Exploring the Factors Influencing an Organisation in Thailand to Adopt Cloud Computing Platforms

Sachin Yadav¹, Papitchaya Wisankosol²

Received: April 2021. Revised: June, 2021. Accepted: July, 2021.

Abstract

This research is aimed to explore the factors influencing organizations in Thailand to adopt to cloud computing platforms. The study was conducted utilizing the theory of planned behavior (attitude toward the behavior, subjective norms, perceived behavioral control) with an additional factor known as the perceived usefulness, perceived ease of use, and satisfaction to predict companies' intention to adopt to cloud. The research was conducted as a quantitative analysis with descriptive and inferential research with a sample size of 284 respondents who have had some experience with cloud computing services. The results of this research were analyzed using simple and multiple linear regression. The finding shows most of the variables have significantly influenced cloud adoption intention. Interestingly, technology impacts perceived usefulness, Perceived ease of use as well as satisfaction. There is a need for proper knowledge sharing, training for Thailand people to use cloud computing platforms.

Keywords: Cloud computing, Cloud adoption, Cloud platforms, Perceived usefulness, Technology adoption model

1. Introduction

Cloud computing is a new type of IT services via software, platform, and infrastructure via internet technologies through some cloud services providers. NIST defines cloud computing, 2009 as a model for enabling easy to use, available on-demand resources access to a shared platform of configurable computing services (e.g. networks, databases, servers, storage etc.), which can be provisioned quickly, and released with minimum management efforts or support. Cloud computing comprises three basic service levels: Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS) and Software-as-a-Service (SaaS). IaaS is bare metal or basic cloud services that provide infrastructure services to customers over the internet.

With the Technological transformation in place, and the current impact of COVID-19 situation, cloud computing has become the talk of town in the whole world along with Thailand. Thailand's cloud computing business is getting a lot of importance as Thailand has a lot of IT companies, E-commerce channels. There are a lot of cloud service providers like Amazon Web services, Microsoft Azure, and Google Cloud. It is pretty easy to start up an IT ecosystem with cloud computing in place. Cloud Computing service provides many advantages, including cost, scalability, flexibility, automatic updates, and upgrades for the software, and applications.

There are lots of existing companies in Thailand, which are already using a lot of cloud products. The cloud computing usage in Thailand is expected to surpass 15 billion baht in value by 2024 with CAGR of around 19% since 2018, with the sudden digital transformation revolution of businesses due to pandemic, as per global research firm IDC.

1.1 Statement of Problem:

Cloud computing adoption has various drivers including technology, organizational competency, external environment etc. Technology is foremost the most impacting factor of cloud computing adoption. Even though Cloud computing platforms provide a very easy way to develop the application, still there are misconceptions that it is not easier to move the on-prem application to cloud computing platforms. This research is focussed on the ease of using cloud computing platforms which leads the businesses in Thailand to adopt cloud computing platforms.

 $^{1\ ^*} Sachin Yadav, Graduate School of Business and Advanced Technology Management, Assumption University of Thailand. E-Mail: sachinyadav 354@gmail.com$

^{2 **} Papitchaya Wisankosol, Graduate School of Business and Advanced Technology Management, Assumption University of Thailand. E-Mail: dr.neiy@hotmail.com

[©] Copyright: Sachin Yadav, and Papitchaya Wisankosol