

Kubera: Cross Border Trade and Finance Assistant

Category Code	C6
Problem Statement Title	Cross-Border Trade & International Finance
Team Name:	Hashcode
Institute Name:	Vivekanand Education Society's Institute of Technology

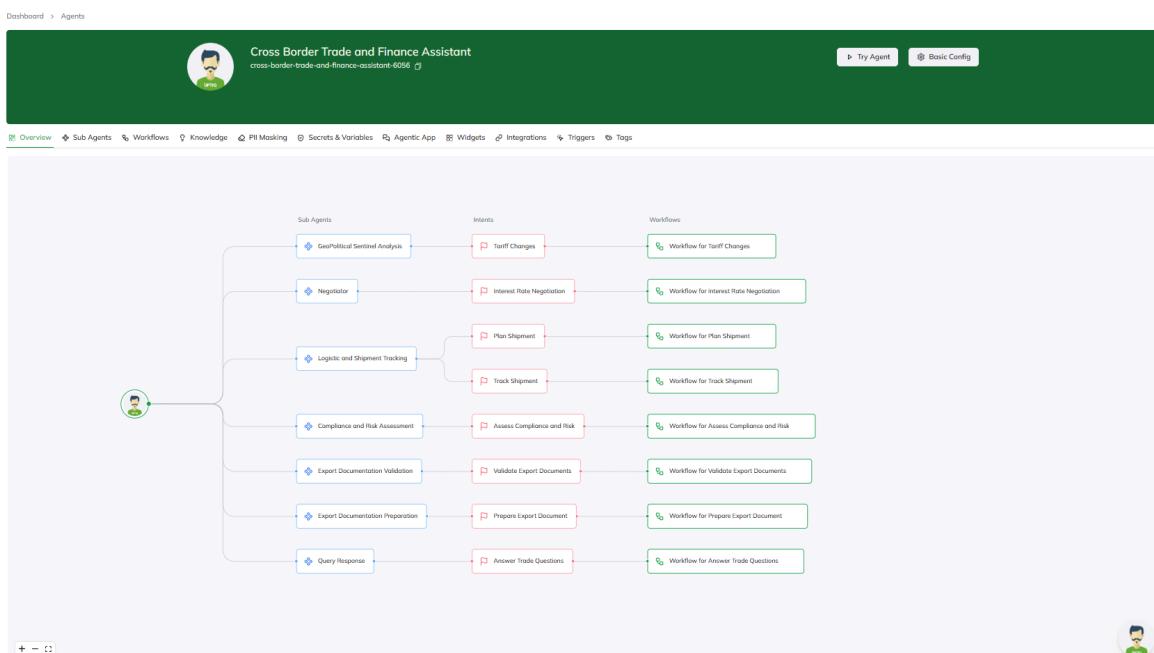
Implemented Features / Agents :

1) Automated Document Processing

Documents : Letter of Credit, Bill of Exchange, Certificate of Origin, Certificate of Origin (1), Commercial Invoice, Packing List, Tax Invoice, Export Agreement Proforma Invoice, Bill of Lading, Export Invoice Template, Export Quotation Template.

- 2) Geopolitical Risk Sentinel
- 3) Finance Negotiator
- 4) Document Generation and Validation
- 5) Risk Assessment and Compliance
- 6) Logistics Tracking

Multi Agent Diagram :



This is the main multi agent consisting of several features

Database Integrated (MongoDB):

And have 2 collections : Companies and Products

The screenshot shows the MongoDB Atlas Data Services interface. On the left, the sidebar includes sections for Overview, Clusters, Services (Atlas Search, Stream Processing, Triggers, Migration, Data Federation), Security (Quickstart, Backup, Database Access, Network Access, Advanced), and Goto. The main area displays the 'test.companies' collection. It shows 1 database and 2 collections. The 'companies' collection has 3 documents. A preview of a document is shown:

```
_id: ObjectId('67e621be55a07aa9d5f6d19')
name: "Nagpur Fresh Produce Ltd"
registrationNumber: "NG0654321"
contactInfo: Object
  email: "sales@nagpurfresh.com"
  phone: "+919955443322"
  website: "http://nagpurfresh.com"
address: Object
  street: "78 Fruit Market Road"
  city: "Nagpur"
  state: "Maharashtra"
  postalCode: "440001"
  country: "India"
businessType: Array (1)
  0: "exporter"
industry: "Fruits & Vegetables"
documentation: Object
financialInfo: Object
createdAt: 2025-04-03T00:00:00.000+00:00
updatedAt: 2025-04-03T00:00:00.000+00:00
__v: 0
```

The screenshot shows the MongoDB Atlas Data Services interface, similar to the previous one but with a different collection selected. The sidebar and overall layout are identical. The main area displays the 'test.products' collection. It shows 1 database and 2 collections. The 'products' collection has 2 documents. A preview of a document is shown:

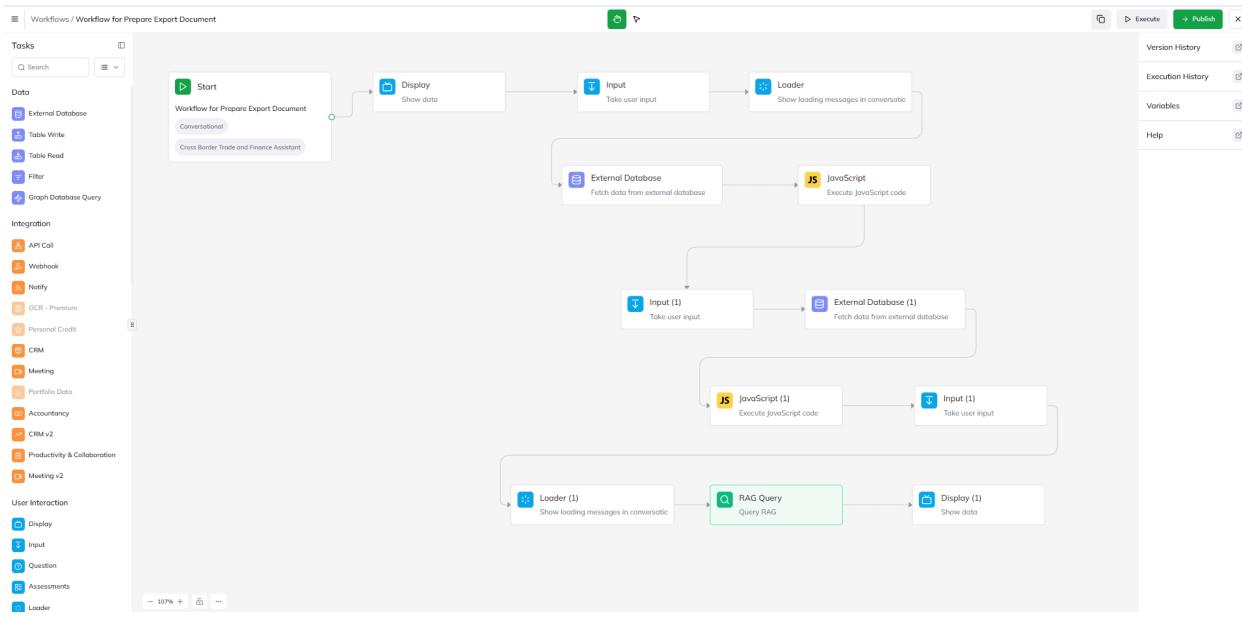
```
_id: ObjectId('676a6acbd5432dc69fd18fa')
name: "Premium Nagpur Mangoes"
category: "Fruits"
description: "Sweet, fiberless mangoes sourced from the best orchards in Nagpur."
transactionType: Array (1)
  0: "export"
materials: Array (empty)
exportDocumentation: Object
documentsList: Array (empty)
price: Object
  amount: 120
  currency: "INR"
  quantity: 500
manufacturingDetails: Object
  unit: "kg"
  vendor: Array (2)
  images: Array (empty)
createdAt: 2025-04-07T00:00:00.000+00:00
updatedAt: 2025-04-07T00:00:00.000+00:00
__v: 0
```

Implemented Features

1) Documentation RAG

- **Data Sources :**
 - From internet for documentation templates:
 - Bill of Exchange
 - Export Invoice
 - Export quotation
- **Data Store**
 - PII Masking - true
 - Data sources : 3
 - Recursive Character Splitting
- **Vector store**
 - MongoDB
- **RAG**
 - **LLM :** Llama 3.1 Nemotron (70B) Instruct HF
 - **System instructions :**
 - You are an AI assistant specializing in import and export documentation, regulations, and best practices for SMBs operating in India. Your role is to assist businesses in preparing and managing essential trade documents while ensuring compliance with international standards. Provide accurate, up-to-date, and actionable information to streamline export processes. Base your responses on the most relevant and current data available. If you cannot find sufficient information to answer a query, acknowledge this and suggest alternative resources or steps the user can take.
- **Problem faced**
 - NO Problems faced :)
- **Document allowed to be created and validated by our System :**
 - Letter of Credit,
 - Bill of Exchange
 - Certificate of Origin, Certificate of Origin
 - Commercial Invoice
 - Packing List
 - Tax Invoice
 - Export Agreement Proforma Invoice
 - Bill of Lading,
 - Export Invoice,
 - Export Quotation

- Workflow



Sample Output :

