Chapter 2
Implementing Cloud Information Systems for Organizational Agility and Competitive Advantage:
SaaS Migration

Kamran Janamian
Independent Researcher, Slovakia

ABSTRACT

In today's competitive business environment, information systems are not a luxury; rather they are vital for survival. A new generation of ISs has been established on cloud capabilities. Moving toward software as a service is not the goal in a business, and if not implemented properly, competitive advantage may even suffer. Managers and change agents should undertake deep study over SaaS implementation before migration. In this chapter, the main elements and features in which CEOs and IT managers should consider in evaluating the SaaS migration option will be provided, and enterprises may be acquainted with the concept, goals, and theoretical foundations of SaaS as a main cloud-based service in the business environment. On the other hand, businesses should undertake some necessary changes in the operating circumstances which are utilization of a proper and modified business models established over a knowledge base strategic movement. This will lead enterprises to achieve the main goals of migrating to SaaS and cloud platforms (i.e., agility, competitive advantage, and innovation).

INTRODUCTION

Information Systems as Carr (2004) states appear to be like electricity. Publicity and essentiality of electricity forced managers not to depend on electricity for their strategic decisions, and so is true for ISs. Carr argues, "When a resource becomes essential to competition but inconsequential to strategy, the risks it creates become more important than the advantages it provides" (2004, P.11). Traditional desktop ISs are more or less known for more than three decades, and managers are following new routes to the quality, timeliness, and effectiveness of information flow for gaining competitive advantage. The main disadvantages of traditional desktop ISs are high costs, implementation difficulties, and information blockage. The arrival of the Internet has extended the way ISs can perform, however network-enabled Information Systems have been in use for more than two decades. Now there is no need to pay heavy costs for Information System implementation and license purchases. "Cloud Computing" emerged a new generation of ISs, i.e., "Cloud Information Systems (CISs)". With this new phenomenon as Martin (cited by Geelan, 2009) explains, there is no need for new IT structures, user training, or licensing procedures; on the other hand and at the same time the company will benefit from increased IT capabilities and capacities.

NIST's[1] definition of Cloud Computing (2011) implies that every application that uses the internet as a tool for enabling "ubiquitous, convenient, on-demand network access" (Mell & Grance, 2011) to shared computing resources, data, information or services, can be grouped in the Cloud Computing Model. To name a few Cloud Computing services offered since far, we can point to Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS). These so-called Cloud-models have moved business IT to a new era, which is based on hybrid and virtual worlds. This chapter attempted to guide managers and change agents through choosing and using the SaaS model in the new Cloud-era. Feasibility and suitability of SaaS and CIS will be studied in different business environments, and SaaS business maturity models will be explained. Change as a vital element of implementing the SaaS model will be described and few delivery methods to SaaS implementation challenges will be offered as well. Thus, this chapter can be a guideline toward SaaS-migration.

Importance of SaaS

SaaS has been modified, explained and defined by almost any expert in the field. However, the most known definition of SaaS explains that any application running on the cloud platform enabling consumers to run the program on a thin-client (Internet browser) or a program interface can be known as SaaS (D. C. Chou &

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