



Case Study

How a complex biotech company with thousands of suppliers pinpointed its most critical partners

The Requirement:

A biotech company wanted to focus its risk management efforts on its most vulnerable suppliers. However, with over 1,000 individual suppliers and multiple materials sourced from each, developing a robust critical list was a complex task.

The Solution:

Before an analysis could begin, it was important to narrow the definition of 'critical' to those suppliers that were unique or difficult to replace. This required a criticality ranking methodology that could be applied quickly across materials and their suppliers.

Two initial filtering methods helped to create a more manageable list of critical materials that could be extracted from the materials management system (MMS).

- 1) The company's procurement team was organised in a category-management-based structure. This had advantages from the filtering perspective e.g. non-critical categories could be excluded from the outset.
- 2) One of the fundamental principles of SCAIR® is to follow the brands/products with the highest revenues. Therefore, the study was limited to critical supplier materials for all brands over the organisation's materiality threshold.

The filtered export from the MMS was presented in an Excel format which included:

- Material details
- Supplier details including the manufacturing location, where available. (If it was not clear whether a manufacturer or agent had been included, this issue was verified later once the scoring had been applied)

This Excel spreadsheet was imported into SCAIR®, which then started the heavy lifting as follows:

- Grouping the materials at an individual supplier sites level
- Classifying materials by categories/subcategories, to further speed up the review process
- Scoring supplier sites according to material criticality criteria (organisations can define this criteria so it focuses on characteristics that determine the ease of replacement)

Only suppliers that scored above an agreed level were passed through for individual supplier gross profit (GP) exposure estimation. To further speed up the exposure estimation step, typical recovery times were agreed based on material types in order to generate some 'first pass' loss estimates for further investigation.



The Results:

The company developed a targeted hit list for investment/mitigation based on vulnerability and GP exposure – rather than the traditional procurement approach of measuring risk by how much is spent with a supplier.

It could also put a financial loss against each supplier site, which facilitated the cost-benefit discussions for mitigation.



Case Study

A biopharma supplier undertakes a supply chain risk analysis to demonstrate its rigorous approach to client fulfilment

The Requirement:

A supplier to major biopharmaceutical companies was identified as the sole source of certain biopharma materials. Consequently, one of these companies required evidence of the supplier's supply chain risk analysis, as part of a due diligence exercise.

Furthermore, the supplier was coming under pressure internally from the finance team to reduce working capital in the form of safety stock. However, the supply chain leads were concerned about the message this would send about the resilience of their supply chains to customers.

The Solution:

Our client undertook a SCAIR® analysis of its own supply chain to assure the customer and its stakeholders. One of the key benefits of SCAIR® is that it follows the value – i.e. focuses efforts on the highest-revenue products – and this function was key to delivering a solution to the requirement.

The client manufactured a range of materials, including bespoke and standard specification materials, so the first challenge was to determine how to map the revenue streams.

- Value streams were identified based on revenue reporting and processing routes
- Key assets and critical suppliers for each revenue stream were modelled, and the loss in market share was also factored into the exposure estimate

Once the value streams were identified and the key assets modelled within SCAIR® (as a baseline scenario), the supply chain managers were able to use the stock scenarios functionality of SCAIR® to precisely target stock reductions. This was preferable to a blanket approach.

Using the baseline scenario as the reference point, two scenarios were set up:

- The impact of reducing safety stock at core production stages by 20% across the portfolio
- The impact of selectively reducing safety stock at core production stages by 20% for manufacturing assets that have alternative sources

The Results:

The resulting exposure profiles proved invaluable to the supplier for two reasons:

- 1) They provided the customer with the assurance of a rigorous supply chain risk management process.
- 2) The results (contrary to current thinking) suggested that assets supporting the standard specification products came top of the list of exposures. This was because of the more competitive nature of the standard material marketplace and suggested that any inability to supply would see revenue permanently lost to the competition. This provided vital information about the company's vulnerabilities.
- 3) Comparison of the resulting stock scenarios enabled some compelling conclusions – the blanket 20% reduction approach raised the 12-month outage exposures by 40%, while the selective approach raised the 12-month exposures by less than 5%.



Case Study

How an insurer informed its underwriting decisions by gathering accurate risk-quality evaluations and accumulations data

The Requirement:

A life sciences insurer was required to undertake risk-quality evaluations and track accumulations across its book of business.

In this world of constant change, the consistent identification of a manufacturing location is no small task – even the regulators struggle to keep pace with acquisitions, divestments, company rebranding and consistency in the declaration of company addresses.

SCAIR® retains the history of all relevant company activity, making available the complete historical performance of individual locations.

The Solution:

SCAIR® employed its exposure reporting and non-compliance reporting function, which tracks activity across the life sciences sector.