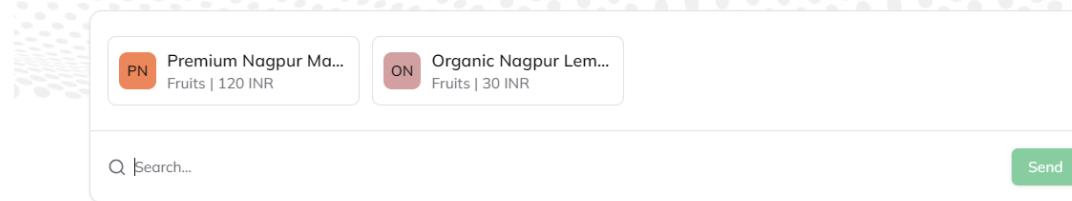
1. Entering the company registration number which is stored in the mongo db backend

1d Finance Assistant ▾

export document generation

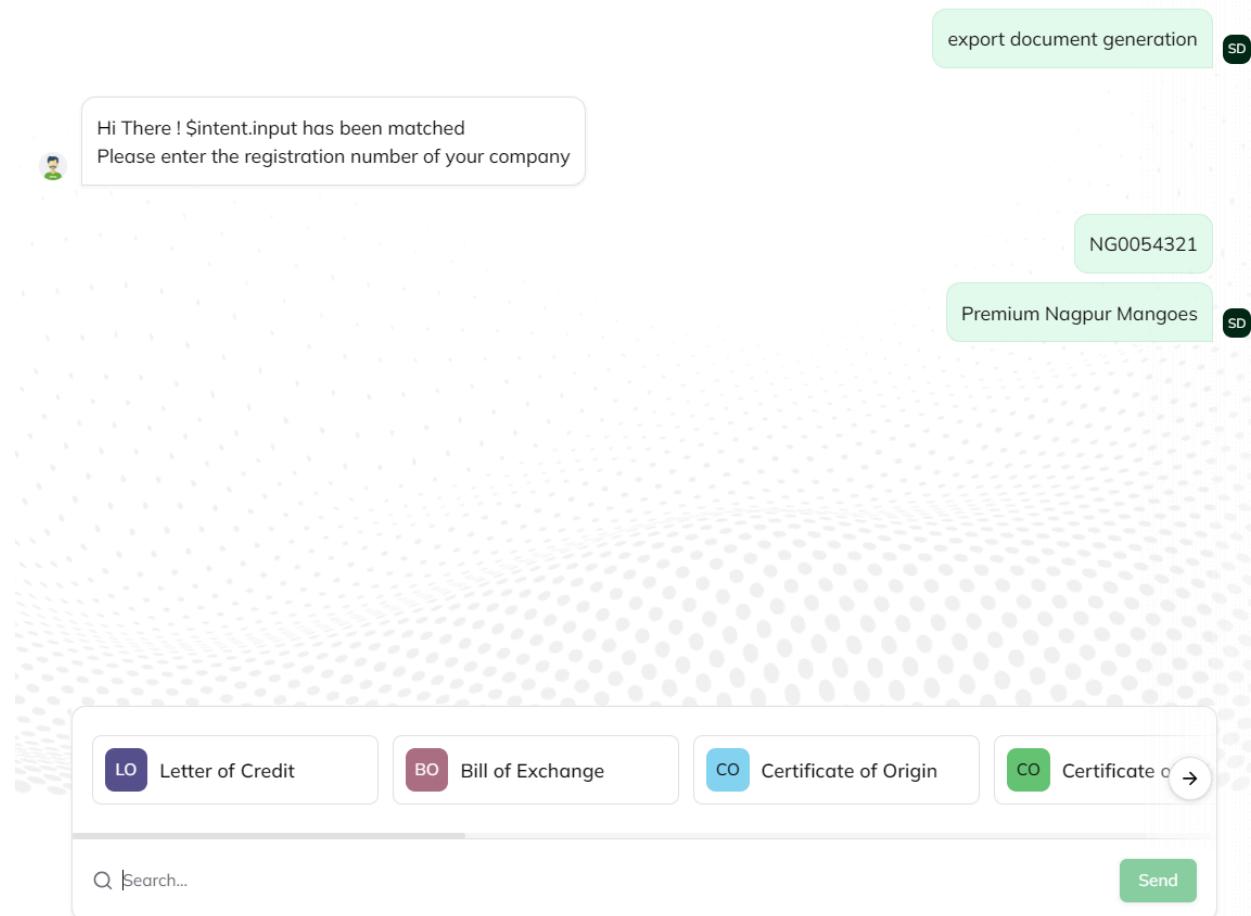
Hi There ! \$intent.input has been matched
Please enter the registration number of your company

NG0054321



Showing a list of products of that company from which the company will choose which product he wants on which he wants to create trade documents So after that he can choose a trade document which he wants to create from a list of documents

Finance Assistant ▾



Output generated. Document generated with proper format and with details of the selected product

sd Finance Assistant ▾

NG0054321

Premium Nagpur Mangoes

Bill of Exchange

sd

BILL OF EXCHANGE

Reference No.: NG0054321

Amount in figures: ₹60,000 (INR)

B/L Date (if applicable): N/A

Place of issue: Nagpur, India

Date of issue: April 7, 2025

At: Payable within 60 days

Pay to the order of: [Insert Name and Address of Importer/Payee]

The sum of (amount in words): Sixty Thousand Rupees Only

Drawn under: Export transaction of Premium Nagpur Mangoes (Batch No.: BNG006)

Dated: March 22, 2025

Issued by: Nagpur Fresh Produce Ltd

Signed for and on behalf of Drawee:

Name of Authorized Signatory: [Importer's Authorized Representative]

Signature: _____

Signed for and on behalf of Drawer:

Name of Authorized Signatory: Priya Verma

Signature: _____

Product Details:

Name: Premium Nagpur Mangoes

Type here...



Saved Prompts



Document Generation RAG Implementation

We have stored all the types of documents that can be made in our RAG Data Store

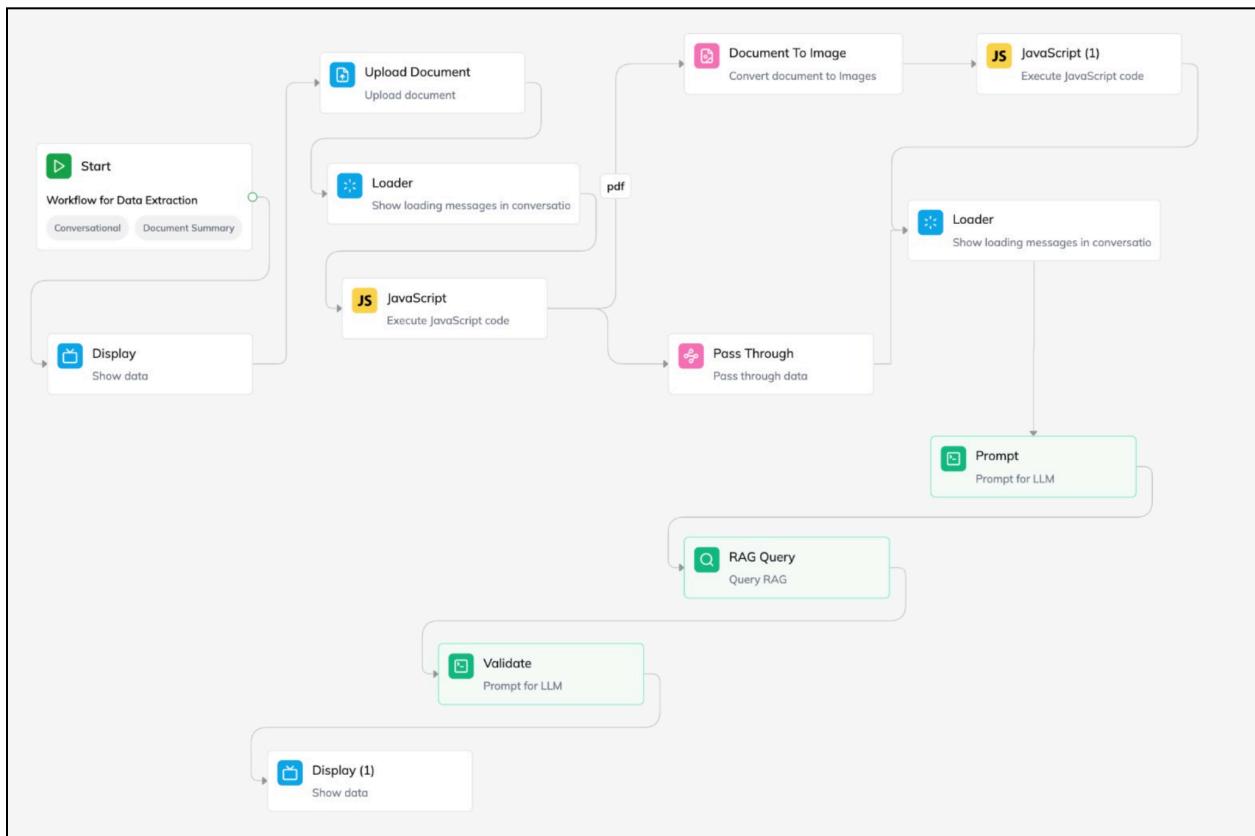
The screenshot shows the AI Workbench interface with the navigation bar "RAG > Data Stores". The main area displays the "Kubera Doc Data Store" configuration. It includes fields for "No. of data sources" (11), "Metadata Extraction Workflow" (Workflow for Prepare Export Document), "Filter Fields" (dropdown menu), and "Enable PII Masking" (set to NO). Below these are sections for "Data Sources" and "View Chunks" for various document types like "letter_of_credit", "certificate_of_origin", etc. A prominent "Upload File" button is at the bottom right. The sidebar on the left shows the AI Workbench dashboard and other sections like Model Hub, Config & Utils, and Security & Monitoring. A user profile for "SARVESH (Admin)" is at the bottom.

