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.
4. FX volatility causes financial instability.
5. Compliance verification is complex and time-consuming.

Our Approach: An **AI-powered Trade Risk & Financing Profiler** Automates document analysis, risk assessment, and supplier selection to streamline global trade.
Data Extraction – AI reads invoices, extracts product details & pricing.
Supplier Matching – Identifies suppliers based on cost, risk & compliance.
Tariff & Duty Analysis – Calculates total landed costs for each supplier's country.
Risk Assessment – AI evaluates supplier risks (FX volatility, trade barriers).
Automated Compliance Checks – Screens suppliers against global sanction lists.
Smart Procurement Decisioning – Recommends the best supplier & trade route.

Key Features:

1. AI Invoice Extraction
2. Supplier Risk Analysis
3. Tariff & Duty Analysis
4. Procurement Optimization
5. Compliance Screening
6. FX Risk Forecasting

Innovation (Showstopper)

What Makes This a Game-Changer?

Instant AI-Powered Trade Analysis

Before: 61+ hours per shipment wasted on manual compliance.
Now: AI automation reduces this to just minutes.

Cost-Effective Decision-Making

Before: Trade costs reached 4% of transaction value in developing countries.
Now: AI-driven supplier and route optimization cuts costs

Risk-Free International Trade

Before: Businesses suffered 10% annual profit losses due to FX volatility.
Now: AI forecasts trends and suggests hedging strategies, eliminating unnecessary losse**s**.

Automated Global Supplier Matching

Before: 50% of businesses lacked data-driven trade insights.
Now: AI matches suppliers instantly and provides real-time procurement plans

Pain Points VS Our Solution

Pain Points		Our Solution
Manual data entry is slow and error-prone	Automation	AI auto-extracts trade details from documents
High trade costs due to inefficient routes	Optimization	AI suggests cost-effective suppliers & shipping
Currency fluctuations cause profit losses	Stability	AI predicts FX trends & suggests hedging
Compliance issues delay shipments	Validation	AI auto-checks trade partners for restrictions
Unclear procurement strategies	Strategy	AI recommends best suppliers & trade terms
Tariff risks increase costs	Risk Mitigation	AI identifies tariff risks & suggests alternatives
Uncertain logistics & supply chain risks	Diversification	AI finds alternative suppliers & routes

Tech Stack

Backend:

Frontend:

APIs:

Moov.io watchman / open sanctions (Facilitates sanctions screening and compliance checks against restricted lists, reducing financial and legal risks.)
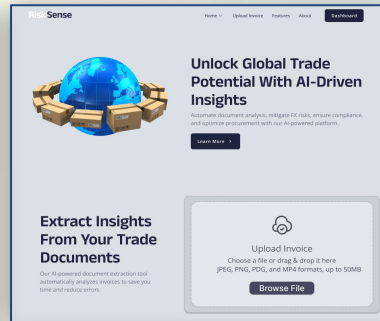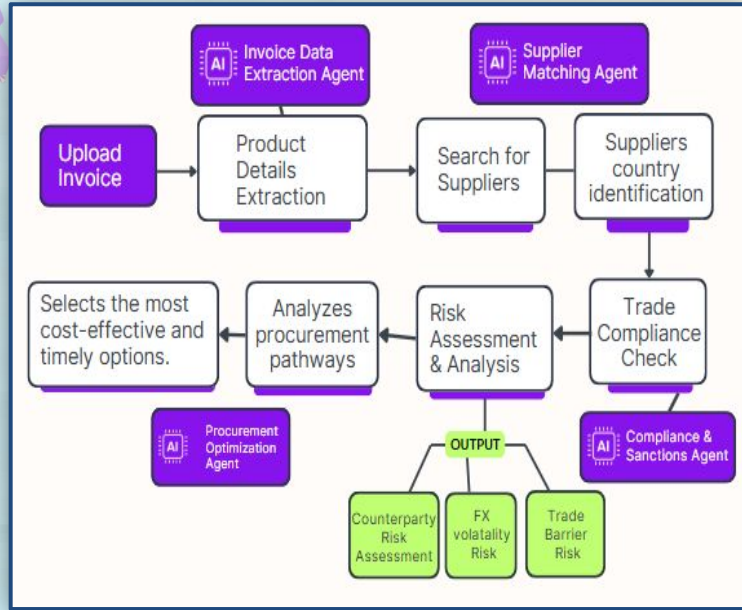
AI integration: UPTIQ AI console

Implementation/Prototype/Use Case Diagram (screenshots)

In case of Uptiq category – Your Uptiq Agent (explain in detail)

INVOICE DATA EXTRACTION AGENT	SUPPLIER MATCHING AGENT	COMPLIANCE & SANCTION AGENT	PROCUREMENT OPTIMIZATION AGENT
Extract Text From Invoices	Query Supplier Databases	Verify Against Sanction Lists	Analyze cost saving opportunities
↓	↓	↓	↓
Format Extracted Data	Evaluate Supplier Options	Ensure Regulatory Compliance	Optimize Procurement Agreements
↓	↓	↓	↓
Validate Extracted Data	Identify Supplier Location	Assess Supplier Risk	Monitor Supplier Performance
	↓		
	Store Supplier Data		

Future Objectives

Future Scope

Implement **blockchain-based smart contracts** to ensure transparency and security in supplier agreements and trade transactions.

Use **Natural Language Processing (NLP) & Legal AI** to detect risks in contracts before execution

Use **machine learning for** Predictive Supply Chain Optimization & Risk Forecasting