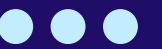
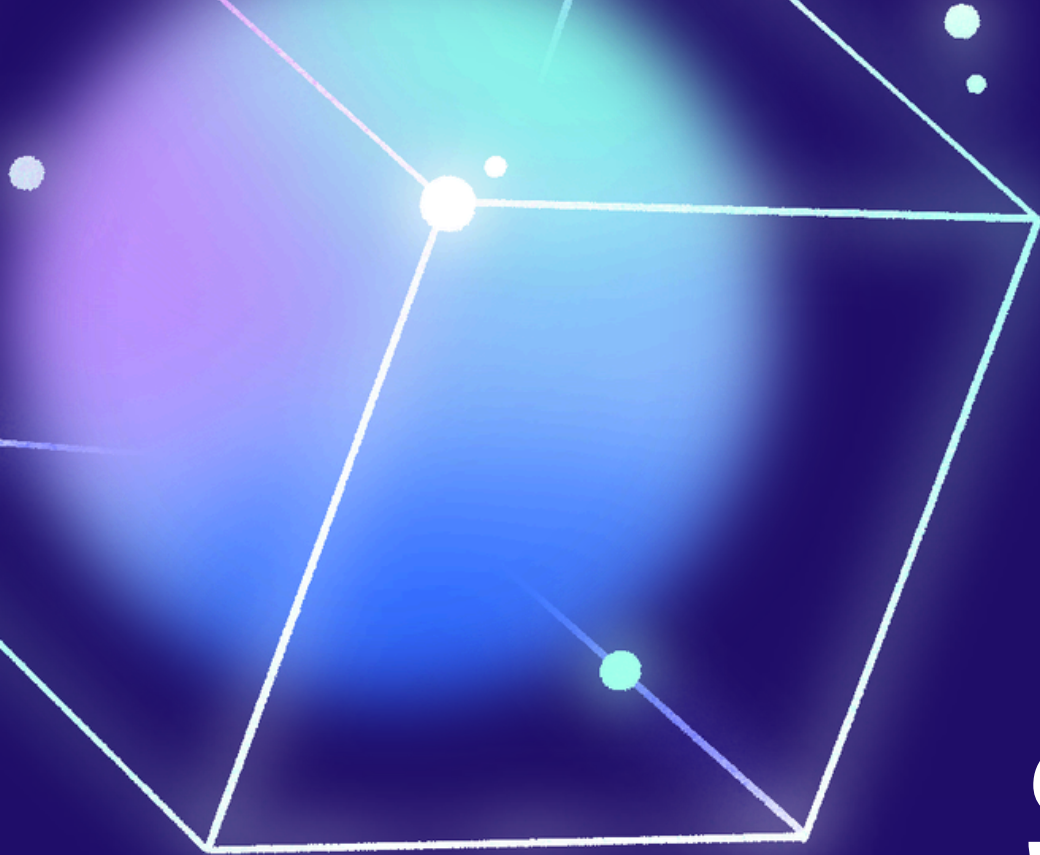


SMARTSHOE'S AGENTIC AI



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MIS 612 | Dr. Anandarajan



SmartShoe's main problem is
that its teams don't work
together, causing waste and
higher costs.

“Suppliers call to confirm which order to follow because purchase **orders keep changing**. One week we increase volume, and the next we reduce it. Some suppliers now insist on written confirmation from three levels of approval. We **lose credibility each time we reverse direction**.”

Excerpt 5 - Global Sourcing Manager

“Suppliers asked for a single contact point. Right now, they hear from procurement, operations, and marketing separately. **Each one sends different guidance**. I tried to set up a shared mailbox, but no one wanted to own it.”

Excerpt 13 - Supplier Relationship Lead

“The Neon shipments were scheduled for sea freight. Mid-cycle, we received a rush order flagged ‘urgent marketing release.’ We had to book **airfreight at twice the cost**. Then, after the air shipment left, another message came saying to **delay distribution until the next campaign phase**.”

