MINIMUM DATA REQUIRED (6-12 months)

1. Sales & Demand Data

- Daily sales by product (milk, paneer, yogurt, etc.)
- Sales by branch/location
- Which products sold on which days
- Customer order patterns

Example:

Date: Nov 26, 2024

Branch A: 5,000L milk, 200kg paneer

Branch B: 3,000L milk, 150kg paneer

2. Production Records

- What was produced each day
- How much raw material was used
- How much end products we got
- Which machines were used
- Production time and shifts

Example:

Date: Nov 26, 2024

Produced: 20,000L milk, 1,500kg paneer

Used: 22,000L raw milk, 50kg culture

End Product: Amul Lassi, Amul Panner

Machines working: M1, M2 ....

Machine Down: M3.....

3. Inventory/Stock Data

- Daily opening and closing stock
- Stock at factory + all branches
- Expiry/waste records
- Stockout incidents (when you ran out)

Example:

Date: Nov 26, 2024

Factory: 10,000L milk in storage

Branch A: 2,000L (ran out by evening)

Branch B: 3,000L (had excess)

...

4. Procurement/Supply Data

- Daily milk procurement (how much bought)
- Supplier names and prices
- Delivery delays or issues
- Raw material prices over time

Example:

Date: Nov 26, 2024

Bought: 22,000L raw milk

Supplier X: 12,000L at ₹45/L (on time)

Supplier Y: 10,000L at ₹43/L (2 hrs late)

5. Delivery/Logistics Data

- Delivery schedules
- Actual delivery times
- Routes taken(optional : anyways we are going to use google map API.(or something similar))
- Delays and reasons

Example:

Date: Nov 26, 2024

Truck T1: Branch A (6:00 AM → arrived 6:15 AM)

Truck T2: Branch B (6:30 AM → arrived 8:00 AM - traffic)

6. Special Events(Optional)

- Festival dates and sales impact
- Weather conditions (rain, heat waves)
- Promotions/discounts run
- Any unusual events

Anyways this is optional cause (We can augment this data using **Sales & Demand Data**)

Example:

Diwali 2023: Sales increased 280%

Holi 2024: Paneer demand up 200%

Summer (Apr-Jun): Buttermilk sales doubled

Monsoon delays: 15% more truck delays

IDEAL DATA (12-24 months or more)

Having 2-3 years of data is better because:

- AI learns seasonal patterns better
- Sees multiple festival cycles
- Understands year-to-year growth
- More accurate predictions

DATA FORMAT We Don't have to Worry about that!!!

We don't need fancy formats(Cause we have good OCR's now a days and also we can use Autoencoders):

- Excel sheets
- Google Sheets
- PDF reports
- Handwritten records
- Old accounting software exports
- Even photos of registers!
- ERP data
- Outsourced data

What If You Don't Have All Data?

No problem! We can start with:

Bare Minimum (3 months):

- Daily sales numbers
- Daily production numbers
- Basic stock levels

AI will still work, but:

- Predictions will improve over time(cause seasonal demands and more of like india is a culturally rich country so yes😢)
- First month = 60-70% accuracy(again depends on the data)
- After 3 months = 80-85% accuracy
- After 6 months = 90%+ accuracy

The system learns as it goes!

So, that's it I guess and an overview:

Need: 6-12 months of sales, production, and stock data
Format: Any format you have (Excel, PDF, even paper)
Missing data: No problem - AI improves as it runs

(The Outcome):

NO code or JSON NO complex terms(everything will get performed by agents)

Agents (What they gonna do…):

Every Morning at 6 AM, Your Agents:

1. INVENTORY AGENT

Checks:

- Scans all stock levels across factory + all branches
- Compares with your ERP system data
- Looks at today's expected sales
- Checks product expiry dates

Then Does:

- ✅ **"Send 3,000L milk to Branch A today"** (they're running low)
- ✅ **"Branch C has excess stock - transfer 500L to nearby Branch D"**
- ⚠️ **"WARNING: 200L yogurt expiring tomorrow at Branch B - run discount"**
- ❌ **"Don't send more to Branch E"** (they still have 5 days stock)

2. PRODUCTION AGENT

Checks:

- How much raw milk came in
- What orders are pending
- Which machines are working
- Coming day is a festival or not

Then Does:

- ✅ **"Produce 8,500L milk today"**
- ✅ **"Make 1,200kg paneer"**
- ⚠️ **"Skip Machine 2 - it needs maintenance"**
- ✅ **"Schedule overtime shift on Thursday"** (Diwali rush coming)

3. LOGISTICS AGENT

Checks:

- Where all trucks are right now (GPS)
- Traffic conditions on main routes
- Weather forecast (rain delays?)
- Which branches need delivery today

Then Does:

- ✅ **"Dispatch Truck #7 to Branch A at 5:00 AM"**
- ⚠️ **"Use Route B instead of Route A"** (traffic jam expected)
- ❌ **"Don't use Truck #3"** (needs servicing)
- ✅ **"Add 30 minutes to all deliveries"** (heavy rain predicted)

4. PROCUREMENT AGENT

Checks:

- Raw milk inventory

- Supplier prices today
- Supplier reliability history
- Next week's production needs

Then Does:

- ✅ **"Order 15,000L milk from Supplier X today"**
- ⚠️ **"WARNING: Milk prices rising next week - order extra now"**
- ❌ **"Don't use Supplier Y"** (late 5 times this month)
- ✅ **"Sugar stock is fine for 7 days"** (no action needed)

5. PERFORMANCE MONITORING AGENT

Checks (Next Morning):

- What AI recommended yesterday
- What you actually did
- What were the results
- Any problems that occurred

Then Tells You:

- ✅ **"Yesterday worked well because you followed the stock transfer advice - zero stockouts!"**
- ⚠️ **"Warning: Branch F shortage happened because truck was delayed by 3 hours"**
- ✅ **"Learning: Next time, send truck 1 hour earlier to Branch F"**
- ✅ **"This week you saved ₹450,00,XX,XXX🥵 by following procurement recommendations"**

Think of It Like Having a Smart Assistant Who:

WATCHES Everything

- Monitors your stock 24/7
- Tracks all trucks in real-time
- Observes sales patterns
- Notices when something unusual happens

REMEMBERS Everything

- "Last Diwali, paneer sold 250% more"
- "Supplier X is always 2 hours late on Mondays"
- "Branch A always runs out on weekends"

- "Machine 2 breaks down every 3 weeks"

TELLS You Exactly What to Do Each Morning

- Clear action items, not suggestions
- Prioritized (urgent items first)
- With reasons explained simply
- In your language, not tech terms

EXPLAINS Why Things Went Right or Wrong

- "You had a stockout because..."
- "You saved money because..."
- "Next time, do this instead..."
- "This pattern is repeating, watch out for..."

Bottom Line:

Your agents are like having 5 expert managers who:

- Never sleep
- Never forget
- Always learn
- Speak your language
- Give you clear daily action plans
- Explain everything simply

You just:

- Read the morning recommendations
- Approve or adjust
- Let them handle the details
- Check the results next day