Identifying Factors Affecting EDI Adoption in the Automotive Supply Industry: A Quantitative Study

Abstract

This study examines the main determinants of electronic data interchange (EDI) adoption inside the automotive supply chain. The research model was developed based on the combination of TOE model, DOI and institutional theory. It studies the main factors that influence EDI adoption, through taking into consideration technological factors (Perceived benefits, compatibility, trialability, observability, costs and risks), organizational factors (size, top management support, IT competence and centralization), and environmental factors (coercive pressure, mimetic pressure, normative pressure, information’s intensity and external support).

A survey was distributed to the automotive companies in Morocco and in total, 47 responses were collected and analyzed. The findings show that only four factors have a significant influence on EDI adoption: coercive and normative pressure, perceived benefits of EDI and the top management support.

Understanding which factors significantly influence the EDI adoption can first help researchers
improve innovation adoption and accumulate the knowledge in this field; Second, it can help managers to have a better understanding about EDI adoption in their businesses and make appropriate decisions on EDI adoption and implementation. Besides, this study is important in a global context, as companies in Morocco are going to export their product in the global marketplace.

References


Index Terms

Computer Science
Distributed Systems

Keywords
Electronic data interchange, Supply chain, adoption of IT, automotive industry.