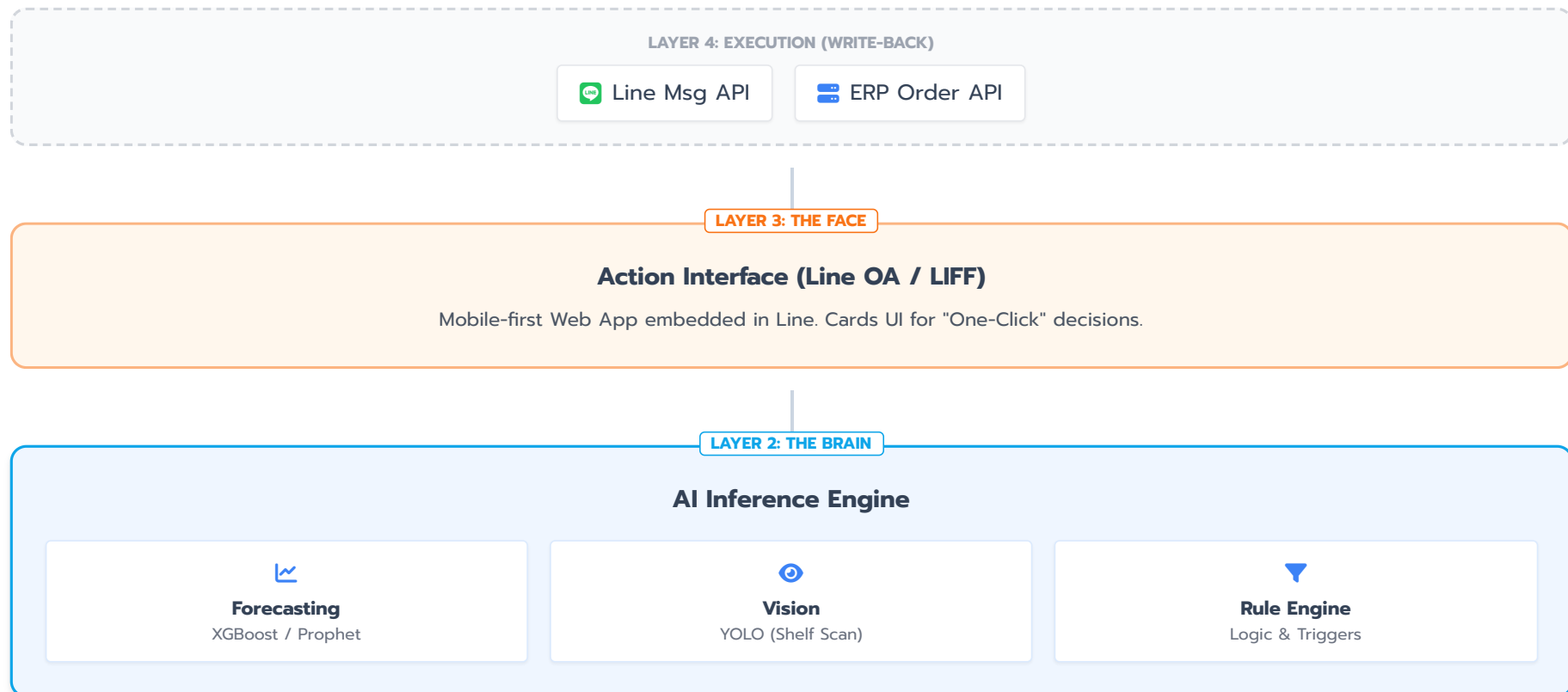


# From Concept to Code

A technical roadmap to build the "Intelligence Layer" over Ovaltine's legacy systems, enabling the transition from passive reporting to active AI-driven sales execution.

## 1. System Architecture: The Intelligence Layer

We are building a "Brain" that sits on top of existing ERP/DMS systems, not replacing them.





LAYER 1: DATA SOURCES

ERP (Sales History)

DMS (Stock)

Social API

Weather API

## 2. The "Loop of Action" UX Flow

The user journey from receiving an alert to executing a task.

STEP 1

### The Trigger

Notification via LINE.

"⚠ Store A Stockout Risk"



STEP 2

### The Context

Insight Card UI.

"Why: Sales +20% due to holiday."



STEP 3

### The Decision

One-Click Action.

Approve Offer



STEP 4

### Execution

System Write-back.

Line Sent

ERP Updated



## 3. Implementation Roadmap

Phased approach to minimize risk and deliver value quickly.

1

### Phase 1: The "Stockout" Pilot

Month 1

Focus on a single high-impact use case (Stockout Alert) using simple logic.

Data

Ingest Sales History & current stock.

Backend

Simple Rule: If No Order > 30 days, Alert.

Frontend

Line Notification + "Call Shop" button.

2

### Phase 2: The "Smart" Upgrade

Month 3

Introduce ML Models for forecasting and Computer Vision for shelf analysis.





AI

Train XGBoost for Demand Forecasting.



Vision

YOLO Model for Shelf Share detection.



UX

Dynamic Offer Cards based on prediction.

3

### Phase 3: Full Automation

Month 6+

Complete ERP integration for automated "Write-back" and order creation.



Integration

Full ERP API (Create Order, Cut Stock).



Auto-Pilot

Auto-approve low-risk orders.



Analytics

Real-time ROI dashboard.

## 4. Data Spec Requirements

The fuel for the AI engine.

| DATA DOMAIN        | REQUIRED FIELDS                     | SOURCE | USE CASE            |
|--------------------|-------------------------------------|--------|---------------------|
| Sales Transactions | Store_ID, SKU, Qty, Date, Price     | ERP    | Forecasting         |
| Customer Master    | ID, Lat/Long, Route_ID, Rep_ID      | DMS    | Routing             |
| Shelf Images       | Image_URL, Timestamp, Store_ID      | PC App | Competitor Tracking |
| External           | Weather_Condition, Social_Sentiment | API    | Contextual Ads      |