Excerpt 6 - Freight Coordinator

“The cost per pair on Neon looked fine until we added freight and overtime. That’s when the **margin collapsed**. The financials show success on paper because those extra costs sit in different accounts. We have **created accounting silos that hide the real picture**.”

Excerpt 15 - CFO

KEY AI AGENTS

- Data Governance Agent: intercepts inputs, validates against rules, enforces guardrails
- Visualization Agent: uses validated SmartShoe data to build interactive dashboards
- Shares data across departments to streamline departments
- Coordinates processes efficiently through unified dashboards



CLIMATE, CULTURE & GOVERNANCE

- Move from fear and silos to psychological safety and shared accountability
- Enable agentic AI use through a culture of trust
- Analyze why decisions failed, not who to blame
- Protect sensitive data and ensure purposeful, accountable AI agency

SMARTSHOE DATA

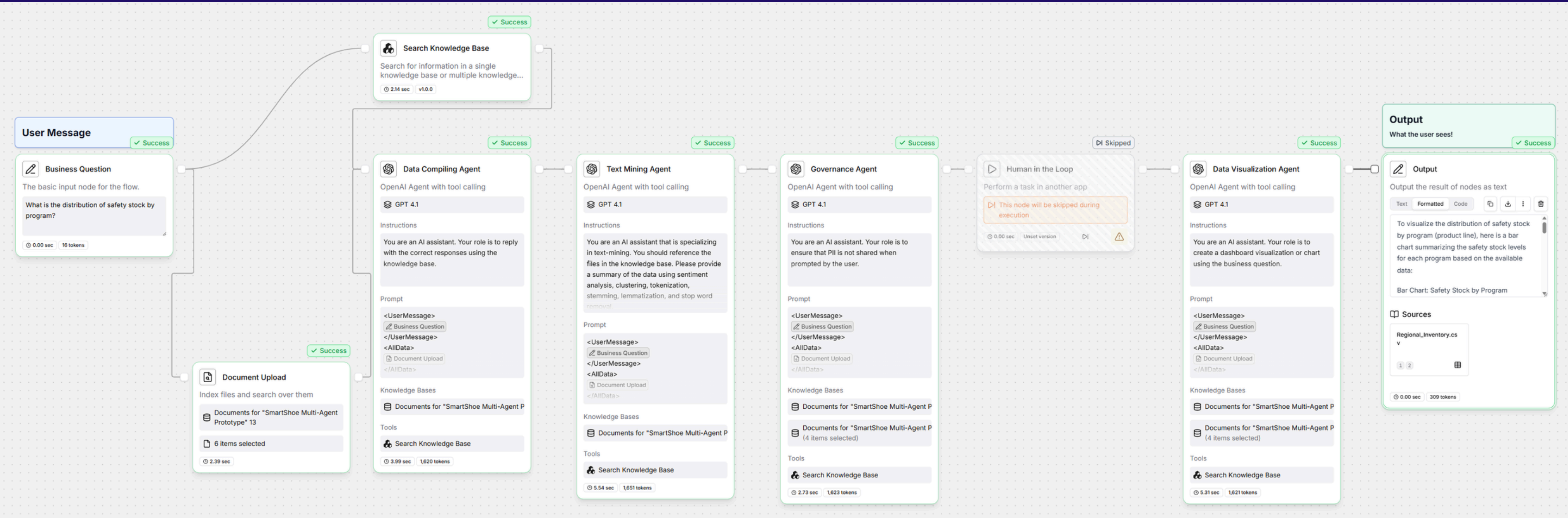
- *Core issue: Data is siloed within departments*
- *Teams are lacking cross-functional coordination without ability to see bigger picture*

