

Intention on adoption of industry 4.0 technology among small and medium enterprises

ABSTRACT

Industry 4.0 is a cutting edge technology in both small and large scale industries. The present study was conducted to investigate the level of intention to adopt Industry 4.0 Technologies among small and medium enterprises (SMEs) in Malaysia's dairy manufacturing companies. Using structured questionnaires, a total of 114 companies, out of 156, were respondents to the study. The findings revealed that attitude, subjective norm (SN) and perceived behaviour control (PBC) of Theory of Planned Behaviour (TPB) had positive effects on intention to adopt Industry 4.0 technologies. Usage level of technology (Low, mid and high) had moderating effects where attitude in low, mid and high levels did not impact intention. SN and PBC had impacted intention in low and mid-levels but not in high level usage of technology. The findings supported the assumptions of TPB and suggested managers and higher authority of SMEs to appreciate the impact of Industry 4.0 Technologies in their management of manufacturing industry.

Keyword: Small-medium enterprises (SMEs); Dairy manufacturing companies; Industry 4.0 Technologies; Subjective norms (SN); Perceived behaviour control (PBC); Theory of Planned Behaviour (TPB)