Conut AI Chief of Operations Agent

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Problem Framing

Conut is a growing sweets and beverages business operating multiple branches with delivery services and a diverse menu. Although operational data exists—sales by item and branch, attendance records, tax summaries, and customer orders—this information is not systematically used for daily decision-making.

Management requires clear, data-driven answers to five key questions: which product combinations to promote, how much demand to expect per branch, whether expansion is feasible, how many employees to schedule per shift, and how to grow coffee and milkshake sales.

This project delivers an AI-powered Chief of Operations Agent that ingests Conut's CSV reports, cleans and analyzes them automatically, and exposes structured insights through a REST API. Through OpenClaw integration, managers can execute operational queries (demand forecasting, staffing, combo optimization, expansion feasibility, beverage strategy) in real time using natural language.

Top Findings

1. Combo Optimization: Frequently purchased product pairs are identified from line-item sales. Strong patterns show chimney variants pairing with toppings and delivery orders. Ranked bundle suggestions are exposed via /api/combo_recommendations.

2. Demand Forecasting by Branch: Rolling-average forecasts are generated for all four branches (Conut, Conut – Tyre, Conut Jnah, Main Street Coffee). Outputs are in scaled units for trend comparison and resource allocation.

3. Expansion Feasibility: Revenue and tax consistency across branches support expansion viability. Ideal locations include high-foot-traffic areas, aligned demographics, and proximity to delivery zones.

4. Shift Staffing: Recommendations are derived from historical attendance hours assuming 8-hour shifts. Branch-specific guidance is available via /api/staffing_recommendation.

5. Coffee & Milkshake Growth: Top coffee items include Espresso variants, Caffè Latte, Cappuccino, and Caramel Frappe. Strategies include bundling with pastries, promoting milkshakes during warm hours, highlighting top items on delivery platforms, and cross-selling with chimney products.

Recommended Actions

• Refresh analytical artifacts weekly to keep forecasts and recommendations up to date.
• Integrate OpenClaw with the API and use GET /api/tools/list for tool discovery.
• Treat outputs as scaled metrics for comparison and trends, not absolute financial values.
• Strengthen over time with advanced forecasting models, A/B testing, staffing validation, and KPI calibration.

Expected Impact and Risks

Impact: The system provides a single operational intelligence source for demand, staffing, combos, expansion, and beverage strategy. It enables faster data-driven decisions and empowers non-technical managers through natural-language queries.

Risks: Outputs are scaled rather than real financial units and require KPI calibration. Current models are intentionally simple and may require refinement as data grows. The API and OpenClaw integration must remain secure and operational to prevent outdated recommendations.