Marketing Data						Supplier Data					
Update ID	Date	Product Line	Original Forecast	Updated Forecast	Reason for Update	Supplier	Material	Avg Lead Time	Variability	Max Expedite	Notes
U101	1/5/2025	Neon Series	12,000	15,500	Influencer spike	SUP01	Neon Upper Fabric	7 days	±2 days	+20% cost	Frequently short during Q1
U102	1/7/2025	Neon Series	15,500	14,200	Inventory concern	SUP02	Foam Midsole	10 days	±1 day	Not available	Stable supplier
U103	1/10/2025	TrailMax	8,000	10,000	Early run ads performing	SUP03	Trail Rubber	12 days	±3 days	+10% cost	Sometimes delays due to weather
U104	1/12/2025	Neon Series	14,200	17,000							
U105	1/14/2025	TrailMax	10,000	9,500	Supplier warning						
Customer Data						Inventory Data					
Customer Name	Address	City	State	Zip Code	SSN	Region	Product Line	Starting Stock	Reserved Stock	Daily Sales Rate	Safety Stock
Jane Doe	123 Main Street	Anytown	CA	90210	118745209	East	Neon Series	2,500	800	400	1,200
John Smith	456 Oak Avenue	Sometown	NY	10001	134690852	West	Neon Series	1,200	400	300	900
Alice Johnson	789 Pine Lane	Anyville	TX	73301	150289376	South	TrailMax	3,000	1,100	200	1,000
Bob Williams	101 Maple Drive	Somewhere	FL	33101	167412580	North	TrailMax	1,800	600	250	900
Charlie Brown	202 Elm Street	Smallville	KS	66001	182390745	South	Neon	3,000	1,100	200	1,000
David Jones	303 Cedar Road	New City	GA	30301	195601428	North	Neon Launch	1,800	600	250	900
Production Data						Customer Feedback Data					
Week	Product Line	Capacity	Scheduled Qty	Flex Buffer	Lead Time	Program	Customer ID	Launch Date	Customer Score	Customer Length (days)	Customer Feedback
W1	Neon Series	18,000	17,500	2%	7 days	Neon Series Launch	482	3/1/2025	8	1423	great shoe
W2	Neon Series	18,000	18,000	0%	7 days	Pulse Recall	9371	6/30/2025	5	56	
W3	TrailMax	12,000	11,000	8%	10 days	Pulse Recall	1562	6/30/2025	6	67	not a bad purchase
W4	TrailMax	12,000	12,500	-4%	10 days	Neon Series Launch	7745	3/1/2025	2	3410	provided poor stability
						Neon Series Launch	209	3/1/2025	3	431	Didn't like enhancements