SCAIR®:

- Tracks the historical performance of individual biopharma manufacturers and suppliers across different medical regulators
- Consolidates the non-compliance events from US, Canadian, European and UK regulators
- Allows users to tailor reports to companies of interest, their subsidiaries and their suppliers
- Helps with accurate manufacturing address identification using its inventory of over 250,000 registered medicines manufacturing sites

SCAIR®'s use of complete compliance histories for prospects helped to raise red flags regarding individual suppliers and provide an indication of risk quality based on recalls, product shortages and regulatory interventions.

Once a risk had been deemed acceptable for coverage and was on the books, the challenge moved to tracking accumulations. SCAIR® prompts the re-use of existing supplier address information to ensure that accumulations are tracked. This is particularly important in the biopharma industry where there are some industry-wide dependencies on individual sites.



The Results:

This consolidated reporting brought huge efficiencies to the business of tracking accumulations and evaluating risk quality.

SCAIR® removed the need for laborious hours researching individual companies on individual regulator's websites.

Crucially, the prompt to use existing supplier address information ensured consistency in presenting site details and avoided the problem of missing accumulations.



Case Study

A pharma manufacturer rapidly assesses the impact of major hurricanes on critical suppliers and gets a headstart on rivals in the search for alternatives

The Requirement:

A large pharmaceutical manufacturer wanted a detailed picture of its manufacturing supply chain dependencies as part of a risk mitigation assessment.

The business decided that materials management/procurement systems were inadequate for the task, as they often don't hold manufacturing location data. Instead, they are more likely to have a record of an agent or distributor of the manufacturer. Also, these systems are designed to prioritise risk based on spend, rather than value at risk, which makes it difficult to prioritise the mitigation of suppliers that could be the most financially damaging if impaired.

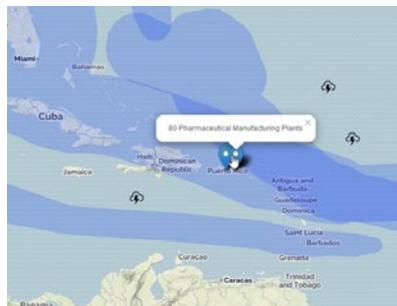
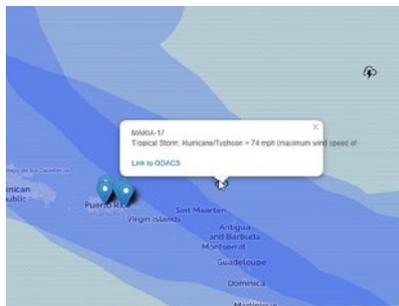
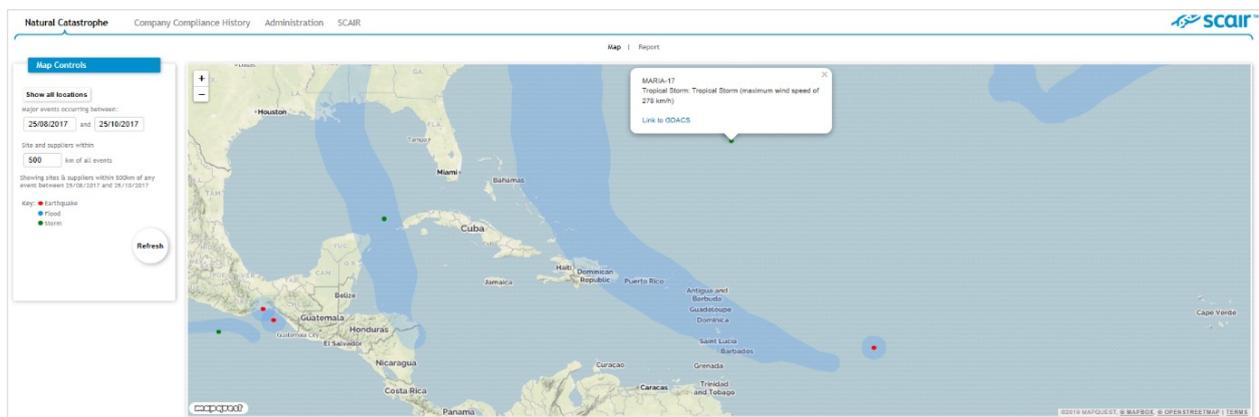
The risk director used SCAIR® to identify and quantify the locations that presented most financial risk to the business; and the natural catastrophe alerting tool to provide the procurement team with information about their most exposed supply locations.

The Solution:

SCAIR® helped the client build a detailed picture of its supply chain dependencies over a number of annual reviews, expanding the scope of study year on year to cover all its major brands.

