



CODECELL-CMPN,VESIT

SYRUS HACKATHON 2025

Category Code: C6

Problem Statement Title: Cross-Border Trade & International Finance

Team Name: CodeMongers

Institute Name: Vivekanand Education Society's Institute of Technology



Idea / Approach details (& implemented features)

Problem:

Global trade is slow, costly, and risky due to:

1. Manual invoice processing delays shipments.
2. Unclear tariffs & duties lead to unexpected costs.
3. No structured supplier risk assessment.

Our Approach: An AI-powered Trade Risk & Financing Profiler Automates product analysis, risk assessment, and supplier selection to streamline global trade.

1. **HS code extraction:** extracts hs code on basis of product name and category
 2. **Supplier Information:** Extracts Suppliers, their respective countries and product rate for requested product based on HS code
 3. **Tariff & Sanction:** Provides THE tariff rates and sanctions for the countries of retrieved suppliers
- Supplier Selection: Selection is done on the basis of tariff rates and sanctions

(implemented features)

Key Features:

1. HS code extraction based on product and product category
2. Supplier Data: Provides List of Suppliers of a particular product alongside supplier country and product rate
3. Tariffs & Sanctions: Provides Tariff Rates and Sanctions of Supplier Country
4. Optimal Supplier Selection

Innovation (Showstopper)

Automated HS Code Extraction – Instead of manually determining the correct HS code for a product, the system extracts it based on product name and category, reducing errors and delays.

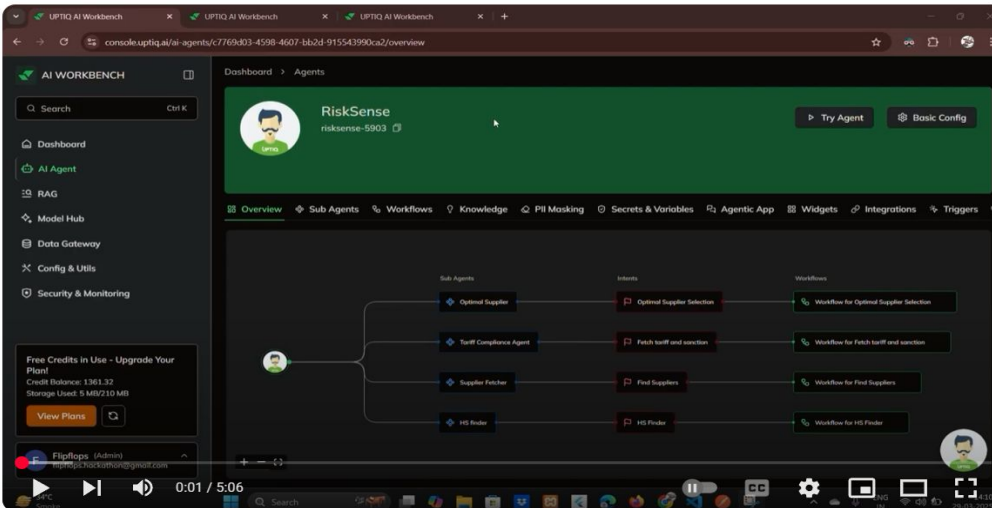
AI-Driven Supplier Selection – The system automatically identifies and ranks suppliers based on country, product rate, and compliance with regulations, making sourcing faster and more reliable.

Real-Time Tariff & Sanction Analysis – Unlike traditional methods that require manual lookup, the platform provides up-to-date tariff rates and sanctions for supplier countries, helping businesses make informed decisions.

End-to-End Trade Optimization – By integrating product analysis, risk assessment, and supplier selection into a single AI-driven solution, the system significantly enhances global trade efficiency.

Video Link

[Youtube link of project](#)



The screenshot displays the UPTIQ AI Workbench interface. The left sidebar contains navigation options: Dashboard, AI Agent, RAG, Model Hub, Data Gateway, Config & Utils, and Security & Monitoring. The main area shows the 'RiskSense' agent (riskense-5903) with buttons for 'Try Agent' and 'Basic Config'. Below this, a workflow diagram is visible, showing a sequence of steps: 'Optimal Supplier' (Sub Agent), 'Optimal Supplier Selection' (Intents), and 'Workflow for Optimal Supplier Selection' (Workflow). Other steps include 'Tariff Compliance Agent', 'Fetch tariff and sanction', 'Supplier Fetcher', 'Find Suppliers', and 'HS Rule'.