AGENTIC AI WORKFLOW

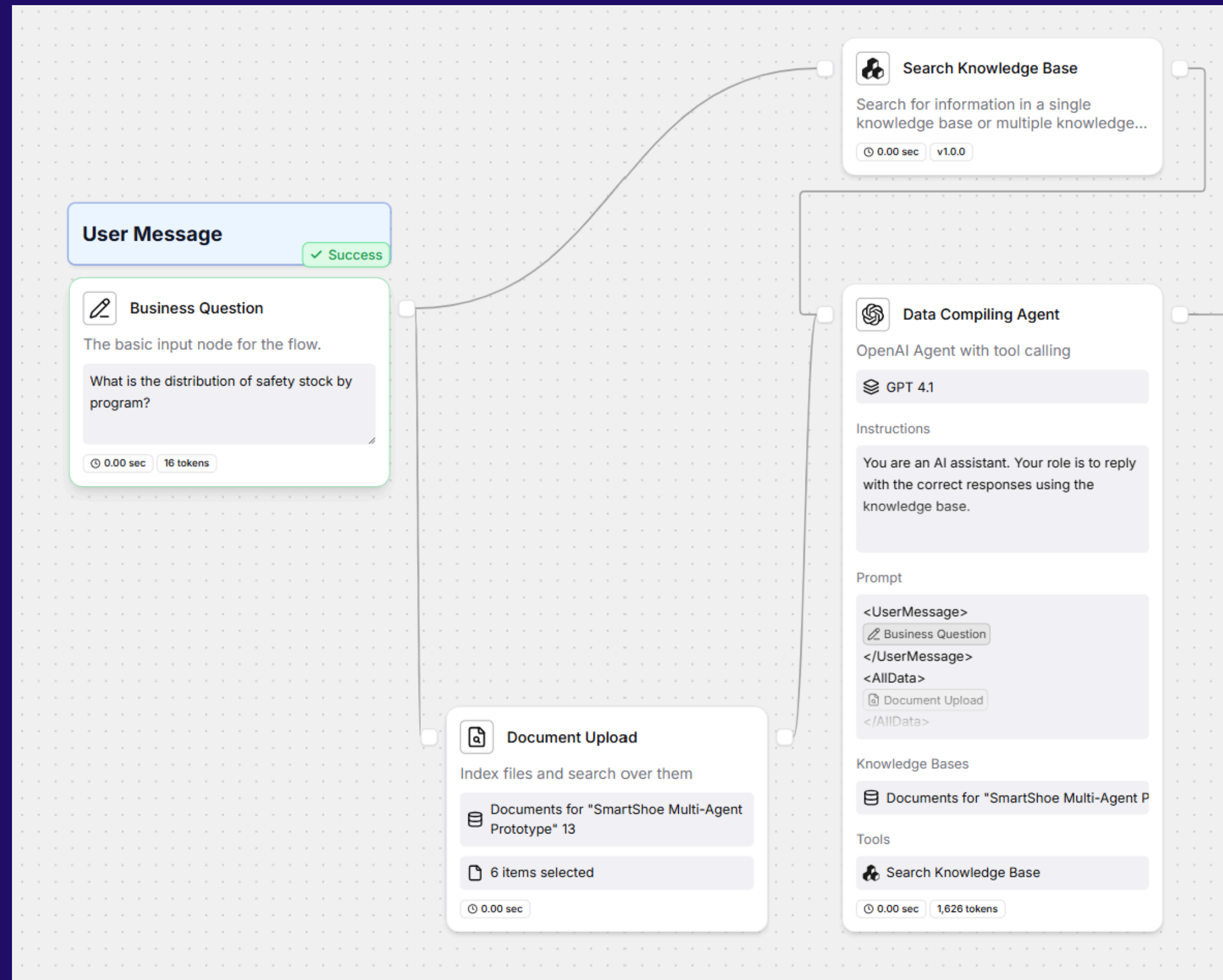


- Business Solution:** Create cohesive workflow which allows for increased data visibility and impact



AGENTIC AI WORKFLOW


- *Company data is uploaded into the agent*
- *User inputs business question*
- ***Data Compiling Agent*** is instructed to answer the business question using the uploaded documents (knowledge base)




AGENTIC AI WORKFLOW

- **Text Mining Agent** is instructed to use text-mining processes to create sentiment analysis, word frequency analysis, and other techniques
- Customer feedback table contains relevant data for text-mining analysis

Customer Feedback Data				
Program	Customer ID	Launch Date	Customer Score	Customer Feedback
Neon Series Launch	482	3/1/2025	8	great shoe
Pulse Recall	9371	6/30/2025	5	
Pulse Recall	1562	6/30/2025	6	not a bad purchase
Neon Series Launch	7745	3/1/2025	2	provided poor stability
Neon Series Launch	209	3/1/2025	3	Didn't like enhancements

 Data Compiling Agent

OpenAI Agent with tool calling


 GPT 4.1

Instructions

You are an AI assistant. Your role is to reply with the correct responses using the knowledge base.


Prompt

<UserMessage>

 Business Question


</UserMessage>

<AllData>


 Document Upload

</AllData>


Knowledge Bases

 Documents for "SmartShoe Multi-Agent P


Tools

 Search Knowledge Base

0.00 sec 1,626 tokens

 Text Mining Agent

OpenAI Agent with tool calling


 GPT 4.1

Instructions

You are an AI assistant that is specializing in text-mining. You should reference the files in the knowledge base. Please provide a summary of the data using sentiment analysis, clustering, tokenization, stemming, lemmatization, and stop word removal.


