

# Leocalc App Summary

## What it is

Leocalc is a React/Vite single-page app that combines pricing, logistics, and supply planning calculators for a packaging-focused workflow. It provides dashboards for costing, freight loading, supply schedules, and quantities analysis.

## Who it is for

Primary user/persona: Authorized internal sales and operations staff managing pricing, freight, and supply schedules for Leopack (explicit persona statement Not found in repo).

## What it does

- Unit economics calculator for PP rate, conversion cost, bag weight, transport, and margin.
- Customer pricing, net profit, and conversion delta outputs.
- Freight loading optimizer with pallet or vehicle dimensions, efficiency, and freight per piece.
- 3D bale packing visualization in the freight view (react-three-fiber).
- Supply schedule planner with vendors, quantities, dates, statuses, and balance tracking.
- Customer or vendor schedule PDF export.
- Quantities profitability dashboard plus saved archives.

## How it works

- Client: Vite + React SPA; App.jsx handles auth, tab routing, and shared state.
- Components: PricingCalculator, FreightCalculator + BaleVisualizer, SupplySchedule, QuantitiesDashboard, SavedArchives.
- Data: localStorage persists PO details, vendors, supplies, and products; Supabase archives table stores saved snapshots (see supabase\_schema.sql).
- Flow: user inputs -> React state -> derived calculations -> UI; Save or Load -> Supabase insert or select; schedule export -> jsPDF or autoTable.
- Services: Supabase auth and storage; other backend services Not found in repo.

## How to run

- Run npm install.
- Optional: set VITE\_SUPABASE\_URL and VITE\_SUPABASE\_ANON\_KEY in .env, and apply supabase\_schema.sql to your Supabase project for archives or auth.
- Run npm run dev and open the local Vite URL.