Vector Store

The screenshot shows the AI Workbench interface with the navigation bar "RAG > Vector Stores". The main area displays the "Kubera Doc Vector Store" configuration. It includes fields for "Data Store" (Kubera Doc Data Store), "Database" (MongoDB), "Embedding Model" (OpenAI - text-embedding-3-large), and "Distance Strategy" (Cosine Similarity). Below these are sections for "Data Sources" and "View Chunks" for the same document types as the Data Store. A "Upload File" button is at the bottom right. The sidebar and user profile are identical to the previous screenshot.

2) Document Validation and Compliance Check Using RAG

This workflow processes uploaded documents for validation and compliance using RAG. It converts documents to images if needed, runs preprocessing scripts, and extracts content. The extracted data is passed to an LLM, which queries relevant information from a knowledge base for compliance checking. Finally, the validated results are displayed.



validate this document and perform compliance checks yc

Welcome! 🌟
I am your Document Validator and Compliance Check Agent 🚀. I can quickly analyze and validate your documents using the knowledge base.

How It Works:

1. Upload your document 📄 in the chatbox.
2. I will process the content and validate it.

Go ahead and upload your document now! 🚀

CIF ID is missing

Sample doc (1).pdf PDF yc

type here... yc

Saved Prompts yc

3) RAG QnA Agent

- **Data Sources :**
 - **dfgt.gov.in** – Official trade policies and regulations.
 - **Legacy Trade Gov** – Historical trade data and policy trends.
 - **RBI** – Forex rates, banking rules, and trade finance.
 - **The Chamber of Tax Consultants** – Tax, GST, and compliance insights.
 - **Amazon.in** – Product pricing, demand, and competition analysis.
 - **ibef.org** – Industry reports and market insights.
- **Data Store**
 - PII Masking - true
 - Data sources : 25
 - Recursive Character Splitting
- **Vector store**
 - MongoDB
- **RAG**
 - **LLM :** Llama 3.1 Nemotron (70B) Instruct HF
 - **System instructions :**
 - You are an AI assistant specializing in import and export regulations, procedures, and best practices for SMBs operating in India. Your role is to provide accurate, up-to-date, and actionable information to help businesses navigate international trade. Base your responses on the most relevant and current data available. If you cannot find sufficient information to answer a query, acknowledge this and suggest alternative resources or steps the user can take.
- **Problem faced**
 - When uploading the pdfs some pdfs failed to process then deleted and uploaded again.

Sample Outputs :

The screenshot shows a web browser window with the URL <https://console.uptiq.ai/ai-agents/d516d231-0f96-4d66-825c-a0e1dd33026c/sub-agents?appid=default-app-for-account-41f2223d-53a3-47...>. The page title is "Cross-Border Trade & Finance Assistant". A text input field contains the query "List the items i can not export from india.". Below the input field, a large text box displays a response titled "Prohibited Items for Export from India". The response states: "As per the Directorate General of Foreign Trade (DGFT), Ministry of Commerce and Industry, Government of India, the following categories of items are prohibited from being exported from India: 1. Wildlife and Animal Products: o Wild animals, their parts, and products (e.g., rhino horns, tiger skins) o Unprocessed ivory, animal rennet, and certain animal fats/oils 2. Nuclear and Strategic Materials: o Nuclear materials, radioactive substances, and related equipment o Certain strategic materials (e.g., titanium, certain alloys) 3. Defense and Military Equipment: o Arms, ammunition, firearms, and explosives o Military vehicles, equipment, and accessories".

The screenshot shows a web browser window with the same URL as the previous screenshot. The page title is "Cross-Border Trade & Finance Assistant". A text input field contains the query "I am farmer from Nagpur, Maharashtra. I want to export Oranges to USA. Give me details of the rules and regulations". Below the input field, a large text box displays a response titled "Exporting Oranges from India (Nagpur, Maharashtra) to the USA: Rules and Regulations". The response includes sections for "Regulatory Bodies Involved" and "Pre-Export Requirements". Under "Regulatory Bodies Involved", it lists "India" and "USA". Under "India", it lists "Agricultural & Processed Food Products Export Development Authority (APEDA), Ministry of Commerce & Industry" and "Directorate of Plant Protection, Quarantine & Storage (DPPQS), Ministry of Agriculture". Under "USA", it lists "United States Department of Agriculture (USDA)" and "Animal and Plant Health Inspection Service (APHIS)". Under "Pre-Export Requirements", it lists "Registration" with points "Register your farm/orchard with APEDA" and "Obtain a Packing House registration (if you have one) or associate with a registered Packing House".

Input	List the items i can not export from india.
Output	<p>**Prohibited Items for Export from India**</p> <p>As per the Directorate General of Foreign Trade (DGFT), Ministry of Commerce and Industry, Government of India, the following categories of items are prohibited from being exported from India:</p> <ol style="list-style-type: none"> 1. Wildlife and Animal Products: <ul style="list-style-type: none"> ○ Wild animals, their parts, and products (e.g., rhino horns, tiger skins) ○ Unprocessed ivory, animal rennet, and certain animal fats/oils 2. Nuclear and Strategic Materials: <ul style="list-style-type: none"> ○ Nuclear materials, radioactive substances, and related equipment ○ Certain strategic materials (e.g., titanium, certain alloys) 3. Defense and Military Equipment: <ul style="list-style-type: none"> ○ Arms, ammunition, firearms, and explosives ○ Military vehicles, equipment, and accessories 4. Antiques, Art, and Cultural Heritage: <ul style="list-style-type: none"> ○ Antiquities (defined as over 100 years old) without a valid export license ○ Art treasures, and cultural heritage items (as notified by the Government) 5. Hazardous and Toxic Substances: <ul style="list-style-type: none"> ○ Certain hazardous chemicals, pesticides, and toxic substances (as listed in the Hazardous Substances (Regulation of Export Import) Rules, 1989) 6. Counterfeit Currency and Coins: <ul style="list-style-type: none"> ○ Fake Indian currency notes, coins, and foreign currency notes 7. Other Prohibited Items: <ul style="list-style-type: none"> ○ Certain types of magnets (strong rare-earth magnets) ○ Unprocessed human hair ○ Maps, atlases, and globes that do not conform to Indian territorial integrity ○ Any item that may pose a threat to national security, public health, or safety <p>Restricted Items (Require License): While not entirely prohibited, certain items require an export license from the DGFT or other regulatory authorities. Examples include: * Certain pharmaceuticals and chemicals * Electronic equipment (e.g., high-power transmitters) * Certain types of textiles and yarns * Food items (e.g., milk, dairy products, and certain spices)</p>

	<p>Important Notes:</p> <ol style="list-style-type: none"> Check for Updates: Prohibited and restricted items lists can change. Verify with the DGFT website or consult with a trade expert for the latest information. Export License: Even if an item is not prohibited, an export license might still be required. Ensure you comply with all regulatory requirements. Comply with International Regulations: Familiarize yourself with the import regulations of the destination country to avoid any issues. <p>References:</p> <ul style="list-style-type: none"> Directorate General of Foreign Trade (DGFT): www.dgft.gov.in Ministry of Commerce and Industry, Government of India: www.commerce.gov.in The Export Import Policy (EXIM Policy) of India (Updated periodically)
Input	I am farmer from Nagpur, Maharashtra. I want to export Oranges to USA. Give me details of the rules and regulations
Output	<p>Exporting Oranges from India (Nagpur, Maharashtra) to the USA: Rules and Regulations</p> <p>1. Regulatory Bodies Involved</p> <ul style="list-style-type: none"> India: <ul style="list-style-type: none"> Agricultural & Processed Food Products Export Development Authority (APEDA), Ministry of Commerce & Industry Directorate of Plant Protection, Quarantine & Storage (DPPQS), Ministry of Agriculture USA: <ul style="list-style-type: none"> United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) <p>2. Pre-Export Requirements</p> <ol style="list-style-type: none"> Registration: <ul style="list-style-type: none"> Register your farm/orchard with APEDA. Obtain a Packing House registration (if you have one) or associate with a registered Packing House. Phytosanitary Certificate: <ul style="list-style-type: none"> Mandatory for export to the USA. Issued by DPPQS after inspection. Good Agricultural Practices (GAP) and Good Handling Practices

(GHP):

- Implement and maintain GAP and GHP to ensure quality and safety.

3. USA Import Regulations**1. APHIS Requirements:**

- Oranges must be free from pests and diseases of concern to the USA.
- Comply with specific treatment regulations (if applicable).

2. Plant Quarantine Act:

- Ensures the oranges do not introduce pests or diseases into the USA.

3. USDA-APHIS Permit:

- Importers must secure a permit at least 30 days in advance (similar to mangoes, though specific to oranges, this requirement might vary).

