InfoWorld,  