Build a mobile application for businesses to:

- Log transactions using **OCR from images**

- Maintain inventory and credit records

- Enable **daily summaries** and **WhatsApp-based notifications**

- Run as a **local-first**, secure, privacy-respecting system

- Market as a **SaaS platform** with multi-device and multi-tier support

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Layer	Design Choice
Mobile Platform	React Native (cross-platform)
Data Model	Primary device = system of record; staff devices sync securely
Backend	FastAPI (API) + Django (Admin)
Database	Linode Managed PostgreSQL
Deployment	Docker / Docker Compose
Cloud Platform	Linode (primary) + GCP/Azure free tiers
Data Sync Strategy	Local DB with encrypted sync
Backup Strategy	Optional encrypted backups to Linode Object Storage
Security	Local encryption (SQLCipher/MMKV), secure device pairing

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- **DB**: SQLite / WatermelonDB (encrypted)

- **OCR**: MLKit via `react-native-vision-camera`

- **Secure Storage**: `react-native-keychain` / MMKV

- **Background Tasks**: `react-native-background-fetch`

- **Notifications**: Twilio or WhatsApp Business API

- **Sync**: API-based or local P2P

- **API Layer**: FastAPI (async, RESTful)

- **Admin**: Django (for prototyping and management)

- **ORM**: Django ORM

- **DB**: Linode Managed PostgreSQL

- **Storage**: Linode Object Storage (S3-compatible)

- **Platform**: Linode (Docker Compose)

- **Free-tier Tools**: Cloud Run / Azure Functions (optional lightweight jobs)

- **Monitoring/Backup**: Uptime Kuma / CronJobs

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1. Multi-tier subscriptions (device/txn limits, backup retention)

2. WhatsApp customer notifications

3. Inventory system

4. GST-compliant billing and invoicing