Application of knowledge management systems in Malaysian oil palm plantations supply chain

ABSTRACT

Vertically integrated firms are streamlining activities in their supply chain by using knowledge management systems (KMS). Effective KMS need suitable combination of organisational and managerial initiatives and the use of suitable information technologies. Malaysian oil palm plantations have been recognised as leaders in technology development and adoption. KMS in the plantations started with the use of computerised inventory management systems. Subsequently, the plantation companies applied KMS to integrate various functions, including sourcing raw materials, production and support activities. This paper explores to what extent oil palm plantations have used KMS in managing their supply chain primary and support activities and how effective it is in increasing performance. Results of the study showed the plantations' performance. However, greater use of existing KMS and adopting a more advanced IT will further improve performance at all stages of the supply chain.

Keyword: Supply chain; Knowledge management systems; Information technology; Primary activities; Support activities; Oil palm plantations