This review included quantifying several contract manufacturing and critical supplier dependencies in Florida and Puerto Rico.

When Hurricane Irma threatened to hit the coast of Florida at the end of August 2017, the manufacturer used SCAIR®'s exposure assessment and Natural Catastrophe Monitor to immediately understand which of its most critical suppliers and contract manufacturers were in Irma's path and at risk. Unfortunately, they were forced to use the SCAIR® data again just two weeks later when Hurricane Maria made landfall on Puerto Rico, which is a world hub for pharmaceutical manufacturing facilities.



The Results:

Supply chain managers and procurement rapidly anticipated the likely impact on critical materials, put continuity plans into action and activated alternative suppliers. This helped ensure business continuity, uninterrupted service to clients and the minimum impact on profits.



Case Study

How companies can comply with UK law by putting a value on supply sites vulnerable to climate change

The Requirement:

In line with Taskforce on Climate-related Financial Disclosures (TCFD) recommendations, since April 2022 over 1,300 of the largest public and private companies in the UK have been required by law to quantify and disclose climate-related financial risks and opportunities.

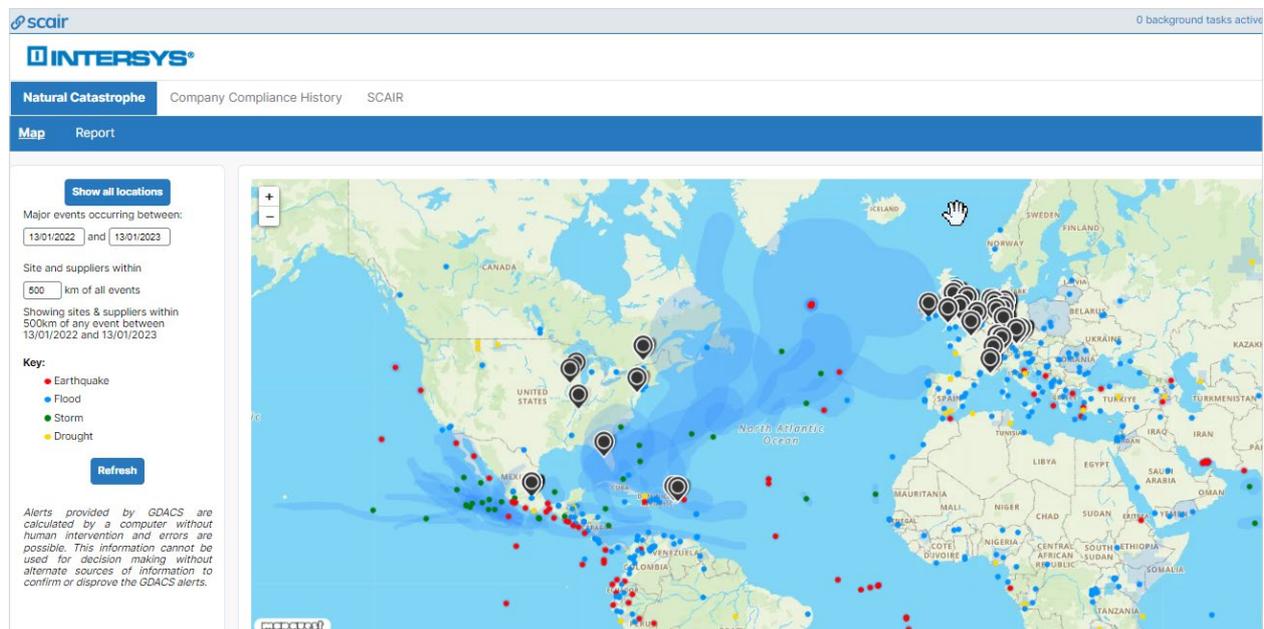
Predicting which sites and suppliers in supply chains could be impacted – and what the financial implications could be – is extremely important for insurers and supply chain-dependent clients alike. However, it is not an easy task.

The Solution:

Using SCAIR®, companies can determine 'value at risk' for key sites and suppliers. This information can be leveraged to fulfil climate change financial reporting requirements as follows:

- 1) Taking the address and latitude / longitude of the most exposed manufacturing locations
- 2) Obtaining the most accurate data on natural catastrophe and climate change-related risks by tapping into NATHAN, one of the most trusted names in location-based risk intelligence

NATHAN can use its natural catastrophe modelling experience to identify which sites are vulnerable to the standard climate change scenarios. By agreeing future state assumptions, a value at risk can be placed on these sites.



The Results:

Using SCAIR®, companies can get the best estimate of their future value at risk across their portfolio for climate-related incidents, so that appropriate action can be taken.

They can also ensure they are fully compliant with UK law and 'do the right thing' from a corporate social responsibility perspective.