Adoption of interorganizational system standards in supply chains
An empirical analysis of RosettaNet standards

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Abstract

Purpose – This study aims to empirically examine the factors that affect the adoption of RosettaNet standards. The four factors examined in this study are partners' power, trust, products' characteristics, and government influence.

Design/methodology/approach – Original research using a self-administered questionnaire that was distributed to 400 Malaysian electrical and electronics (E&E) organizations. The hypotheses were tested by employing binary logistic regression analysis.

Findings – The results show that partners' power, trust, and products' characteristics have significant and positive effects on the adoption of RosettaNet standards.

Research limitations/implications – The generalisability of the findings is limited as the study focuses only on E&E industry in Malaysia.

Practical implications – Organizations planning to adopt RosettaNet standards will be able to make managerial decisions based on the findings from this research.

Originality/value – The findings made a contribution in terms of creating an understanding of the influence of the adoption of RosettaNet standards. This study has filled previous research gap by advancing the understanding between the association of adoption factors and RosettaNet standards adoption.

Keywords Standards, Data analysis, Electronic commerce, Malaysia

Paper type Case study

Introduction

The current business environment is getting more competitive and organizations are increasingly focusing on operating as efficient as possible. One way for organizations to be efficient and achieve competitive advantages over their rivals is to implement an efficient and effective supply chain management (SCM) (Jharkharia and Shankar, 2005). An effective and efficient supply chain will have benefits such as reduced inventories, increase inventory turns, reduce cost, and increase customer service (Serve et al., 2002). One enabler for an effective and efficient SCM is to implement a collaborative SCM system. In a collaborative supply chain environment, the supply chain members work together, share important information, and collaborate on activities efficiently and effectively (Kim and Smari, 2005). The implementation of a collaborative SCM system needs the integration of business processes and information exchanges which has been facilitated by interorganizational system (IOS). IOS enables information flow to be automated between organizations which is the requirements for a collaborative SCM. However, in