Prompt

<UserMessage>

 Business Question


</UserMessage>

<AllData>


 Document Upload

</AllData>

Knowledge Bases

 Documents for "SmartShoe Multi-Agent P

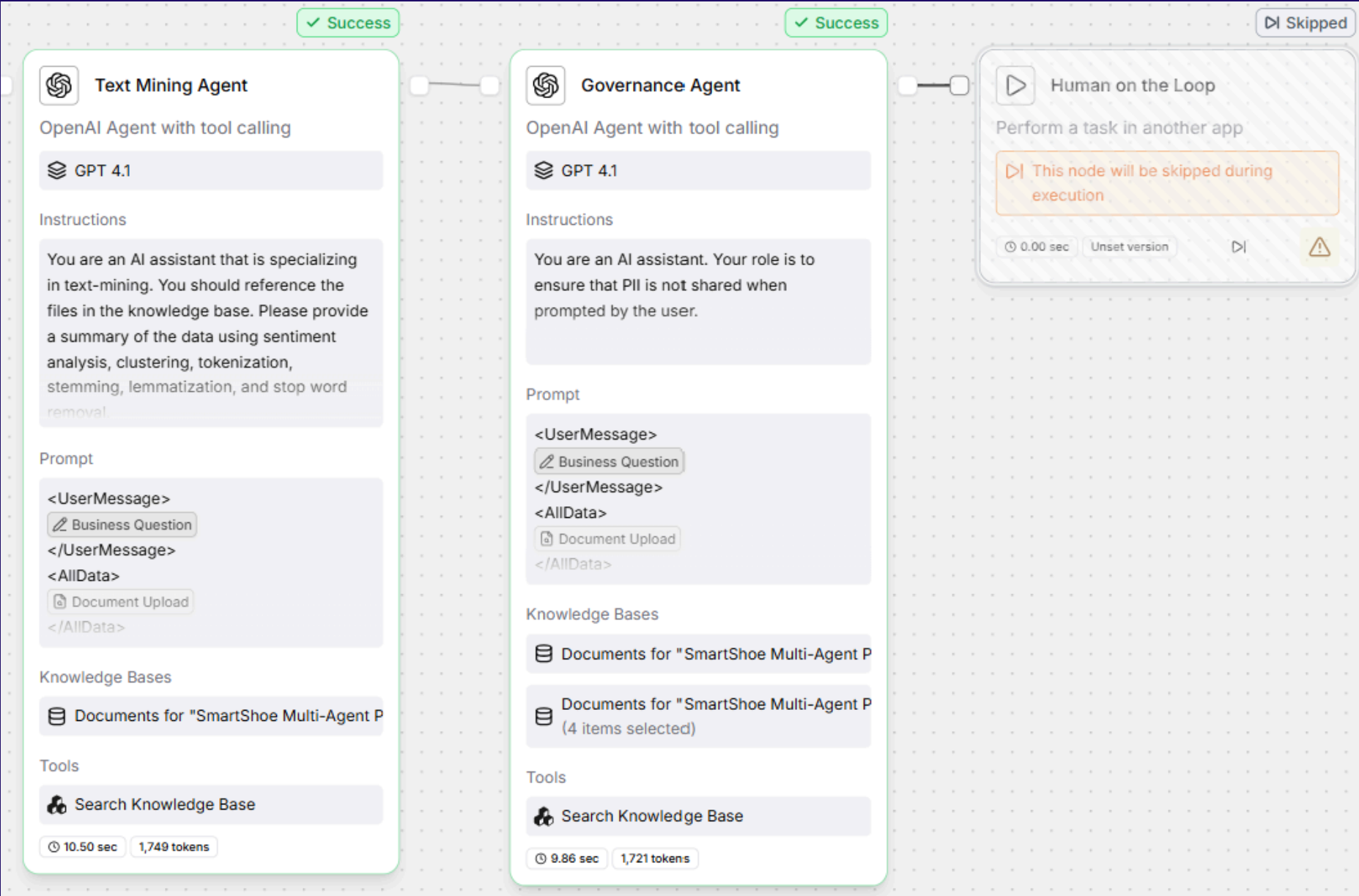
Tools

 Search Knowledge Base

0.00 sec 1,651 tokens

AGENTIC AI WORKFLOW

