

Supply Pulse

A. Objective: To build a product to map domestic and global supply trends for various industries, aimed at providing comprehensive insights into global product demand patterns, export and imports trends and pricing dynamics.

B. Mission @ 1Lattice: The Objective of Supply Pulse clearly resonates with the mission of 1Lattice to unlock the power of trustable data, actionable research and provide insights.

C. Assumptions (To narrow down the scope):

1. An example of a single Indian industry/sector namely FMCG, has been considered but the product features are scalable for all major industries globally
2. The Product Road map is for a single industry
3. Due to Time Constraint we will not be discussing the User flows or user journey
4. No data repository is available prior to the creation of the product

D. Market Analysis:

Global Context: The Global Market research/ Insights Consulting Services has grown exponentially in recent years. It is expected to grow from \$84.33 billion in 2023 to \$102.88 billion by 2028. This growth can be attributed to

- Increasing demand for data driven decisions
- Rise in data driven business
- Increase in awareness about market research and consulting

Indian Context: **The Indian Market research and Consulting services are at \$2.9 billion in 2023. India is the world's third largest market research and insights industry. It can be attributed to:**

- India being considered as a growth market
- Global confidence in India which is considered a talent hub with strong analytics expertise.
- Government of India's Vision-2030 strategy

Benefits of a Domestic and Global Supply Demand trends products:

- Helps to mitigate risks due to macro level changes
- Improves understanding of ever changing customer preferences
- Improves cash flow management
- Deciding factor in demand forecasting, inventory planning/ management & Manpower planning

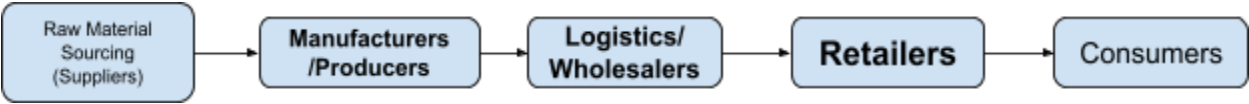
Competitor Analysis:

Products	IBM Sterling Supply Chain Intelligence Suite	NielsenIQ	SAP Integrated Business Planning (IBP)	Oracle Supply Chain Management Cloud	Kinaxis RapidResponse
Key Features (Common Features)	- Real-time visibility	- Consumer demand analytics	- Dynamic demand management	- Advanced analytics	- Integrated planning
	- Predictive analytics	- Market trend analysis	- Advanced analytics	- Pricing optimization	- Real-time inventory
	- Risk management	- Customizable dashboards	- Scenario planning	- Supplier collaboration	- What-if analysis
	- Inventory optimization	- Retail measurement	- Supply chain control tower	- Inventory management	- Demand forecasting
			- Collaboration across departments		
Strengths	- Strong integration capabilities	- Extensive data sources	- Improved forecasting accuracy	- Robust cloud infrastructure	- User-friendly interface
	- Advanced AI-driven insights	- Trusted brand reputation	- Enhanced agility and responsiveness	- Comprehensive feature set	- Flexibility
	- Large network of business		- Real-time simulation analysis	- Extensive organisation Network	
			- Large network of business	- Large network of business	
			- High Upslling potential		
Weaknesses	- Complexity in implementation	- Primarily consumer-focused	- High cost of implementation	- Complexity can lead to a steep learning curve	Requires significant time investment
	- Focused on B2C				

For Explanation purposes, we will discuss the **FMCG Industry**.

The **fast-moving consumer goods (FMCG) sector** in India contributes about 2.5% to the country's GDP. It is the 4th largest sector in India's economy. The FMCG sector is a significant source of employment in India, providing jobs in marketing, sales, and other areas. It employs more than 10 million people. It comprises *food and beverages, household and personal care products, and local kirana stores*. The FMCG sector is expected to grow at a rate of 7–9% in 2024.

Value Chain:



E. Customer Profiles (For Supply Pulse) & Pain Points/ Needs:

- A. *Manufactures*: They need to understand what & when to produce to increase sales. They need demand forecasting & want to know supply risks. They also need to be aware of consumer sentiments & customer- price dynamics.
- B. *Wholesalers/ Retailers*: They need to manage inventory by stocking and selling the produced goods, so they need to understand and predict the demand.
- C. *Logistics Partners*: Demand helps them in managing goods and allocating resources on time and eases their cash flow.
- D. *Investors*: They want to invest in businesses which help them maximize their profits and where there is demand. They need forecasting to understand future growing industries.

F. Feature Prioritization:

We will solve for Manufacturers, Wholesalers/Retailers and then for Logistics Partner and Investors

Competitive View: Across the competitors, the following features are commonly found (highlighted in **green**) in the table:

- *Real-Time Analytics*: Ability to monitor and analyze supply chain data as it occurs.
- *Demand Forecasting Tools*: Predictive capabilities to anticipate future demand based on historical data.
- *Pricing Optimization Strategies*: Tools that help adjust pricing based on current market conditions.

