Utilising IoT to attain resilience across supply chains

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The huge development in the field of IT, and the high competition in the open market forces companies to look for solutions to increase their market share and revenue. To satisfy the previous goals, companies can apply and adopt plans that may lead to make the supply chain (SC) lengthy and too rigid to control and monitor. The longer the SC the more it can be disrupted by expected and unexpected events (e.g., Digital security incidents, climate, or natural disasters).

For that purpose, the supply chain must be built in a way to respond fast to disruptive events in an effective way and to bounce back to its original state to be considered as one of the supply chain resilience features, which gives a competitive advantage to the companies that have these features in their plan and process.

In way to achieve resilience in the supply chain, several studies have discussed enablers and ways to fulfil the previous aim. Some of these studies have focused on increasing velocity through the supply chain, other studies argued that high adaptability leads to increase resilience in the SC, moreover mentioned information sharing as a key to achieve resilience in the SC. In addition, applying technology in the supply chain process can add strength to the companies’ processes. As such, the Internet of Things (IoT) can support and enhance the level of Velocity, Adaptability, and Information sharing, which leads to enhancing the resilience level in the supply chain. This research will explore the opportunities the IoT can give to enhance resilience enablers and boost supply chain resilience.

Keywords
Supply chains, Supply chain resilience, IoT, Internet of Things,

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