

Enhancing the Functionality of Supply Chain Management Systems to Deal with Resilience in UK Food Sector

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Examples of disruptions



1. Introduction

In a globalised economy with complex supply chains, food companies are using sophisticated software to manage a wide range of coordination activities, but the planning capabilities within these decision support systems are unable to effectively deal with recovery from various contemporary disruptions associated with climate change, access to resources (raw materials, energy and water) and economical volatility.

Top Supply Chain Software used by Food Companies

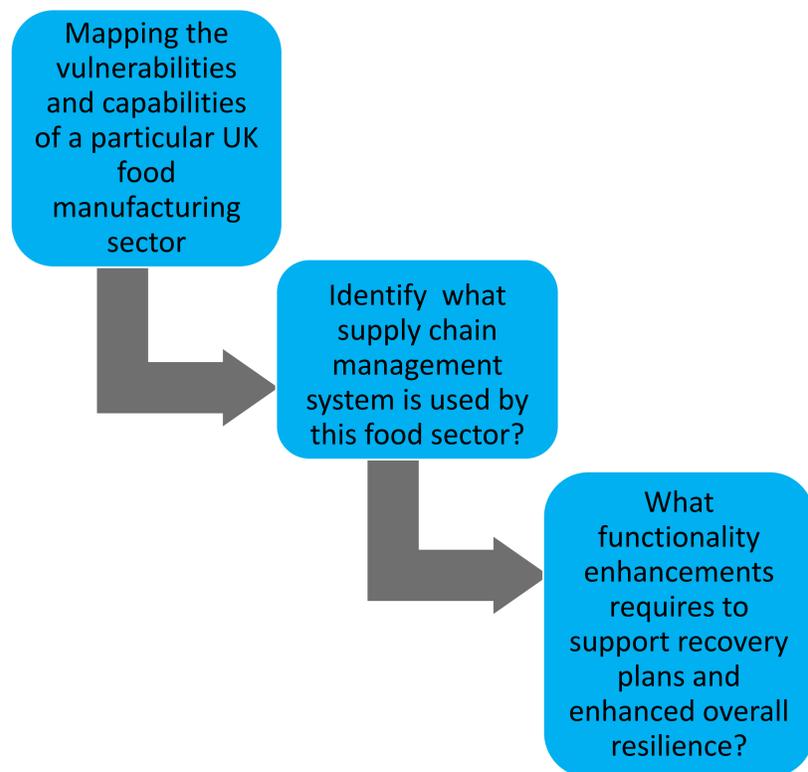


2. Aim/Objectives

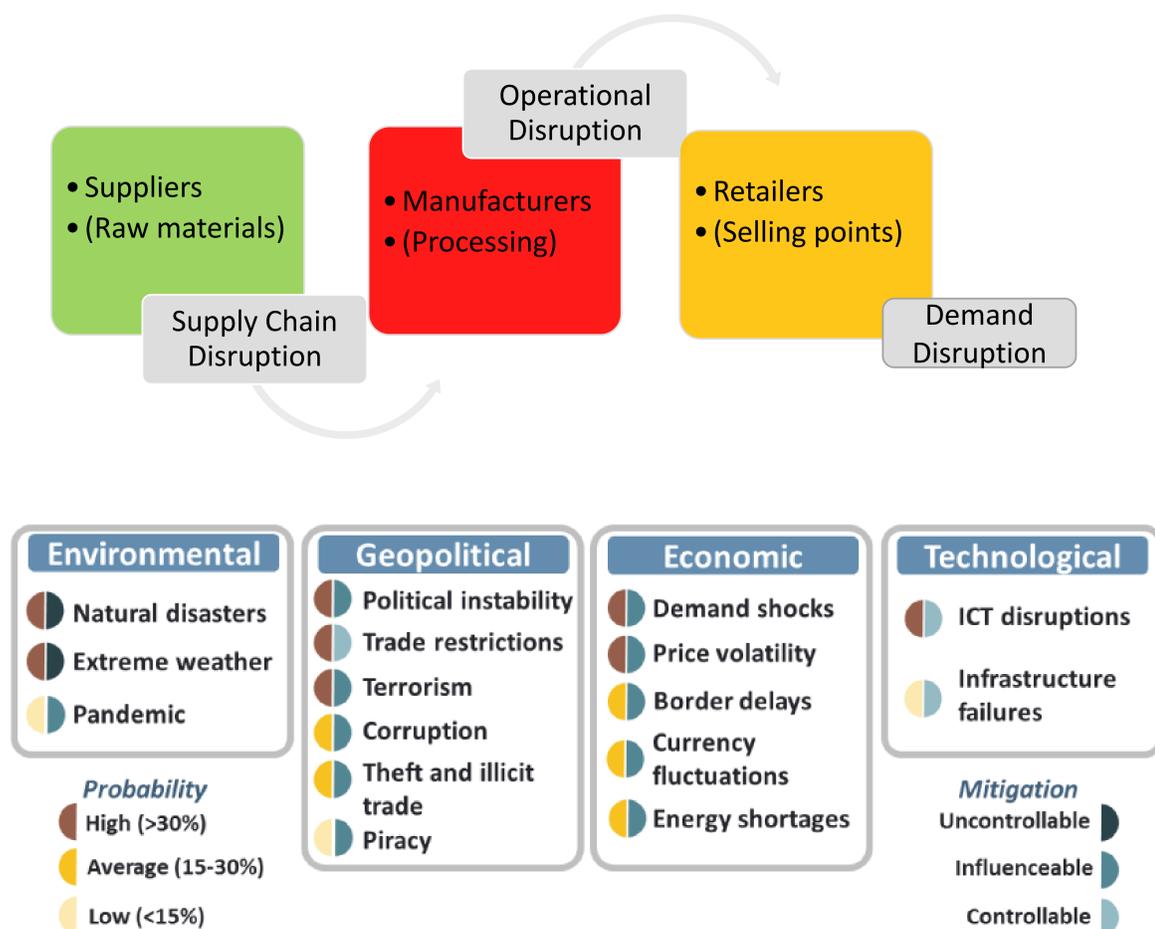
This research aims to investigate how the existing functionalities of supply chain Software should be enhanced to help with recovery plans from disruptions. To achieve these, the following research questions will be addressed.

- What are the SC software currently employed by food sector?
- Which are the major/common disruptions? And based on their severity and probability of taking place, what are their likely impact on UK food supply chain?
- What are specific resilient capabilities required by food products sectors (e.g. Dairy, Ready Meal, Poultry)?

3. Methodology/ Framework



Possible Disruptions in Various Supply Chain Cycles



4. Conclusions and Future Work

Major disruptions such as Climate Change, Food Contamination and Economic Volatility (e.g. Brexit) will impact various food products differently, and requires specific supply chain solutions to enhance overall resilience. The next step of research will focus on UK Dairy Industry, due to its sensitivity and importance of products to nation's well being, and investigate.

1. The UK Dairy supply chain and its most common disruptions over the last 10 years (e.g. milk shortages, transport disruption, variability quality, traceability, price volatility of raw materials).
2. The most commonly used supply chain software in Dairy sector and short coming associated with the utilisation of these in planning against aforementioned disruptions.
3. Models in form of algorithms and software tools to enhance supply chain resilience for Dairy product sector.