4. Treatment and Inspection**1. Pest and Disease Inspection:**

- Conducted by DPPQS before export.

2. Treatment (if required):

- Depending on the pest/disease risk, treatment might be necessary (e.g., heat treatment, irradiation).
- Approved treatment facilities must be used.

5. Packaging, Labeling, and Marking**1. Compliant Packaging:**

- Ensure packaging prevents pest/disease spread and meets USA standards.

2. Accurate Labeling and Marking:

- Include phytosanitary certificate information, country of origin, and other required details.

6. Shipping and Documentation**1. Commercial Invoice:**

- Detailed, accurate, and including all required information.

2. Bill of Lading/Airway Bill:

- Reflects the shipment's contents and destination.

3. Phytosanitary Certificate:

- Must accompany the shipment.

4. USDA-APHIS Permit (if required):

- Confirmation of the permit must be with the shipment documents.

7. Additional Tips for Nagpur, Maharashtra Exporters

- **Local Assistance:**

- Contact APEDA's Western Regional Office (Mumbai) for guidance.
- DPPQS's Maharashtra office for phytosanitary certifications.

- **Logistics and Freight Forwarding:**

- Partner with experienced exporters or freight forwarders familiar with USA-bound agricultural exports.

References and Further Reading

- APEDA: www.apeda.gov.in
- DPPQS: dppqs.gov.in
- USDA-APHIS: www.aphis.usda.gov

- **Specific Regulations for Oranges:**

- Refer to the latest APHIS regulations and the USA's Federal Register for updates on orange imports from India.

Please Note: Regulations can change. It's crucial to verify the information with the relevant authorities or their official websites before initiating the export process.

Input	What are the top export destinations for blue pottery from Rajasthan?
Output	<p>Top Export Destinations for Blue Pottery from Rajasthan</p> <p>While the provided context files (Amazon Exports Digest) do not specifically mention blue pottery from Rajasthan, I've compiled information from various reliable sources to give you an overview of the leading export destinations for this traditional craft. Please note that the rankings may vary depending on market trends and sources.</p> <p>Top Export Destinations for Blue Pottery from Rajasthan:</p> <ol style="list-style-type: none"> 1. United States: <ul style="list-style-type: none"> ○ Major cities: New York, Los Angeles, Chicago (for wholesale and retail markets) ○ Popular platforms: Amazon, Etsy, specialty home decor stores 2. United Kingdom: <ul style="list-style-type: none"> ○ Major cities: London, Birmingham, Manchester (for both wholesale and retail) ○ Popular platforms: Online marketplaces like eBay, Amazon UK,

- and boutique home decor shops
3. **Australia:**
 - Major cities: Sydney, Melbourne, Brisbane (focusing on retail and online sales)
 - Popular platforms: Etsy Australia, Amazon Australia, and local artisanal stores
 4. **Canada:**
 - Major cities: Toronto, Vancouver, Montreal (targeting both wholesale and retail segments)
 - Popular platforms: Amazon Canada, Etsy Canada, and specialty gift shops
 5. **United Arab Emirates (UAE) & Middle East:**
 - Major cities: Dubai, Abu Dhabi (focusing on luxury retail and wholesale for decorative items)
 - Popular platforms: High-end home decor stores, souks, and online luxury marketplaces

Additional Insights:

- **Europe:** Countries like Germany, France, and Italy also present opportunities, particularly through online marketplaces and specialty stores.
- **Online Marketplaces:** Amazon, Etsy, and eBay are popular platforms for blue pottery exports, offering a broad customer base.
- **Trade Shows and Exhibitions:** Participating in international trade shows, like the Ambiente (Frankfurt, Germany) or the NY NOW (New York, USA), can help Rajasthan's blue pottery artisans and exporters connect with global buyers.

Regulatory Compliance: Ensure compliance with Indian export regulations and the import regulations of the destination countries. For example:

- Obtain necessary export permits from the Director General of Foreign Trade (DGFT), India.
- Comply with customs regulations, packaging, and labeling requirements of the destination countries.

Sources:

- Ministry of Commerce and Industry, Government of India
- Rajasthan Small Industries Corporation Limited (RIICO)
- Indian Trade Promotion Organisation (ITPO)
- Market research reports and industry associations related to handicrafts and exports.

INPUT	भारत से किसी उत्पाद का किसी देश में निर्यात करने के लिए आवश्यक प्रमुख दस्तावेज और कानूनी प्रक्रियाएँ क्या हैं?
OUTPUT	<p>भारत से निर्यात के लिए आवश्यक कानूनी प्रक्रियाएँ और दस्तावेज कानूनी प्रक्रियाएँ:</p> <p>निर्यातक पंजीकरण: निर्यातक को Directorate General of Foreign Trade (DGFT) में पंजीकृत होना आवश्यक है, जिससे एक वैध Importer-Exporter Code (IEC) प्राप्त होता है।</p> <p>निर्यात लाइसेंस: कुछ उत्पादों के लिए, जैसे कि प्रतिबंधित या नियंत्रित सामान, विशेष लाइसेंस की आवश्यकता हो सकती है।</p> <p>Customs Clearance: निर्यात से पहले Customs Act, 1962 के तहत सीमा शुल्क अधिकारी से मंजूरी लेना आवश्यक है।</p> <p>विदेशी मुद्रा प्रबंधन अधिनियम (FEMA): निर्यात से संबंधित सभी लेन-देन FEMA द्वारा निर्धारित दिशानिर्देशों का पालन करना चाहिए।</p> <p>आवश्यक दस्तावेज़:</p> <ol style="list-style-type: none"> व्यापार संबंधी दस्तावेज <ul style="list-style-type: none"> वाणिज्यिक इनवॉइस (Commercial Invoice): उत्पाद की जानकारी, मूल्य, और व्यापारिक शर्तों का विवरण। पैकिंग सूची (Packing List): माल की विस्तृत सूची, वजन, मात्रा, और पैकेजिंग विवरण। शिपिंग बिल (Shipping Bill): निर्यातक, आयातक, माल की जानकारी, और शिपिंग विवरण का उल्लेख करता है। बिल ऑफ एक्सचेंज (Bill of Exchange) या लेटर ऑफ क्रेडिट (Letter of Credit): भुगतान की शर्तों को परिभाषित करता है। गुणवत्ता और मानकीकरण संबंधी दस्तावेज <ul style="list-style-type: none"> गुणवत्ता प्रमाण पत्र (Quality Certificate): उत्पाद की गुणवत्ता मानकों की पुष्टि करता है। मानकीकरण प्रमाण पत्र (Standardization Certificate): यह प्रमाणित करता है कि उत्पाद निर्धारित मानकों का पालन करता है। कर और शुल्क संबंधी दस्तावेज <ul style="list-style-type: none"> सीमा शुल्क चालान (Customs Duty Challan): सीमा शुल्क भुगतान का प्रमाण।

वैट/जीएसटी इनवॉइस (VAT/GST Invoice): मूल्य वर्धित कर की देयता और भुगतान का विवरण।

4. परिवहन और बीमा संबंधी दस्तावेज

बिल ऑफ लेडिंग (Bill of Lading) या एयरवे बिल (Airway Bill): परिवहन के लिए माल की प्राप्ति और वितरण का प्रमाण।

बीमा पॉलिसी (Insurance Policy): माल के दौरान _damage, _loss, _delay के खिलाफ कवरेज का विवरण।

5. अन्य आवश्यक दस्तावेज

कंट्री ऑफ ऑरिजिन सर्टिफिकेट (Country of Origin Certificate): उत्पाद के मूल देश की पुष्टि करता है।

फाइटोसैनिटरी सर्टिफिकेट (Phytosanitary Certificate), यदि लागू हो: कृषि उत्पादों के लिए, यह प्रमाणित करता है कि माल कीटों और रोगों से मुक्त है।

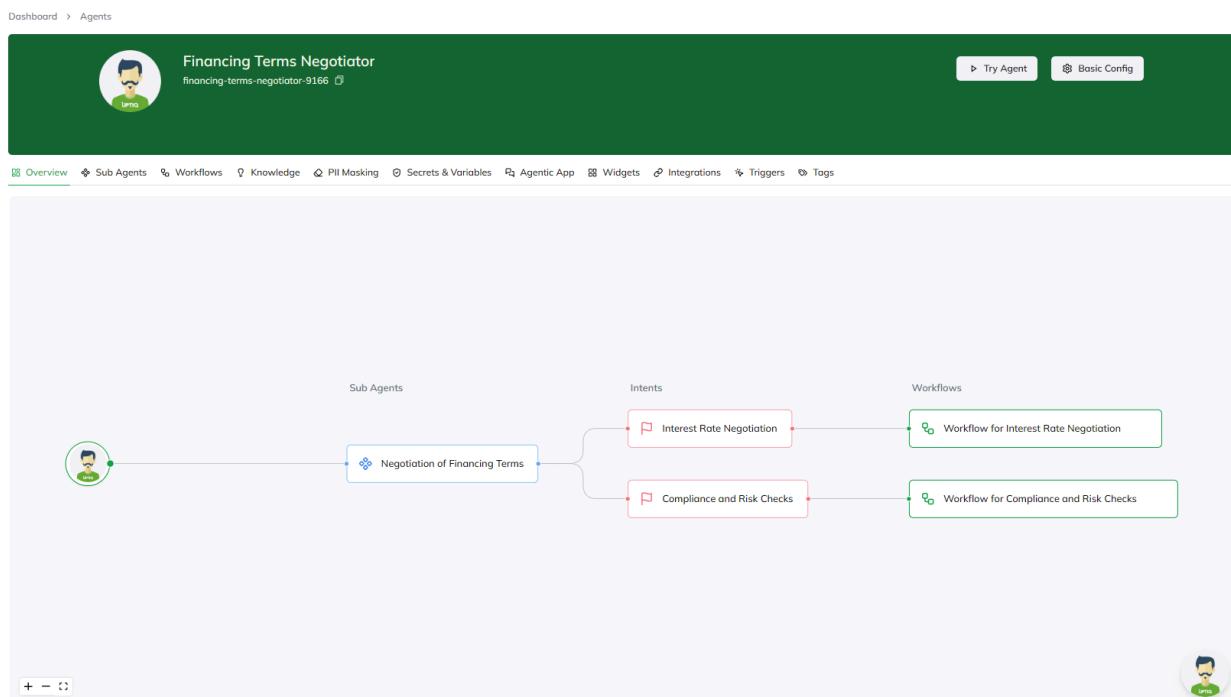
केमिकल/हजार्डस मATERIALS: यदि लागू हो, तो सुरक्षा डेटा शीट (SDS) और अन्य प्रासंगिक प्रमाण पत्र।

