Cloud Computing Adoption in SMEs

Senarathna, R. P. I. R.¹, Priyadarshani, W. P. E.²

¹ Department of Industrial Management, Wayamba University of Sri Lanka ² ICT Center Kuliyapitiya, Wayamba University of Sri Lanka

isenarat@gmail.com

Cloud Computing has become increasingly important for Small and Medium-sized Enterprises (SMEs) because of its cost-effective benefits. However, the adoption of Cloud Computing over the recent years raised challenging issues with regard to privacy, security, trust and reliability. In this research, we explored and presented the findings of the factors influence on Cloud adoption by SMEs. Based on a survey of SMEs across Australia, we analysed the data using factor analysis and multiple regression. The analysis indicates that the main contributing factor for Cloud computing adoption by SMEs is awareness of Cloud. The awareness of Cloud computing by SMEs showing that there is a high level of perception of SMEs to adopt Cloud computing. In other words, when SMEs are aware of this new operational model, there is a high prospect to adopt Cloud computing. Other factors are come to affect when SMEs are aware of this new service model. Therefore, other factors are less effective without awareness of Cloud computing factors in our proposed model. These are the two other intensify factors to adopt Cloud computing.

This research makes a number of contributions to research and practice. This study extends the current understanding of Cloud computing adoption by Australian SMEs (micro, small and medium enterprises) using a technology-based service adoption framework. On a practical front, these research findings offer insights for SMEs that are planning or are in the process of implementing a review of their Cloud computing initiatives. Service providers can also use the model to understand the requirements of SMEs in their provision of the service. Further, it will be beneficial for consulting companies that are assisting SMEs with Cloud computing implementation. In addition, the government could use the Cloud computing model to assist with developing awareness, support programs and policies for Australian SMEs. This study was limited to research on Public Cloud adoption. This can be extended for other deployment methods in future research.

Key words: Australia; Cloud Computing; Small and Medium-sized Enterprises (SMEs).