

Category Code: C6

Problem Statement Title: Cross-Border Trade & International

Finance

Team Name: Hashcode

Institute Name: Vivekanand Education Society's Institute of Technology























Approach details & implemented features

We propose our solution, "Kubera" automates trade finance using AI for document verification, real-time financing adjustments, and risk mitigation. It reduces cash flow gaps for SMEs and enhances lender risk assessment dynamically.

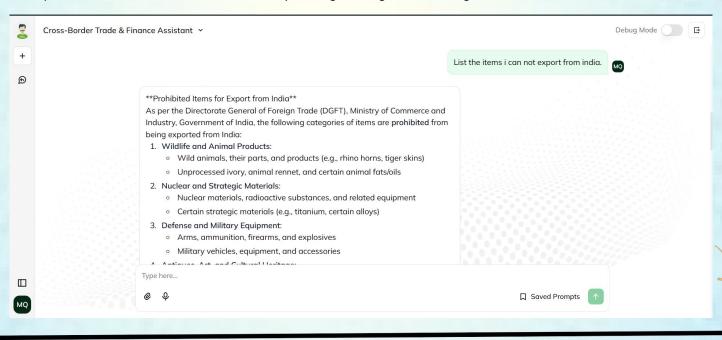
Implemented Features:

- Automated Document Processing
- Smart Route Optimization
- Geopolitical Risk Sentinel
- Language-Agnostic Trade Hub
- Risk Assessment

- Fraud-Proof Workflows
- Adaptive Credit Scoring
- Dynamic Financing Terms Engine
- Finance Negotiator

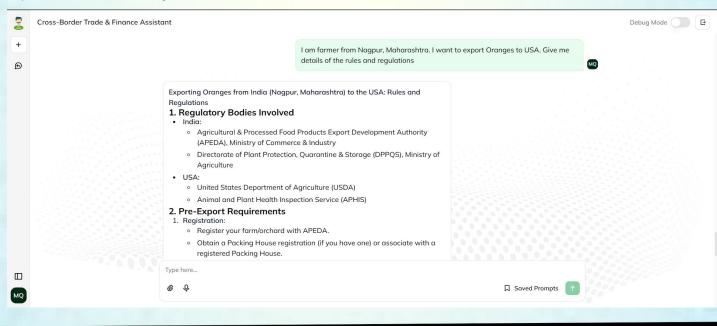
Innovation (Showstopper)

RAG for cross border trade and Finance Assistance: Provide Al-driven answers on cross-border trade regulations, compliance, documentation, and market entry strategies using Retrieval-Augmented Generation (RAG).



Innovation (Showstopper)

RAG for cross border trade and Finance Assistance :Provide Al-driven answers regarding Regulatory bodies ,Pre-export requirements, Rules and regulations.



Innovation (Showstopper)

Interest Rate Negotiator: Leverage web crawling to identify current interest rate trends and negotiation strategies, enabling businesses to secure optimal loan terms. The LLM model retrieves real-time financial data lender-specific insights to support data-driven negotiations.

Please provide the following details in one input (separated by commas):

1. **Current Interest Rate Offer**: Your current offer is 5.75%. 2. **Market Comparison**: Research shows the average rate for similar borrowers is around

5.25%. 3. **Credit Profile Evaluation**: A credit score of 720 is considered good, which strengthens your position in negotiations, 4, **Negotiate**: Yes, it's advisable to negotiate for a lower rate based on market data and your credit profile. 5.

Counteroffer: Consider a counteroffer of 5.25%, aligning with market averages. 6. **Additional Considerations**: Highlight your strong credit profile and long-term

- . Current Interest Rate Offer (%): e.g., 5.75
- · Borrower Credit Score: e.g., 720
- Annual Income: e.g., 85000 Total Debt: e.g., 20000
- · Debt-to-Income Ratio (%): e.g., 24

relationship potential during negotiations.

Additional Notes: Any extra details or context about the offer

5.75,720,85000,20000,24,Long-term

- **Research Market Rates**: Use platforms like BankBazaar or PaisaBazaar to find competitive rates and strengthen your negotiation position, - **Negotiate with Evidence**: Present your findings and credit profile to the lender, emphasizing your reliability as a borrower. - **Consider Loan Terms**: Be open to adjusting loan terms (e.g., longer repayment period) if it leads to a lower interest rate. - **Check for Fees**: Review loan documents for hidden fees that could offset a lower interest rate; negotiate these as well. - **Utilize Relationship**: If you have a long-standing relationship with the bank, mention it to leverage goodwill in negotiations. - **Seek Pre-Approval**: Obtain pre-approval from multiple lenders to enhance your negotiation leverage. - **Stay Informed**: Keep track of economic indicators that affect interest rates, such as the RBI's monetary policy, to time your negotiations

Indian Banks with Competitive Trade Loan Rates:

- HDFC Bank competitive rate around 6.5%
- ICICI Bank competitive rate around 6.75%
- Axis Bank competitive rate around 6.6%
- State Bank of India (SBI) competitive rate around 6.8%
- Punjab National Bank (PNB) competitive rate around 7.0%

Flow Diagram

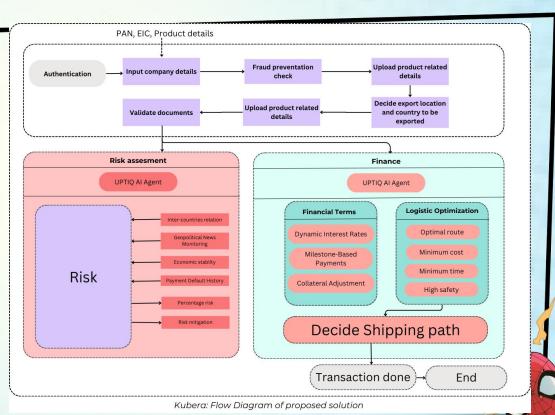
Authentication & Verification: Users input company details, which undergo fraud prevention checks and document validation to ensure compliance.

Risk Assessment with UPTIQ AI Agent:

Evaluates geopolitical risks, economic stability, payment default history, and mitigation strategies to assess trade risks.

Finance Optimization: Determines financial terms like dynamic interest rates, milestone-based payments, and collateral adjustments for better trade financing.

Al-Driven Decision Making: The system integrates Al insights to decide the **best shipping path**, completing the transaction securely and efficiently.



Uptiq Agent



- Agents & Sentinels: Al agents (Doc Processor, Risk Evaluator) + domain-specific Sentinels (Fraud Detector, ESG Auditor).
- APIs/Integrations: Secure API nodes for forex/ESG data, SWIFT payments, compliance checks.
- Interactive Widgets: Risk Dashboard (forex/ESG scores), Route Optimizer (cost vs. time), Doc Tracker (validation status).
- RAG Workflows: OCR & RAG for doc validation, Vector Search for fraud detection, Risk queries & summaries.
- **Security**: PII masking, OAuth, signed URLs for document handling.

Future Objectives

- Al-Powered Trade Finance Assistant: An intelligent Al assistant designed to help users with trade finance queries, document processing, compliance checks, and financing recommendations.
- Al-Powered Intelligent Agent for Broker Finance Management: An
 Al-driven financial assistant designed to help brokers manage portfolios,
 optimize investments, track market trends, and automate risk
 management.
- Al-Powered Inventory Management for Sellers : An Al-driven inventory management system designed to help sellers optimize stock levels, forecast demand, reduce wastage, and automate order fulfillment.