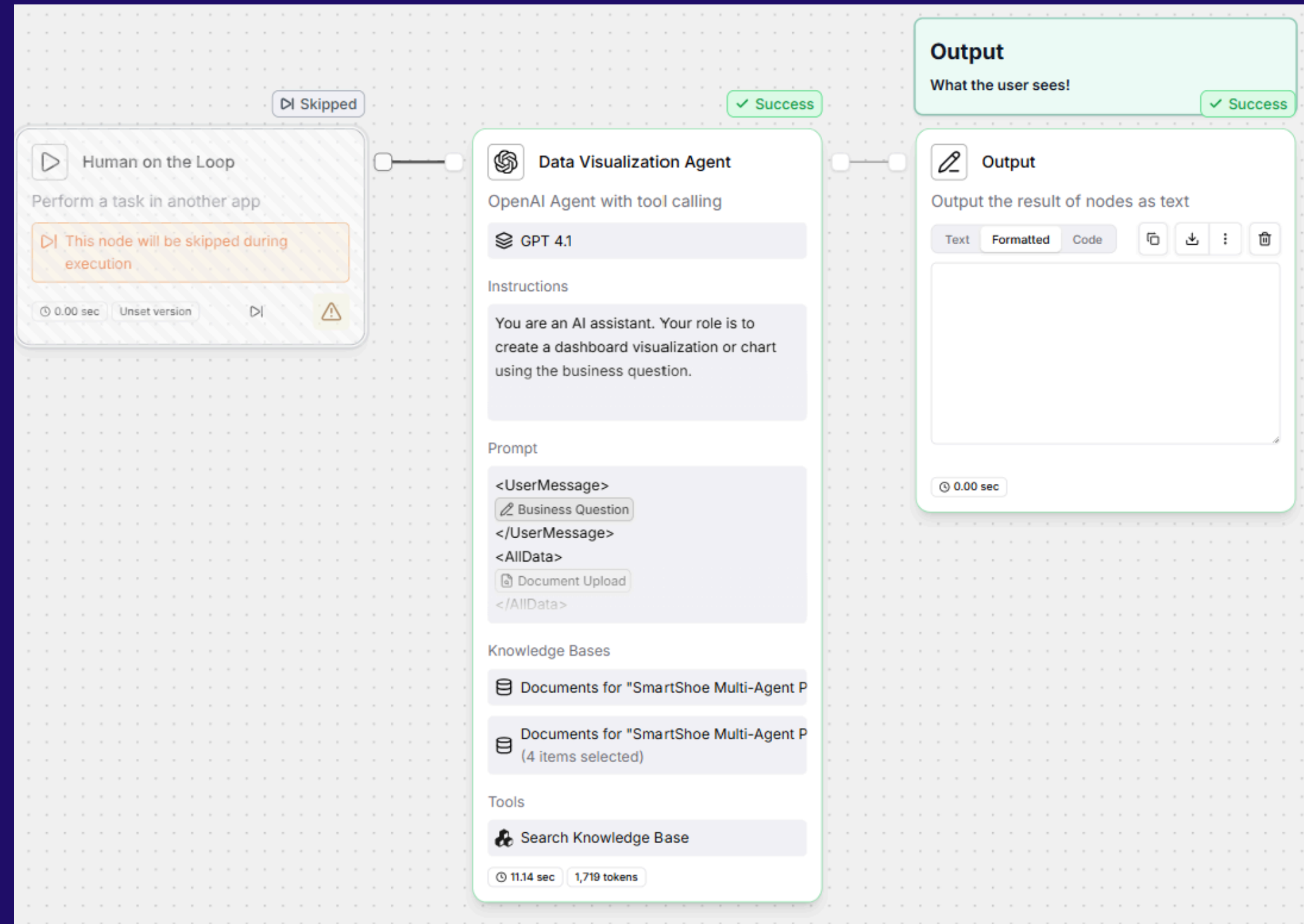
- **Data Governance Agent** is instructed to ensure that Personally Identified Information (PII) is not shared with certain individuals
- Customer data table contains PII
- Data output is reviewed by a **Human on the Loop** to ensure data integrity



