

INTROSupply

The objective of INTROSupply is to build a new automated supply chain management platform made in Luxembourg that enables companies to not only be compliant with due diligence legislation but also to dynamically optimize their supply chains in these complex times.



Inspiration

The European Supply Chain Act requires companies to monitor their suppliers regarding a set of criteria, such as compliance with human rights, work safety, and environmental regulations. Once in law, companies will be obligated to assess their suppliers' individual risks of violations. Especially for larger firms with thousands of suppliers, this represents a significant challenge. However, the Act is introduced in a time where supply chain issues are much broader than compliance aspects. The current global situation is characterized by resource shortages and supply disruptions in all industries. Thus, the mandatory monitoring also provides an opportunity for firms to make their supply chains more resilient in the future.

Innovation

INTROSupply is designed to provide an entirely new automated and comprehensive supply chain risk management platform. This new platform will have the following main features:

1. Assessment of a company's likelihood to encounter supply chain threats considering its suppliers, facility locations, and fields of economic activity.
2. Automatic production of comprehensive supply chain status reports.
3. Simulation of potential supply chain disruption scenarios, evaluation of current supply chain resilience, and provision data-driven recommendations for optimization.

All platform functionalities will be driven by the real-time processing and analysis of hundreds of millions of data sources. To reach this goal, the subsequent technical objectives must be achieved:

- New natural language processing algorithms that autonomously detect, characterize, and compactly summarize supply chain threats.
- New software that is suitable that is capable of the autonomous production of supply chain status reports and regulatory audits given the customers supplier list.
- New machine learning techniques for the prediction of supply chain disruptions based on highly dynamic data and contextual industrial logics.
- A powerful simulation infrastructure that is capable of adaptively emulating potential supply chain threat scenarios in light of an uncertain and highly dynamic global economy.

Impact

This platform will provide big data-driven recommendations for supply chain optimization to ensure that firms will remain competitive and can navigate through the economic uncertainty that will affect all industries in the years to come. CURE seeks to support Luxembourg's economy through smart technology and help to position the country as digital leader inside the EU.

Partenaires

CURE Intelligence (LU)

Support financier

Ministère de l'Economie (LU)

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