4) Finance Negotiator Agent

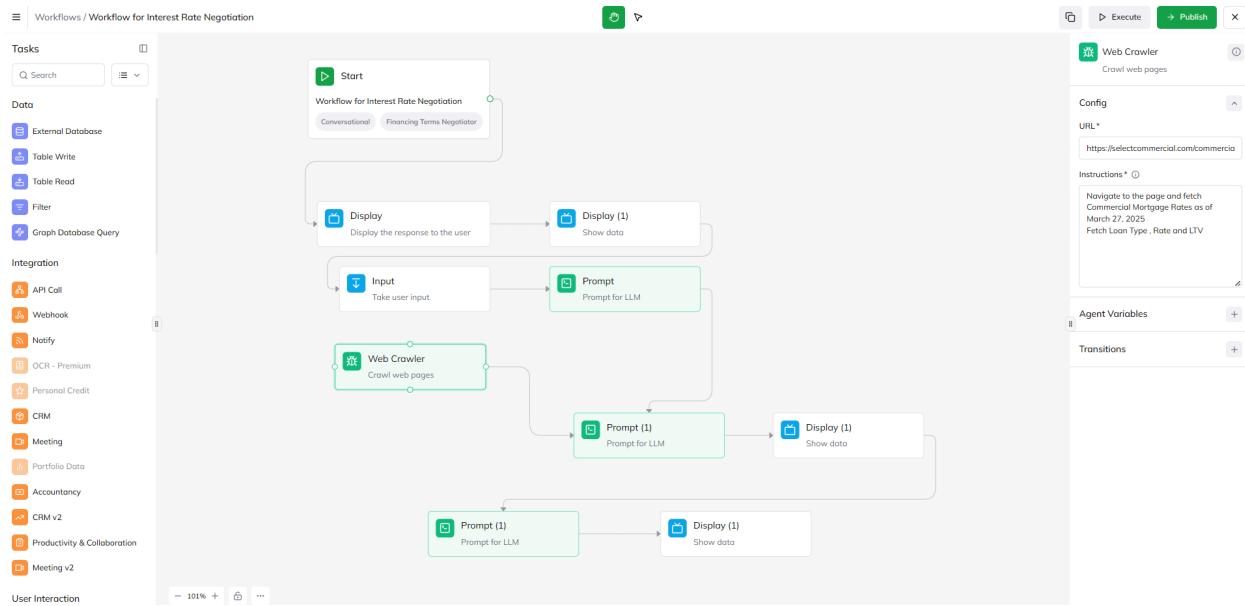
How It Works:

1. Collects user financial details (interest rate offer, credit score, income, debt, etc.).
2. Fetches up-to-date market interest rates from reliable financial sources via web crawling.
3. Integrates user data with market rates using AI/LLM for a comprehensive comparison.
4. Generates tailored negotiation strategies and suggests optimal counteroffer rates.
5. Provides actionable insights on improving financial metrics to strengthen negotiation power.
6. Used web crawler to fetch data of current market rates from different websites

Workflow

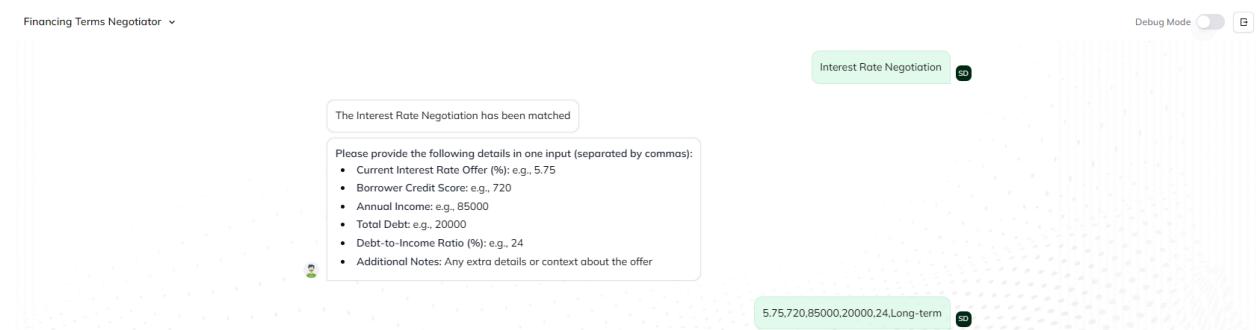


The workflow of the interest rate negotiator



Output :

User will initially enter his details



The market crawl and the user input data is sent to the prompt node using model Gpt 4o (Azure)

Output :

It will provide market comparison whether there is room for negotiation

Interest Rate Negotiation Analysis and Recommendations
Based on the provided details, here is a detailed analysis and actionable recommendations for negotiating your interest rate:

1. Current Interest Rate Offer

- Offer: 5.75%
- Analysis: The rate appears moderately competitive depending on the specific market conditions. However, further evaluation is needed based on your credit profile, market averages, and cross-border trade-related considerations.

2. Market Comparison

- Current Market Rates:
 - For borrowers with a similar credit score (720) in October 2023, average interest rates for loans typically range between 5.00% and 6.00%, depending on loan type, terms, and borrowing purpose.
 - In cross-border trade finance, lenders may charge a slight premium (~0.25%-0.50%) due to the risks associated with currency fluctuations and geopolitical uncertainties.
- Analysis: Your rate of 5.75% is within the expected range for cross-border loans. However, if your financial profile is strong, there may be room for further negotiation toward the lower end of this range (closer to 5.00%-5.25%).

3. Credit Profile Evaluation

- Credit Score: 720 (Good)
- Debt-to-Income Ratio (DTI): 24%
- Total Debt: \$20,000
- Annual Income: \$85,000
- Analysis:
 - A credit score of 720 places you in the upper tier of "Good" creditworthiness, meaning you are a low-risk borrower. This strengthens your negotiation position.
 - A DTI of 24% is below the typical risk threshold (36%-50%) for lenders, which reinforces your ability to service additional debt effectively.

reliable borrower, emphasizing your strong repayment ability.

4. Negotiation Strategy

- Objective: Use your strong credit profile and low DTI to argue for a lower interest rate, especially if this is for a stable and secure long-term trade finance project.
- Key Talking Points:
 - Emphasize your excellent repayment ability (low DTI and stable income).
 - Highlight your history of good credit management based on your credit score.
 - Reference market benchmarks: Point out that rates for borrowers like you are closer to 5.00%-5.25%.
- Recommendation: Negotiate directly with the lender to lower the interest rate by 0.25%-0.50%, aiming for a final rate within the 5.25%-5.50% range.

5. Counteroffer Suggestion

- Suggested Counteroffer: 5.25%
- Why This Rate?
 - It is competitive for the current market.
 - It reflects the low credit risk you pose, while still accounting for modest cross-border premium adjustments.
 - Provides the lender with a fair return without undue risk.

6. Additional Considerations

- Cross-Border Trade Loan Parameters:
 - Ensure the loan terms include protections against potential currency exchange risks if you are operating in foreign markets.
 - Verify whether fixed or variable interest rates are offered; fixed rates may provide long-term cost stability.
- Prepayment Options:
 - Confirm if the lender allows early repayment without penalties. Use this as a bargaining tool if you are confident in improving your cash flow in the near future.
- Additional Discounts:
 - Consider asking for small discounts based on other factors (e.g., loyalty if you are a long-standing client, bundling other services, or offering collateral).



