

LEO Activation

12-Day Execution Plan

AI-first Customer Activation Platform

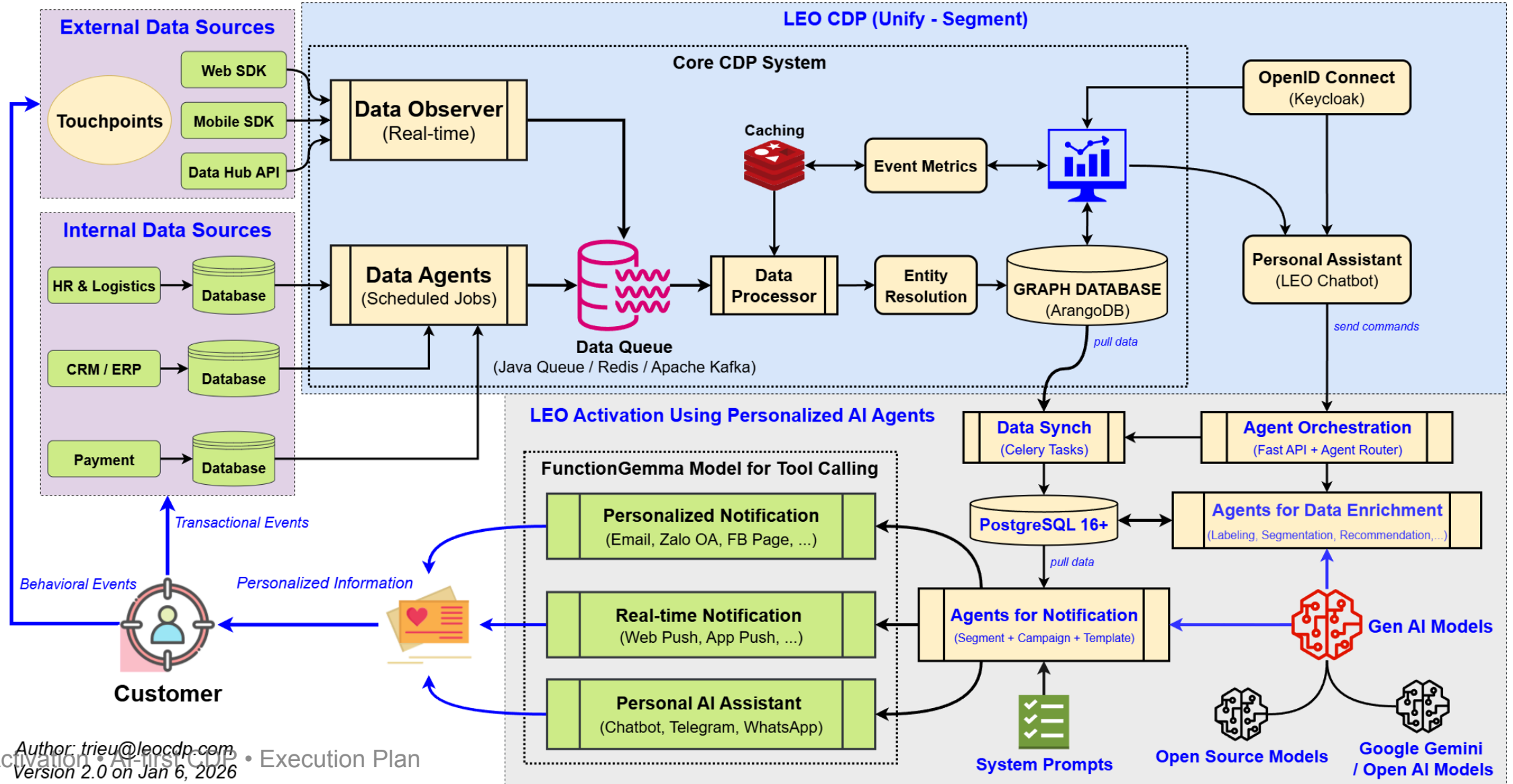
Sprint Plan + Jira Tasks + Definition of Done

Owner: Product / Tech

Version: v1.0

AI-first LEO CDP framework

Purpose of LEO CDP framework: Unify, process, and enrich customer data into a real-time golden profile.
Purpose of AI Agents: Use that data with AI reasoning to deliver personalized engagement and customer experiences.



