Science and innovation company DuPont used DHL’s Resilience360 tool to identify its major risk areas. The results are visibility across the entire supply chain, risk prevention, and cost avoidance.

CUSTOMER CHALLENGE

With its broad portfolio, global footprint, and extensive network, DuPont has a highly complex supply chain. The strategy for this supply chain is defined not by the logistics team – which is located across several countries – but by multiple business units within the organization. A key challenge for DuPont was to achieve a holistic view of its entire supply chain in order to assess risk and improve efficiency.

Additionally, the company knew it needed greater supply chain resilience. It had experienced damaging disruptions, including the tragic 2011 tsunami in Japan, which affected DuPont’s sole supplier plant, and 2013 strikes in the U.S.A. which disrupted operations at East Coast ports. So another key challenge for DuPont was to monitor incidents and minimize impact on the supply chain.

Customer Objectives

- Achieve a holistic view of the supply chain to assess risk and improve risk management efficiency
- See strengths, weaknesses, and “what-if” scenarios
- Minimize impact of incidents on the supply chain

DHL Solution

- DHL Resilience360: supply chain risk management
- Visualizes entire supply chain; rates risk exposure
- Identifies mitigations and risk impacts
- Finds “hot-spots”, “value at risk”, and “what-ifs”

Customer Benefits

- End-to-end supply chain visibility
- Quantify risk and establish robust backup plans
- Demonstrate the case for operational improvements
- Avoid substantial risk-related cost
CUSTOMER OBJECTIVES

DuPont wanted to achieve holistic supply chain management but according to An D’haenens (DuPont’s Logistics Manager EMEA): “We didn’t know how or where to begin”. The ideal solution would enable everyone in DuPont to access supply chain information, with visibility of different routes and specific modes of transport – sea, air, or road – along with both global and per-country perspectives.

DHL SOLUTION

DHL delivered a unique supply chain risk management solution called DHL Resilience360, customized to provide a continuous assessment study and software that improve the resilience of DuPont’s supply chain. This solution comprises both a targeted risk assessment process and a supply chain incident monitoring platform.

To create transparency on exposure and vulnerability in multiple risk categories, DHL embarked on a major risk assessment exercise. Guided by DuPont, this bespoke study focused on seven risk categories deemed most likely to impact the supply chain: strikes, power outages, telecoms outages, industrial fires, terrorist attacks, IT failures, and the financial stress of suppliers.

After mapping and visualizing the DuPont supply chain, DHL was able to give a risk exposure rating to all elements of the supply chain. For this customized assessment, DHL provided risk severity scores for each supply chain entity in scope, and a resiliency rating based on the available alternative capacities, time-to-recovery, and the importance of the entity to DuPont business. It then identified risk hotspots and choke points, along with appropriate risk mitigations.

CUSTOMER BENEFITS

End-to-end supply chain visibility: DHL Resilience360 provides DuPont with comprehensive, real-time, global and country-specific insight. Prior to this solution, “different people had been aware of different pieces of the supply chain” but not all of it, and D’haenens describes the risk assessment as “an eye-opener”. The team can now make contingency plans, manage and track risks, and receive alerts and incident status reports.

Quantify risk and establish robust backup plans: The bespoke risk assessment revealed disruption potential at Rotterdam and Antwerp ports in the Netherlands. This enabled DuPont to quantify the risk and establish more robust backup plans than simply shifting operations to alternative ports.

Demonstrate the case for operational improvements: The study also identified some supply chain partners with inadequate IT contingency plans and fire prevention systems, enabling DuPont to take risk-mitigation action. As the study is ongoing, it also provides continual guidance to maintain service levels, minimize disruption, adjust the supply chain, take additional mitigation measures, and achieve fast post-disruption recovery.

Avoid substantial risk-related cost: DHL Resilience360 enabled DuPont to accurately estimate potential financial damage – inventory loss from fire in just one European site could cost up to USD1.65 billion, and a 10-day transportation delay on major outbound lanes could result in USD11.13 million of sales losses. Data like this supports early, fully informed decision making, so DuPont can respond promptly and effectively to disruption, and execute on business contingency plans. This avoids the substantial costs of lost production and sales, premium-rate transport, personnel costs, and brand damage.

“This assessment was an eye-opener, because we never looked at supply chain risk holistically before. Now we know where the risks are.”

An D’haenens
Logistics Manager EMEA, DuPont

Resilience@dhl.com | www.dhl.com/Resilience