Business Opportunities Arising from Cloud Computing in Information Technology Industry

Author: Dr. Lee Ho Cheong (Jackie) and Siti Normaziah Ihsan

The MDEC has appointed 6

Technology Partners to offer

customized package of

cloud hosting subscription,

training and go to market

under the ISV Cloud Com-

puting Programme

1 Introduction

Nowadays, cloud computing becomes a hot topic not only for information technology (IT) industry but for everyone. Cloud computing does not have a clear definition in the literature yet. Carroll et al. (2012) described cloud computing as a collcomputing concepts that involve a large number of computers that are connected through a real-time communication network (typically the Internet).The development and the application of cloud computing have a great impact on the IT industry (Rahul et al., 2012). This paper highlights some critical issues on the

ways to run business in cloud computing. In particular, it looks specifically on the recent development of cloud computing around the world. The potential busi-

ness opportunities arising from cloud computing are also explored.

2 Running business in cloud computing

How does cloud computing affect

the ways to run business? From the last decade, running business has shifted from traditional ways to the internet in using software models. From the business point of view, it is very complicated and expensive in running traditional business applications. Huge amounts and varieties of hardware and software are required to run the applications for a small and medium enterprise. One can imagine what human and capital resources are required o install, configure, test, run, secure, and update the applications for a large enterprise.

With cloud computing, an experienced vendor manages the

shared infrastructure and platforms that run the applications. There are many services according to several fundamental models offered by the vendors: infrastructure as a ser-

vice (laaS), platform as a service (PaaS), and software as a service (SaaS) (Voorsluys et al., 2011).laaS means the clients can rent the hardware and tools to maintain the hardware. PaaS means the clients can rent everything but the applications. SaaS means the clients can rent applications and access them over the internet. The clients using SaaS usually are the application developers.

The clients determine appropriate costs for the services they need. The services can be upgraded automatically, and scaled up or down easily. Cloud computing provides both cost and time effective solutions in running business as the majority of costs in development, running and maintenance of hardware and software are covered by the vendor. Besides, the cloud-based applications can be set up and running in days or weeks. Once the cloud applications are set up, the clients can open a browser, log in, customize the applications, and start using it.

A vast variety of business applications are running in the cloud, for example, customer relationship management (CRM), human resources and accounting. The potential clients should first rigorously test the security and reliability of the vendor's infrastructure before moving their applications to the vendor's cloud.

BIT@F\$KKP 2013