

AI-Powered Supply Chain Risk Analysis System using Multi-Agent Architecture

The project is company centric

For a particular company

It should have a Dashboard showing news related to their raw materials, their supplier and other companies they depend on. Should also display any risks or alerts

The main aim is to identify any crisis, disruption, anomaly as soon as possible and to reduce its impact on the company while also providing alternate solutions

The project is divided into 4 modules

1. Data Ingestion
Ingest Live News Data from various sources related to the company
2. Data Processing and Risk Analysis
Find if the news contains any risk, and calculate the risk score based on the risk and its impact and then find out whether this risk can cause a disruption for the company, use graph algorithms
3. Find and recommend alternate suppliers for the company for the disrupted goods / supplies
4. Agent generates the report (User Interaction)

For example

1. If company X depends on a company in california, and that company has been destroyed in the wild fires of california, this should be detected as a risk
2. Nayara energies depends on russian crude oil, trump threatening sanctions on India over russian oil imports should also be a risk
3. For any EV company, china halting the export of lithium cells, would be a risk