It will then provide strategies on ways to improve your credit score and also suggest best banks for loans to the trade companies

Strategies :
Indian Banks Offering Competitive Trade Loan Rates — October 2023
To support your negotiation, here are some Indian banks currently providing competitive rates for trade loans:

- 1. State Bank of India (SBI)**
 - Rates: Starting at ~6.75% for trade and export financing.
 - Competitiveness: SBI offers volume-based discounts, particularly for established exporters/importers. Borrowers with strong financials can negotiate favorable terms.
- 2. HDFC Bank**
 - Rates: Starting at ~6.50% for cross-border trade loans.
 - Competitiveness: Known for flexible repayment terms and digital lending processes. Ideal for businesses with consistent cash flow.
- 3. ICICI Bank**
 - Rates: Starting at ~6.40% for structured trade loans (based on tenure and risk assessment).
 - Competitiveness: Offers customized financing options for export contracts and trade receivables.
- 4. Kotak Mahindra Bank**
 - Rates: Starting at ~6.30% for long-term loans, based on creditworthiness.
 - Competitiveness: They focus on high-net-worth individuals (HNIs) and businesses in organized sectors, and they're open to rate negotiation for large-value financing.
- 5. Axis Bank**
 - Rates: Starting at ~6.25% for customers with strong profiles.
 - Competitiveness: Provides competitive floating-rate loans tailored to market trends. They are an excellent choice for businesses seeking flexibility.

Action Steps:

- Compare Rates: Contact these lenders for tailored trade loan offers based on your specific requirements.
- Negotiate: Use your strong credit profile to push for interest rate concessions.
- Consider Alternatives: If domestic banks don't provide competitive terms

Type here... 🕒 📈

Saved Prompts ↑

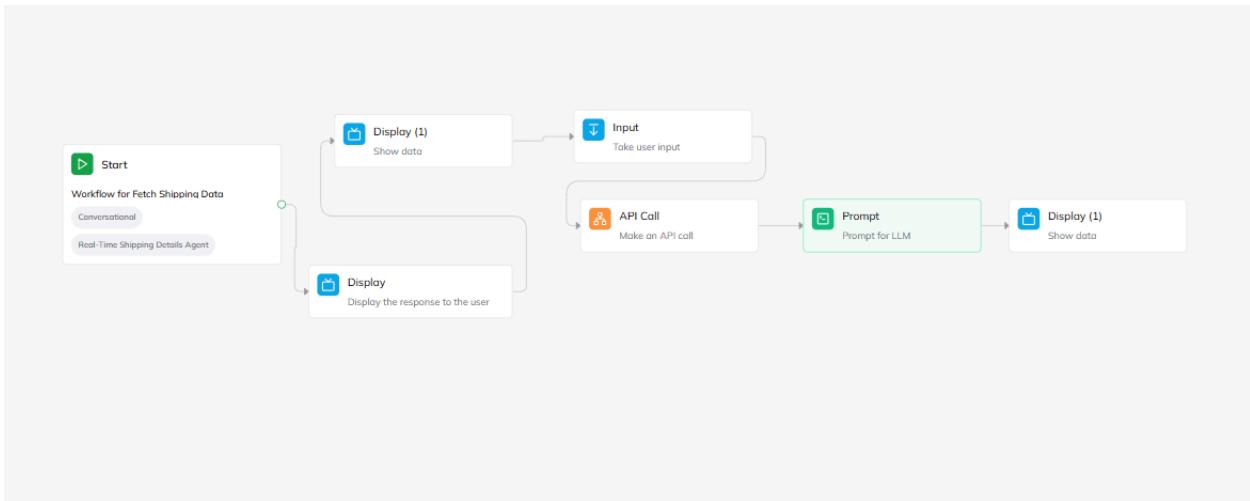
It checks the companies country from the database and then suggest best banks in that country(For Example India)

5) Logistic Tracking Agent :

How it works:

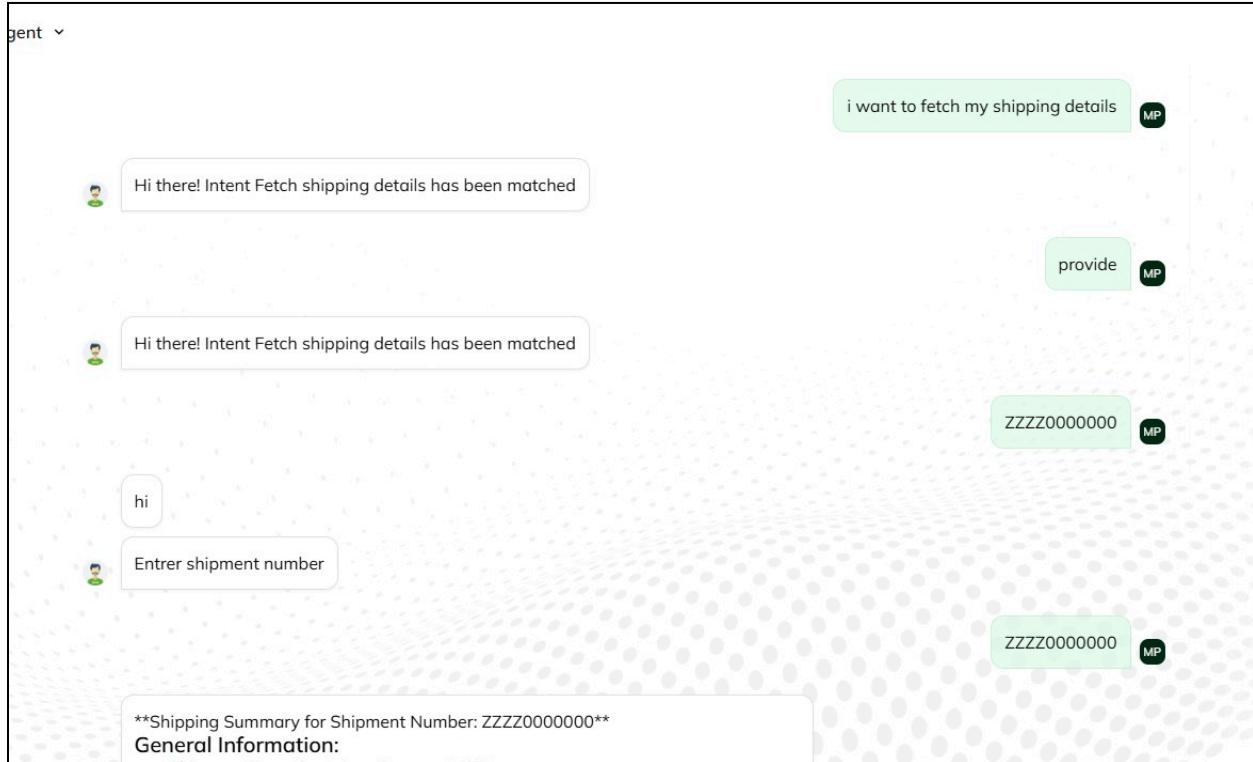
- AI-driven business impact analysis helps organizations assess potential outcomes and make data-driven decisions.
- Automated risk assessment identifies potential threats and mitigates risks efficiently.
- Custom business recommendations provide tailored insights to enhance operational efficiency.
- Real-time alerts and email notifications keep stakeholders informed and responsive.
- To implement this agent we have used ShipCube.ai a logistics api which takes in input of shipment number and gives details of shipment

Workflow :



Output:

First user will input their shipment number to the agent this will be send to the api which will fetch the shipment details



Here's a summary of your shipping details based on the provided information:

Shipping Overview

- Shipment Number: ZZZZ00000000
- Shipping Status: In Transit
- Last Updated: January 29, 2024

Shipment Type

- Type: Container (CT)
- Sealine: Ocean Network Express (ONE)

Route Information

- Port of Load (POL):
 - Location: Xiamen, Fujian Sheng, China
 - Departure Date: December 29, 2023
- Near Port of Discharge (POD):
 - Location: Lazaro Cardenas, Michoacán, Mexico
 - Estimated Arrival Date: February 5, 2024 (not actual yet)
- Transshipment Point:
 - Location: Busan, South Korea
 - Arrival Date: January 11, 2024

Vessel Details

- Vessel Name: MSC CHIYO
 - IMO: 9947110
 - Flag: Liberia (LR)
- Vessel Name: MSC IVA
 - IMO: 9962550
 - Flag: Liberia (LR)

Container Details

- Container Number: ZZZZ00000000
- ISO Code: 45G1
- Status: In Transit

Key Events

- Container Release to Shipper: December 22, 2023
- Loaded at Port of Loading: December 29, 2023
- Departure from Port of Loading: December 29, 2023
- Arrival at Transshipment Port: January 11, 2024
- Loaded at Transshipment Port: January 16, 2024
- Departure from Transshipment Port: January 18, 2024
- Estimated Arrival at POD: February 5, 2024

