

Agro-food SMEs' intention to adopt halal traceability system

ABSTRACT

Traceability system enables agro-food small and medium enterprises (SMEs) to record the information on attributes of their products along the food supply chain effectively. The halal status of the food products can be retained across companies' supply chain by practising halal traceability system. This system is considered as one of the advanced technologies to overcome the violation of halal food products in the market despite low usage of advanced technologies detected among Malaysian SMEs. The main objective of the study was to investigate the agro-food SMEs' intention to adopt halal traceability system. This study involved 130 agro-food SMEs that were selected using a systematic random sampling method. A structured questionnaire was used to collect the data from the SMEs. The data were analyzed using descriptive analysis, mean ranking analysis, Chisquare analysis, and independent-samples t-test. The results revealed that majority of agro-food SMEs involved in this study (111 companies, 85.4%) were categorized as small business size companies and most of the agro-food SMEs (73 companies, 56.2%) was in operation for less and equal to 9 years in the agro-food industry. Based on the mean ranking analysis, the agro-food SMEs have high intention to adopt halal traceability system (mean score of 4.25). From the Chi-square analysis result, there was a significant association between sales turnover and agro-food SMEs' intention to adopt halal traceability system ($p=0.046$). This explained that the agro-food SMEs with low sales turnover tend to have high intention to adopt halal traceability system in order to upgrade their businesses. Independent-samples t-test revealed that there was a significant difference between sales turnover of low and high intention of agro-food SMEs to adopt halal traceability system; $t(128) = 1.964$, $p = 0.052$. This study concluded that the agrofood SMEs should be encouraged and exposed to the adoption of advanced technologies in the market.

Keyword: Agro-food SMEs; Adoption; Intention; Halal; Traceability system