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**THE EFFECTS OF IT ON SUPPLY CHAIN PERFORMANCE:
INFORMATION SHARING, KNOWLEDGE CREATION, AND COORDINATION**

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e-SCD is a supply chain design which integrates and coordinates suppliers, manufacturers, logistic channels, and customers using information technology (IT). In this study, the model developed in a previous study is refined and tested using the data collected from Korean companies in automobile industry. The model combines Malone et al.'s framework for IT effects with Nonaka's knowledge creation process. It shows a process through which an electronic supply chain network is transformed from a simple infrastructure for data exchange into a knowledge-sharing network for fast response and better performance. The results show that e-SCD has significant effects on the supply chain coordination and knowledge sharing. It is also shown that the IT has bigger impact on sales, profit, and modularization capability rather than cost of supply chain.

Keywords: supply chain, electronic supply chain design, customization, electronic communication, electronic brokerage, electronic integration, knowledge sharing, knowledge creation