Location Coordinates

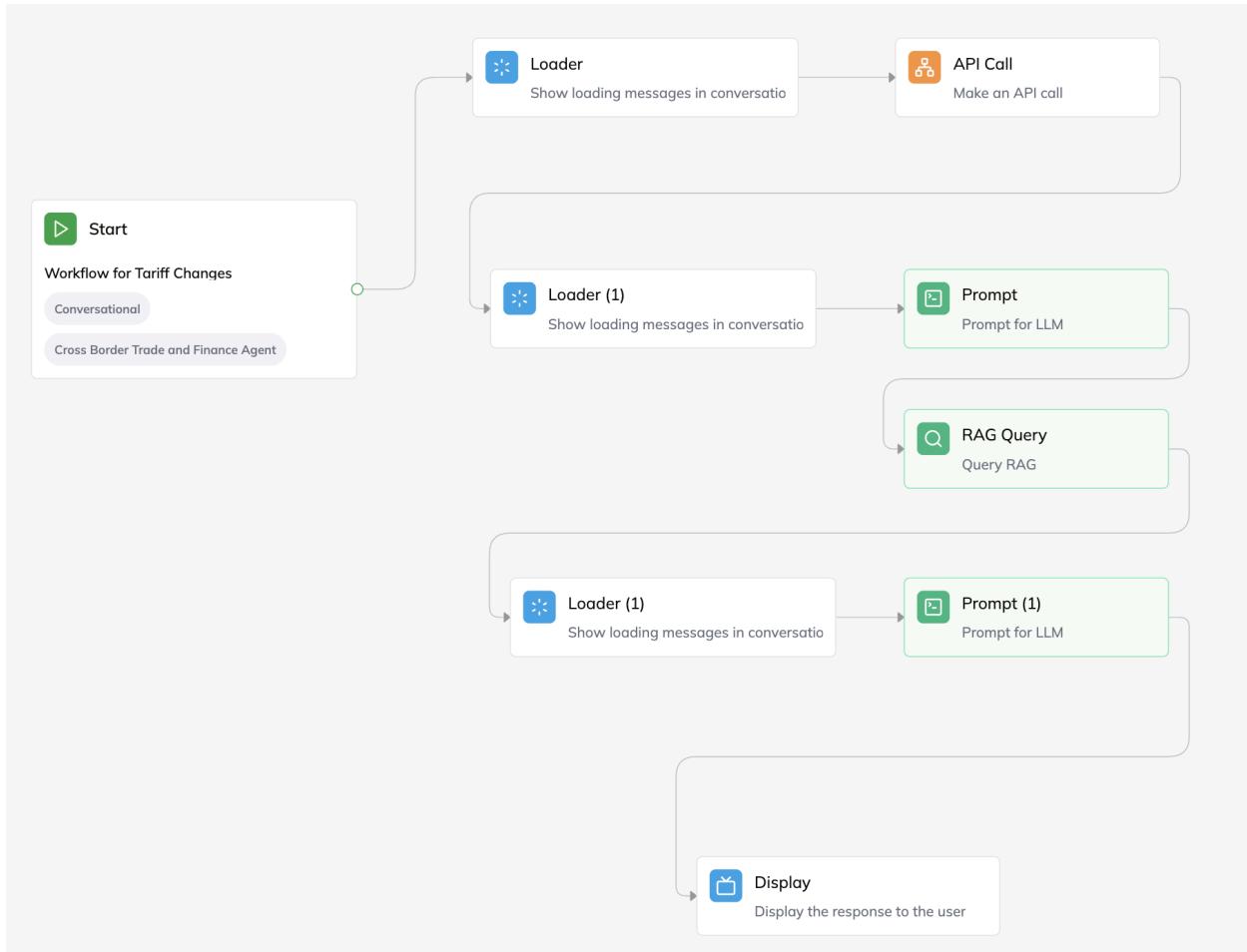
- Xiamen, China: Lat: 24.47979, Lng: 118.08187
- Busan, South Korea: Lat: 35.10168, Lng: 129.03004
- Lazaro Cardenas, Mexico: Lat: 17.97066, Lng: -102.22124

Feel free to ask if you need more specific information or any other assistance!

So using the API, it provides the details of the shipments such as overview, type, Key Events and Container Details, etc.

6) Geopolitical Events and Tariff Changes Tracker Agent:

This workflow tracks geopolitical events and tariff changes by making an API call to fetch news. The retrieved data is processed using RAG to assess its impact on the user's business. The system then generates insights and suggestions using an LLM and displays the results to the user.



Output:

Cross Border Trade and Finance Agent ~

Debug Mode



ell me about the latest tariff changes and how does it affect my business. 

Geopolitical Events

The United States has recently imposed a 10% tariff on semiconductor imports from China, signaling heightened trade tensions between two of the world's largest economies. This change is particularly impactful as semiconductors are pivotal to the manufacturing of electronics, one of IndiBazaar's key product categories. Beyond tariffs, global geopolitical shifts can lead to supply chain disruptions, currency fluctuations, and changes in international trade policies. For IndiBazaar, these factors hold implications for procurement costs, pricing strategies, and overall operational efficiency.

Impact on Your Business

Increased Production Costs

The tariff could drive up costs for electronic components and finished devices sourced from China, which serves as the world's largest semiconductor producer. If IndiBazaar procures smartphones, laptops, smartwatches, and other accessories reliant on Chinese semiconductors, it's likely that suppliers will pass on these added costs, raising procurement expenses by an estimated 7-12%. This could hinder competitiveness in IndiBazaar's electronics vertical, where it already faces competition from established players like Flipkart, Amazon India, Meesho, and Snapdeal.

Supply Chain Disruptions

Trade restrictions and geopolitical shifts can introduce complexity into IndiBazaar's supply chains, delaying product availability and causing fulfillment challenges. This is particularly relevant given the platform's reliance on efficient warehousing and logistics systems to meet consumer demand for popular items via same-day and next-day delivery.

Impact on Export Operations

IndiBazaar has a significant global presence, with 25% of its export volume targeting the US, followed by key markets such as Europe (12%), the Middle East (20%), and Southeast Asia (18%). The tariff indirectly affects IndiBazaar's export operations, as rising procurement costs for raw materials and components could lead to thinner margins in international markets. Moreover, currency fluctuations triggered by changing geopolitical sentiment may escalate shipping and production

Type here...



Saved Prompts 

Cross Border Trade and Finance Agent ▾

Debug Mode

expenses.

Consumer Sentiment and Pricing

Economic volatility and higher product costs could impact consumer buying behavior, especially given IndiBazaar's target audience of urban and semi-urban consumers who prioritize affordability. Any upward pricing adjustments on electronics could result in reduced competitiveness, pushing price-sensitive customers toward alternative platforms.

Suggestions to Mitigate Impact

1. **Supplier Diversification:** Reduce reliance on Chinese imports by exploring semiconductor alternatives from countries unaffected by the tariff or prioritizing domestically manufactured electronics. Strengthening local partnerships could align with India's "Make in India" initiative.
2. **Cost Optimization:** Evaluate production and logistics costs to identify areas for efficiency, ensuring profitability amid rising procurement prices. This includes renegotiating contracts with suppliers and courier partners.
3. **Focus on Private Labels:** Expanding private label electronics could allow IndiBazaar to have greater control over production costs and pricing, branding these products as affordable yet high-quality alternatives.
4. **Leverage AI-Driven Insights:** Invest in AI-driven personalized shopping experiences to enhance customer retention despite pricing challenges. Tailored recommendations could boost sales in non-electronics categories to offset lower margins in electronics.
5. **Currency Hedging Strategies:** Minimize exposure to currency volatility by implementing hedging strategies to stabilize procurement and shipping costs, particularly for exports.
6. **Expand International Markets Thoughtfully:** When exploring new international markets, prioritize countries with favorable trade policies and strong consumer demand for Indian-made goods. Maintain competitive pricing strategies to drive volume sales.

Conclusion

The US tariff on Chinese semiconductors introduces significant challenges for IndiBazaar, including inflated production costs, supply chain disruptions, and pricing pressures. However, proactive steps such as supplier diversification, localization, and technological investment can help mitigate these impacts while positioning

Type here...

Notification on E-mail:

Gmail

Compose

Inbox 6,354

Starred

Snoozed

Sent

Drafts 34

More

Labels

Images are not displayed. Display images below - Always display images from no-reply@uptiq.ai

Thu, Mar 27, 8:41PM (2 days ago)

no-reply@uptiq.ai to me



{"totalArticles":10,"articles":[{"title":"Trump announces 25% tariffs on foreign-made cars","description":"President Trump announced a 25% tariff on all cars not made in the U.S., effective immediately.", "content":"This aggressive move aims to protect domestic auto manufacturers from foreign competition.", "url":"https://www.cnbc.com/2025/03/27/cnbc-daily-open-to-tariff-or-not-to-tariff-that-is-the-question.html","publishedAt":"2025-03-27T07:47:51Z","source":"CNBC"}, {"title":"How Trump pushed Canada to the brink","description":"Trump's tariff war strains the historical relationship between the U.S. and Canada.", "url":"https://www.bostonglobe.com/2025/03/27/opinion/trump-canada-tariffs-annexation-threat","publishedAt":"2025-03-27T04:00:02Z","source":"The Boston Globe"}, {"title":"Tariffs on autos could increase car prices significantly","description":"The new tariffs are expected to result in higher prices for consumers, potentially impacting auto sales.", "url":"https://www.cbsnews.com/news/trump-auto-tariffs-gm-ford-stellantis-car-prices/","publishedAt":"2025-03-27T02:42:22Z","source":"CBS News"}, {"title":"China's industrial profits decline amid tariff risks","description":"Chinese industrial firms continue to face challenges, with declining profits as global tariff pressures mount.", "url":"https://www.cnbc.com/2025/03/27/chinas-industrial-profits-drop-point3percent/"}]

7) Graphs and Visualizations using chart.js:

Workflow for Market Analysis

Conversational
Cross Border Trade and Finance Agent

```

graph LR
    Start((Start)) --> Prompt1[Prompt  
Prompt for LLM]
    Prompt1 --> Input[Input  
Take user input]
    Prompt1 --> Display1[Display  
Show data]
    Prompt1 --> APICall[API Call  
Make an API call]
    Input --> Prompt1_1[Prompt (1)  
Prompt for LLM]
    Display1 --> Prompt1_1
    APICall --> Prompt1_1
    Prompt1_1 --> Display1_1[Display (1)  
Show data]
  