Must-Have Features for Supply Pulse(Basis Customer Needs, Business Impact (the Strategic/Competitive View) and Development Feasibility)

Given resource limitations, the following 3 features should be prioritized for the initial release of Supply Pulse:

1. **Comprehensive Market Trend Visualization (Feature 1)**
Effective visualization of market trends helps users quickly grasp complex data sets, facilitating informed decision-making. This feature enhances user engagement and comprehension. Predictive capabilities to anticipate future demand based on historical Domestic and Global Demand/ Supply data. Ability to monitor and analyze domestic and global supply chain data for a specific Industry
2. **Real-Time Analytics with easy integration option with ERP or other tools (Feature 2)**
This feature is essential for businesses to react swiftly to changes in market conditions. It allows users to optimize inventory levels based on current demand, reducing stock outs or excess inventory. It alerts the

users to mitigate risks affecting the integrated supply chain due to macro level changes.

3. Dynamic Pricing Analysis (Feature 3)

Understanding how pricing fluctuates in relation to supply and demand is vital for strategic decision-making. This feature will empower users to adjust pricing strategies based on real-time market conditions.

G. Data to be captured for top 5-6 Industries In India and Globally

1. Primary Research (Qualitative)-

- Consumer surveys to map consumer behavior and sentiments, Brand awareness, preferences
- Industry Expert calls from top 4-5 Companies (Private Companies)- To understand the pulse of the industry, top products, sales and new projects
- Economic Experts- To understand market conditions and any macro level changes/ anticipations
- Industry Investors- To understand what are their preferences and what are their anticipations

2. Secondary Research-

- Ministry of Statistics and Programme Implementation, Government of India, RBI, Banks data -
 - Trade Data, Inflation, CPI and WPI data, Balance of Payments Data, Fiscal data Repo rates, FDI Data
- [IMF Data Mapper](#), [UN Trade and Development Data](#), Industry-Specific Research Reports, Publicly listed companies data- Trade, Investment, Balance of Payments, GDP, Inflation, Exchange rates, Commodity Prices, Government Expenditures, Natural Resources data, Maritime Transport data, Bank Rates,

H. Analysis to show (Comprehensive Market Trend Visualization- Core feature)

1. Industry level trade Data Domestic and globally with highlighting potential markets
2. City level Consumer preference trends(Comparison with the client company)
3. Competitor level Metrics
4. Inventory level data for a specific company/ Client
5. Predictive analytics to understand change in demand and consumer behavior/ preference with p value < 0.05
6. Pricing dynamics chart helps to understand the fluctuations in consumer affinity with changes in price, brand, quality with a p -value < 0.05

I. Metrics to Measure Success

1. User Engagement Metrics:

- Session duration
- Number of active users
- User retention rate

2. Feature Adoption Metrics:

- Percentage of users utilizing core features (e.g., market trend visualization, real-time analytics)
- Feedback scores from user testing sessions

3. Market Impact Metrics:

- Improvement in demand forecasting accuracy (targeting a p -value < 0.05)
- Reduction in inventory stock outs or excess inventory levels
- Changes in pricing strategy effectiveness based on dynamic pricing analysis

J. Product Roadmap

Start	End	Key Phases	Deliverables	Feature Milestones
14-10-2024	19-10-2024	1. Determination of Sector	- Identify target sectors (e.g., FMCG, electronics) - Market potential assessment	- List of top 5-6 industries for analysis - Initial market research report - Stakeholder interviews completed
20-10-2024	14-04-2025	2. Primary & Secondary Research	- Conduct consumer surveys - Gather industry expert insights - Compile secondary data sources	- 100+ consumer responses collected per month - 5 expert interviews conducted per month - Data from 3-4 government and industry reports
30-10-2024	14-04-2025	3. Validating Data	- Data cleaning and validation - Establish data accuracy metrics	- Validation of 80% of collected data against reliable sources - Create a data quality report
30-10-2024	14-04-2025	4. Backend Database Creation	- Design database schema - Implement data storage solutions	- Database structure approved - Successful integration with data sources - Test database for performance with 10,000+ records
30-10-2024	30-11-2024	5. Feature 1: Data Visualization Product	- Develop visualization tools - Integrate with backend database	- Prototype of visualization dashboard created - User testing with 10 stakeholders - Achieve an average user satisfaction score of 80%
01-12-2024	11-12-2024	6. Beta Testing and Scale (Feature 1)	- Conduct beta testing - Refine visualization features based on feedback	- Collect feedback from 50 beta users/ Clients - Implement changes to improve usability
12-12-2024	12-01-2025	7. Feature 2: Analytics & Business Integration	- Develop analytics tools - Ensure ERP integration capabilities	- Predictive analytics algorithms implemented - Successful integration with at least one ERP system
13-01-2025	23-01-2025	8. Beta Testing and Scale (Feature 2)	- Conduct beta testing	- Collect feedback from 30 beta users/ Clients - Achieve an average user satisfaction score of 80%
24-01-2025	24-02-2025	9. Feature 3: Pricing Analytics	- Develop pricing analysis tools	- Pricing dynamics chart created - Integration with market data sources completed
25-02-2025	05-03-2025	10. Beta Testing and Scale (Feature 3)	- Conduct beta testing	- Collect feedback from 30 beta users/ Clients - Implement changes based on user feedback
06-03-2025	26-03-2025	11. Marketing & Sales Training	- Develop training materials	- Training sessions conducted for sales and marketing teams - Achieve a training satisfaction score of at least 80%
27-03-2025	14-04-2025	12. Feature Rollout (Launch) & Debugging	- Launch Supply Pulse product	- Monitor performance metrics post-launch - Address any critical bugs within the first month

