

IT Application in Supply Chain Security

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Abstract

Information Technology (IT) has recently gained much success in its application in industrial as well as service organizations. Specifically, IT plays an important and an integral role in supply chain management in organizations, whether it is to allow access to data, to facilitate communications or the analysis of available information. On the other hand, organization's operations and management of them often play a key role in the ability of an organization to exist and evolve. Among operation management tasks, supply chain management is one of the most critical tasks. Unfortunately despite the acknowledged importance of the use of IT, the number of empirical studies assessing the use of IT in the supply chain context is very limited. So this paper tries to analyses application of IT in the supply chain management of organizations. Reviewing literature of supply chain management and IT, highlights the gap of studies in analyzing effectiveness and efficiency of IT application in supply chain security. This paper presents available literature in its selected context; present a classification of the ways in which companies use IT in supply chain security management, and examines IT application in supply chain security with a case study in Siemens Company. Based on authors' experience and reviewing its supply chain productivity which will be presented in the paper, their selected company for the case study is good enough to be as a benchmark for other companies in terms of supply chain security management. From this study, authors draw a conceptual framework to show how supply chain managers can use IT to secure their supply chain.

Keywords

Supply Chain, Security, IT, Framework.

Biography

Shahryar Sorooshian, is senior lecturer in faculty of Technology, Universiti Malaysia Pahang. He earned his B.Sc, M.Sc, and PhD in Industrial Engineering. He has published books, journals and conference papers. He is member of editorial board in some scientific journals and conferences. His research interests include operational management, management engineering, and Business modeling.

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