Customer Data					
Customer Name	Address	City	State	Zip Code	SSN
Jane Doe	123 Main Street	Anytown	CA	90210	118745209
John Smith	456 Oak Avenue	Sometown	NY	10001	134690852
Alice Johnson	789 Pine Lane	Anyville	TX	73301	150289376
Bob Williams	101 Maple Drive	Somewhere	FL	33101	167412580
Charlie Brown	202 Elm Street	Smallville	KS	66001	182390745
David Jones	303 Cedar Road	New City	GA	30301	195601428

AGENTIC AI WORKFLOW

- **Data Visualization Agent** is instructed to create a dashboard visualization or chart that reflects the answer to the business question
- Final output will allow for increased synergies between departments and will enable better decision-making
- Positive experience with this AI agent will encourage a culture of digital fluency



OPERATIONAL SYNCHRONIZATION DASHBOARD

Integrated View for Cross-Functional Decision Making (OSO)

Open Customer

Voice Customer

📦 Total Available Stock

5,600

Net stock ready for immediate dispatch.

📏 Avg Lead Time Variability (Flow Equalizer)

±2.0 Days

High variability requires extra buffer stock

📈 Forecast Volatility (High Urgency)

2 High Alerts

5 total forecast updates issued this period.

⚠️ Avg Days to Safety Stock

4 Days

Average buffer time before reaching minimums.

Sentiment derived (Text Mining).

LUV BAD

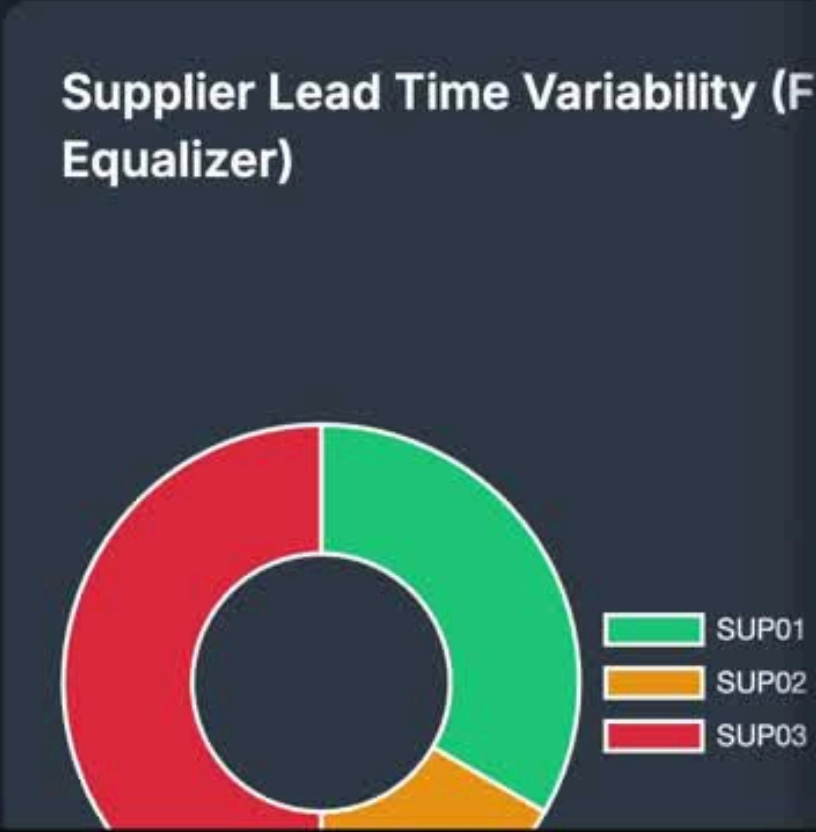
LUV - Neon Se
great shoe
Score: 8 | ID: 4

BAD - Pulse Re
Received sho
Score: 5 | ID: 9

BAD - Spring C
provided poc
Score: 2 | ID: 6

BAD - Spring C
Did not like th
design.
Score: 4 | ID: 8

BAD - Spring C
The material
Disappointed



THANK YOU!

Q&A

