Chapter 101

Business Transformation though Cloud Computing in Sustainable Business

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ABSTRACT

The changing market trends make it mandatory for businesses to constantly innovate and improve while keeping the expenditures at lowest. For any business, irrespective of size, information technology is playing a major role. Cloud computing is emerging as a driving factor for all types of businesses. Although cloud computing is widely recognized as a technology transformer, its potential for driving business innovation is not exploited to the fullest. Cloud computing promises to decrease capital expenditures and offer higher utilization rates on existing hardware. To exploit the cloud computing capability to enable organizations to enhance their revenue streams and improved customer relationships while increasing business agility, organizations need to determine how best to employ cloud enabled business models that promote sustainable competitive advantage, as this chapter discusses. By completely leveraging cloud computing opportunities, organizations can focus on process improvement by driving inefficiencies out of repeatable processes and providing agility to reuse elements of business logic.

1. INTRODUCTION

In today’s rapidly changing business environment, organizations are grabbing opportunities around the cloud to create novel services and business models that increase fast delivery by creating operational efficiencies and engaging customers through innovative path. For any business, irrespective of size, information technology is playing a major role in managing the business. In this direction Cloud computing is emerging as a driving factor for all types of businesses. Cloud Computing is not just about cost. It can provide a platform for a business to achieve its ambitions of having an “inclusive” IT system that covers the entire supply chain and its customers, enabling
and generating business growth more effectively. The businesses will no longer need to invest in / manage IT infrastructure, it can be provisioned as a service on demand. It’s important to note that private, public, and hybrid clouds are not strictly distinct, as many organizations choose to build a customized cloud solution out of a combination of these. In cloud computing, there is a convergence of two major interdependent IT trends: IT efficiency and business agility. Cloud computing value proposition is reduction of total cost of ownership, translating the fixed to variable cost, improvement of business agility and ability to build systems of global class. The cost model allows the business to free up budgets on infrastructure and the platform allows using them for delivering innovation services quickly. The forthcoming sections investigates the feasibility of novel and practical solutions on how organizations can deliver high business value through technology and operations strategy engagements while building systems of global class so that cloud users can have self-provisioned cloud-based IT resources.

The services provisioned by the cloud like Infrastructure-as-a-Service (IaaS), Software-as-a-Service (SaaS), Platform-as-a-Service (PaaS) and Business Process-as-a-Service (BPaaS) are not mere technology delivery paradigms, they offer several value propositions to consumers.

Any enterprise who wants to consume or offer cloud services can leverage the capability of cloud to achieve new levels in sustainable competitive advantage across customer, supplier, partner and employee relationships. Recent technology and social connectivity trends have created a perfect storm of opportunity for companies to embrace the power of cloud to optimize innovate and disrupt business models. Organizations can scale their investments as they grow their business by appropriately choosing the cloud delivery models. They also have opportunity to open up new doors to new business approaches through standardized applications, infrastructure, testing environments and business processes to provide better and efficient service delivery (“State street corporation”, 2011). It is very much essential for organizations to understand the different forms of the cloud and identify the right approach for each organization and also to identify the right cloud service provider to meet business’ requirements.

Depending on how organizations use cloud today and how they plan to employ its power in the future, organizations can be classified in order to show the extent to which the organizations view how the usage of cloud impacts value chains and value propositions. We can see that most of the cloud adopters’ view a return on investment (ROI) calculation as a key proof point for cloud computing. In addition to hard benefits, cloud technologies soft benefits such as accelerated time to market for new offerings, increased business agility, and improved quality of service and end user satisfaction also should be considered as criteria for cloud adoption and analysis. On the whole, the Cloud is not just a passing phenomenon but a reality that has just begun to realize its potential in the IT solutions and service industries and would continue to stay ahead. The following sections of the chapter discuss the recommendations and methodologies for implementing cloud computing based on the lessons learned from various sources.

2. BACKGROUND

To ensure that organizations develop and adhere to a sustainable development strategy, management should consider aspects of value creation that would benefit its employees, users and stakeholders. In this context, incorporating sustainable strategy with emerging technologies is becoming the norms in contemporary businesses (Newton, 2003). As it is widely accepted the fact that adoption of the cloud computing services and technology will assist in the reduction of capital expenditure and carbon footprint (Grossman,
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