Strategic analysis against digital supply chain manipulations

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Abstract

The supply chain (SC) is the network of organizations involved in different processes and activities to generate products and services through upstream and downstream linkages. Due to globalization, market competition has increased, forcing companies to develop competitive advantages to expand their products and provide high-quality services. Today's business environment requires SC networks to be more complex and dynamic, meaning that companies are exposed to a growing number of risks that can affect the performance of the supply chain. These risks can be external (related to the problems that could potentially occur to electronic devices with access to internet) and internal (lack of control of the gathered information). The development of information and communication technology (ICT) has led to a phenomenon known as digital disruption in which traditional business models based predominantly on physical activities are being disrupted and shifting towards digitalization, transforming SC into digital supply chains (DSC). A DSC can be defined as a technological system based on the capability of massive data disposal and accurate cooperation and communication for digital hardware, software, and networks to support and synchronize interaction between organizations, making services more valuable, accessible and affordable while having effective outcomes. In the present talk, we revise some game theoretical models to design a strategy proof digital supply chain that prevents data manipulations.

Keywords

Digital Supply Chain, Game Theory, Strategic behavior, Digital Platforms, Data Manipulation.