```

Prompt (1)
Prompt for LLM

Config

Model*
GPT 4o mini (Azure)

System Prompt*
Generate a valid JSON object containing data visualizations for India's exports. The JSON must follow these strict guidelines:

Query*
Generate a chart.js config and put it in the key named i

Base64 Document Data
Enter base64 document data

Document Ids
Example: 5acbdb3-dd9d-4f89-aa55-6891e6e8e887,
Enter document ids separated by comma

Supported document types for selected model: .png, .jpeg, .jpg, .webp, .gif

Response Format
 JSON Object

Temperature
Please enter temperature (0-2)

Number of Conversation Turns
Please enter number of conversation turns (0-5)

Report
Export Value (USD)

Category	Value (USD)
Agriculture	150,000
Textiles	200,000
Pharmaceuticals	100,000
IT	250,000
Automobiles	180,000

Pie chart

Sector	Percentage
IT Services	~35%
Textiles	~25%
Pharmaceuticals	~20%
Automobiles	~10%
Others	~10%

perform market analysis of India's exports

Type here... (microphone icon) (camera icon) (Saved Prompts)

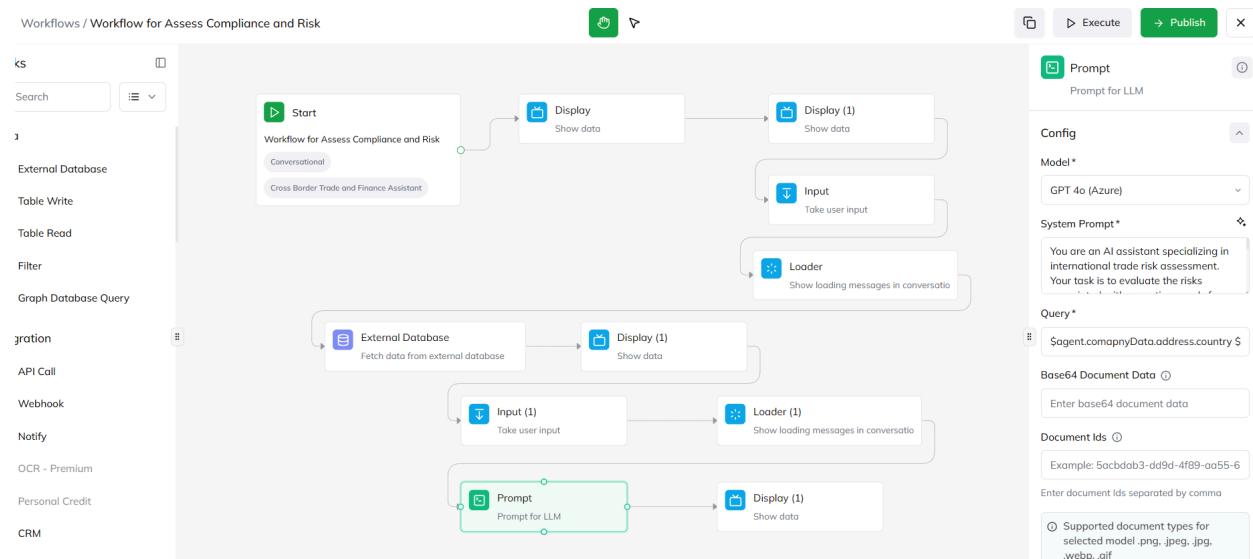
8) Risk Assessment and Compliance Agent

In this agent we have provided facilities to user to check pre-risk before trading in any country. For this the country of the current User is fetched from the database and user input is asked of where he wants to trade or export in which country.

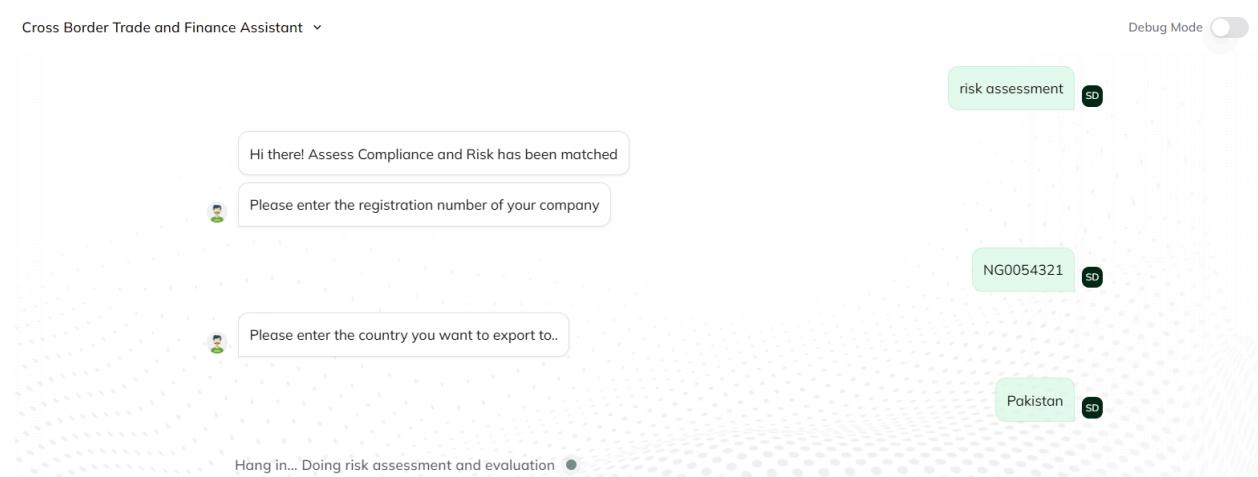
Example : Current country is India and export country is Pakistan

Then the agent using LLM and real time data of current bilateral relations of the 2 countries calculates the risk Percentage(%) and provides justifications for it
Additionally, provides alternative countries where he can export.

WorkFlow :



Output :



Pakistan

****Risk Assessment of Exporting Goods to Pakistan******Step 1: Analyze Bilateral Relations**

Home Country: India

Destination Country: Pakistan

India and Pakistan share historically strained bilateral relations influenced by political, territorial, and security concerns. Major factors include:

1. Political Relations: India and Pakistan have experienced long-standing conflicts over the region of Jammu and Kashmir. Diplomatic ties fluctuate based on political events and changes in government. Recent escalations in geopolitical tensions have resulted in the deterioration of relations.
2. Trade Agreements and Restrictions: Direct trade between India and Pakistan has been significantly disrupted in recent years. Pakistan suspended bilateral trade with India in August 2019 following India's revocation of Jammu and Kashmir's special status (Article 370). As of now, trade remains largely restricted.
3. Sanctions and Barriers: Pakistan imposed trade embargoes on most Indian goods and products. Diplomatic hurdles, high tariffs, and non-tariff barriers make formal trade impractical and legally constrained.
4. Economic Relations: Both countries suffer from deep mistrust that impacts economic partnerships. Cross-border trade is rare and mainly occurs informally or via third-party countries to circumvent legal restrictions.

Step 2: Risk Evaluation

Risk Percentage: 95%

The risk of exporting goods directly from India to Pakistan remains extremely high due to:

1. Political Instability: The ongoing regional conflict causes frequent disruptions.
2. Trade Embargoes: Pakistan's ban on Indian goods prohibits almost all export activities.
3. Economic Uncertainty: Fluctuating foreign exchange reserves and inflation in Pakistan exacerbate trade challenges.
4. Logistical Barriers: Trade routes are limited and prone to closures, with border crossings being unpredictable.

Step 3: Justification

The assessment indicates an overall export risk of 95%, reflecting heightened political and economic uncertainties between India and Pakistan. Key challenges include:

1. Legal Constraints: The ban on bilateral trade remains a critical obstacle. Even if lifted, tariff and regulatory barriers would severely hamper profit margins for exporters.
2. Unstable Diplomatic Environment: Recent geopolitical developments such as cross-border skirmishes further reduce trust and trade potential.
3. Dependency on Third-Party Channels: Informal trade through third countries (e.g., UAE) exposes exporters to additional costs, delays, and risks of regulatory breaches.
4. Economic Vulnerabilities in Pakistan: Pakistan's economic instability reduces its

Step 4: Alternative Recommendations

Given the high export risk, Indian businesses should consider alternative markets with stable trade relations and favorable policies. Potential destinations include:

1. **Bangladesh:** India has strong diplomatic and economic ties with Bangladesh, supported by preferential trade agreements such as SAFTA. Low tariffs and proximity make it an ideal export destination.
2. **Sri Lanka:** Despite recent economic challenges, Sri Lanka shares favorable trade relations with India and provides access to various sectors like textiles and machinery.
3. **UAE:** The UAE serves as a gateway for Indian exporters and has robust bilateral trade agreements, enabling access to global markets.
4. **Nepal:** Strong economic cooperation and open borders make Nepal an easy and low-risk destination for Indian goods.

Conclusion:

Exporting directly to Pakistan is not recommended due to significant risks stemming from political and economic uncertainties. Indian exporters should prioritize alternate markets with high trade potential and favorable diplomatic and regulatory environments to minimize risk and maximize profitability.

Let me know if you'd like further recommendations or insights!