CODEMONGERS - RISKSENSE - C6

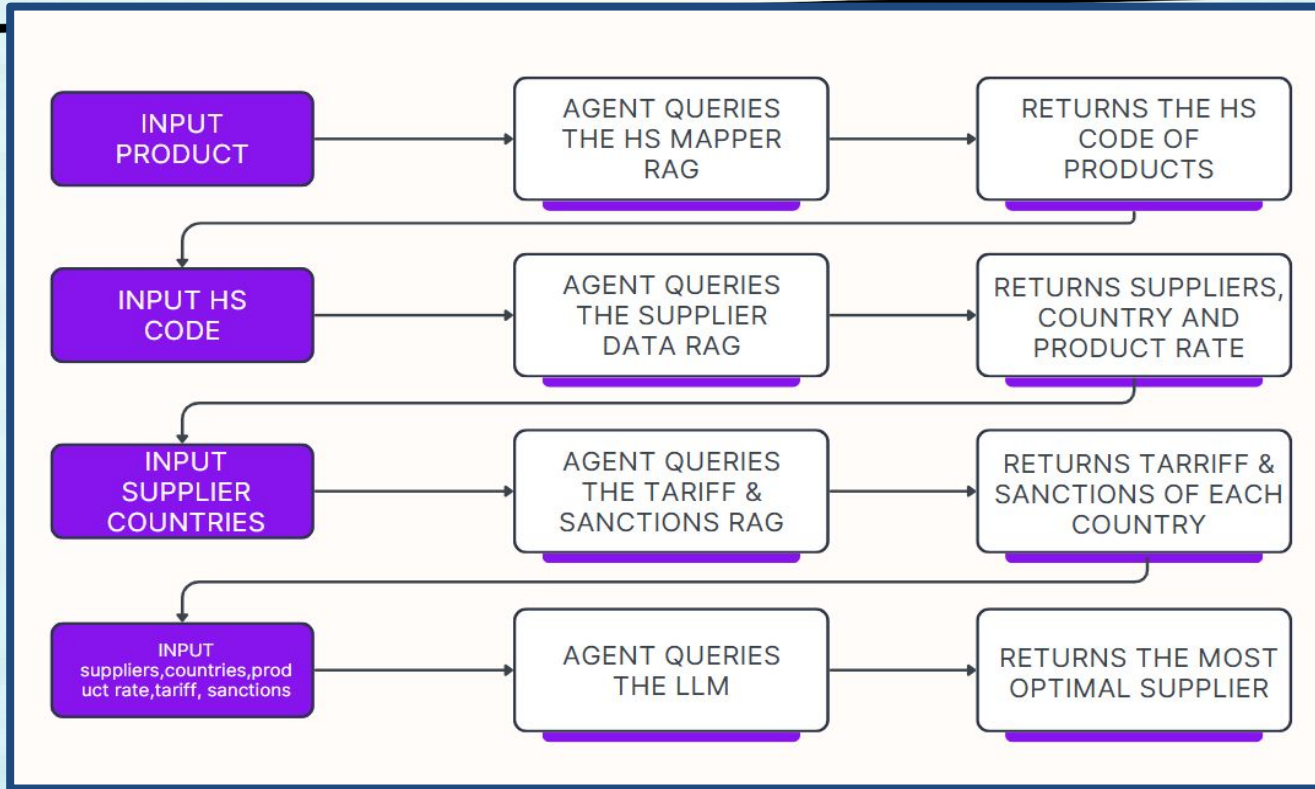
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Architechture



Future Objectives



Supplier Risk Scoring System – Develop a rating system that evaluates suppliers based on risk factors like profit margins, tariffs, and sanctions.

Profitability-Based Supplier Ranking – Optimize supplier selection by factoring in potential profit margins alongside tariffs and trade restrictions.

Advanced AI-Powered Risk Assessment – Enhance risk profiling by integrating real-time market data, geopolitical factors, and trade policies.

Integration with Trade Agents & Brokers – Connect businesses with trade agents for better negotiation and compliance management.

