Uncertainty Factors Affecting in Supply Chain Management Systems Using Computer-based Application

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Abstract

The aim of the research is to empirically investigate the effective use of computer-based applications to reduce several sources of supply chain uncertainty, with particular emphasis on uncertainty or strategies involving internal organizational problems/issues.

Design/methodology/approach:
Referring to the theories of manufacturing strategy, application development theory, usability, alignment, and contingency theory, which are used as theoretical foundations. Multi-case study data are collected from sales distribution networks ranging from producers (farmers), collectors, users (retailers), agents, distributors, and exporters in Indonesia.

Findings:
Within the context of management strategy is the achievement of alignment to overcome the factors of uncertainty in the supply chain. Within the scope of application development, modeling a prototype web-based application, android, to minimize risk, uncertainty, then providing recommendations for solution options

Research limitations/implications:
The study is limited to the Indonesian distribution coffee, and so further research is needed in other cultures/contexts.

Practical implications:
Management strategies that aim to reduce an uncertainty at its source lead to better overall supply chain performance than strategies that merely cope with uncertainty, which only have an impact on firm-level performance.

Keyword
Supply chain, Uncertainty Factors, Computer-based, Applications