Industry 4.0: The Importance Factors of Innovation in Adopting Cloud Computing Among SMES in Malaysia

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ABSTRACT

Small and medium-sized enterprises (SMEs) are commonly perceived as an essential part of boosting and stabilizing global economic growth. In 2018, SMEs recorded a 38.3% contribution to GDP of RM521.7 billion compared to RM491.2 billion in 2017. SMEs are expected to contribute 50% to Malaysia's GDP by 2030 relative to its present 38% contribution. However, in the context of Malaysia businesses, particularly small and medium-sized enterprises, are still not embracing the latest technology revolution sufficiently, as reported by the Ministry of International Trade and Industry (2018). Malaysia is currently in the third industrial revolution (automation), and some are still under the second industrial revolution. Such matter is worrying as only a few industries in Malaysia can adopt pillars of Industry 4.0, where business owners in Malaysia were still hesitant to embrace technologies such as the cloud. To bridge the gap in this analysis, this research adopted the technology acceptance model developed by Davis (1989) and Rogers' Diffusion Innovation Theory (1995), which incorporates the contexts of technology and innovation among SMEs in Malaysia. By using survey questionnaires, data was collected among manufacturing and services SMEs in Malavsia. Structural equation model employed to assess the important factors of innovation in adopting cloud computing among SMEs in Malaysia by using Smart-PLS.

Keywords: Cloud computing, Industry 4.0, Innovation, Technological