Why LEO Activation?

- CDP không kích hoạt → chỉ là kho dữ liệu
- Activation chậm → mất thời điểm
- Multi-channel không orchestration → spam

LEO Activation = Event-driven + Agent-based + Measurable

Sprint Scope (12 Days)

- **Day 1–4:** Core LEO Activation Engine
- **Day 5–8:** Channels & Notification
- **Day 9–12:** UAT, Load Test, Bug Fix, Release

Ship theo chiều sâu, không dàn trải.

Architecture Context

Event

- Segment Snapshot
- Agent Orchestration
- Channel Dispatch

Mỗi bước phải:

- Deterministic
- Observable
- Testable

Epic Breakdown

- 1. Core LEO Activation**
- 2. Channels & Notification**
- 3. UAT & Stabilization**

Epic 1 – Core LEO Activation

Goal

- Rule-based activation
- Agent orchestration
- Snapshot-based segmentation

Không realtime giả. Không rule mơ hồ.

Task: Setup Activation DB Schema

SQL

Check the [SQL Scripts Documentation](#) for database setup.

Tech

- PostgreSQL 16+
- Indexed, migration-safe

Unit Tests – DB Schema

- Create campaign record
- Insert `delivery_log` < 50ms
- Rollback migration an toàn

Không test → không ship.

Task: Activation Rule Engine (MVP)

Features

- Segment match
- Trigger condition
- Cooldown logic

Performance target

- < 30ms / evaluation

Unit Tests – Rule Engine

- Segment = true → trigger fired
- Cooldown active → no trigger
- Invalid rule → rejected

Task: Agent Orchestration API

Endpoint

- `POST /activate/event`

Responsibilities

- Create `agent_task`
- Async dispatch
- Retry on timeout

Task: Data Sync Worker

- Celery-based
- Sync GraphDB → PostgreSQL
- Delta only
- Idempotent

Task: Segment Snapshot Builder

Principle

- Snapshot immutable
- Snapshot = truth tại thời điểm kích hoạt

Performance

- Query < 100ms

Task: Activation Metrics

Track

- Sent
- Delivered
- Failed

Tech

- Redis cache
- DB fallback

Task: Security – Keycloak

- OpenID Connect
- Scope-based access
- Không log PII

Epic 2 – Channels & Notification

Channels

- Email
- Zalo OA
- Facebook Page
- Telegram
- WhatsApp
- Firebase Push
- PushAlert Web Push

Một payload. Nhiều kênh.

Email & Zalo OA

Email

- SMTP / API
- Template rendering
- Retry on failure

Zalo OA

- Token validation
- Rate-limit handling

Facebook Page & Telegram

Facebook

- Page token security
- Delivery logging

Telegram

- Bot messaging
- Markdown support

WhatsApp & Firebase Push

WhatsApp

- Approved templates
- Delivery status tracking

Firebase Push

- Multicast
- Token cleanup

PushAlert & Unified Dispatcher

PushAlert

- Web push
- `sw.js` compatible

Dispatcher

- One payload
- Multi-channel
- Fallback support

Epic 3 – UAT & Stabilization

Goals

- Verify end-to-end flow
- Load safety
- No silent failure

UAT – End-to-End Activation

Scenario

Event

→ Segment

→ Agent

→ Notification

Requirements

- No manual step
- Full traceable logs
- SLA met

Load Test & Bug Fix

Load

- 1k events / minute
- No crash
- Queue stable

Bug Fix

- No blocker
- Regression-safe

Definition of Done (DoD)

Một task chỉ được DONE khi:

- Unit test $\geq 80\%$
- Performance đạt target
- Logs + metrics đầy đủ
- Security enforced
- Documentation cập nhật

Final Principle

LEO Activation không phải 1 system “gửi tin”.

Nó là:

- Hệ ra quyết định
- Hệ chọn thời điểm
- Hệ tạo niềm tin

Không đo được → không phải activation.