

# **LEO Activation**

## **12-Day Execution Plan**

AI-first Customer Activation Platform

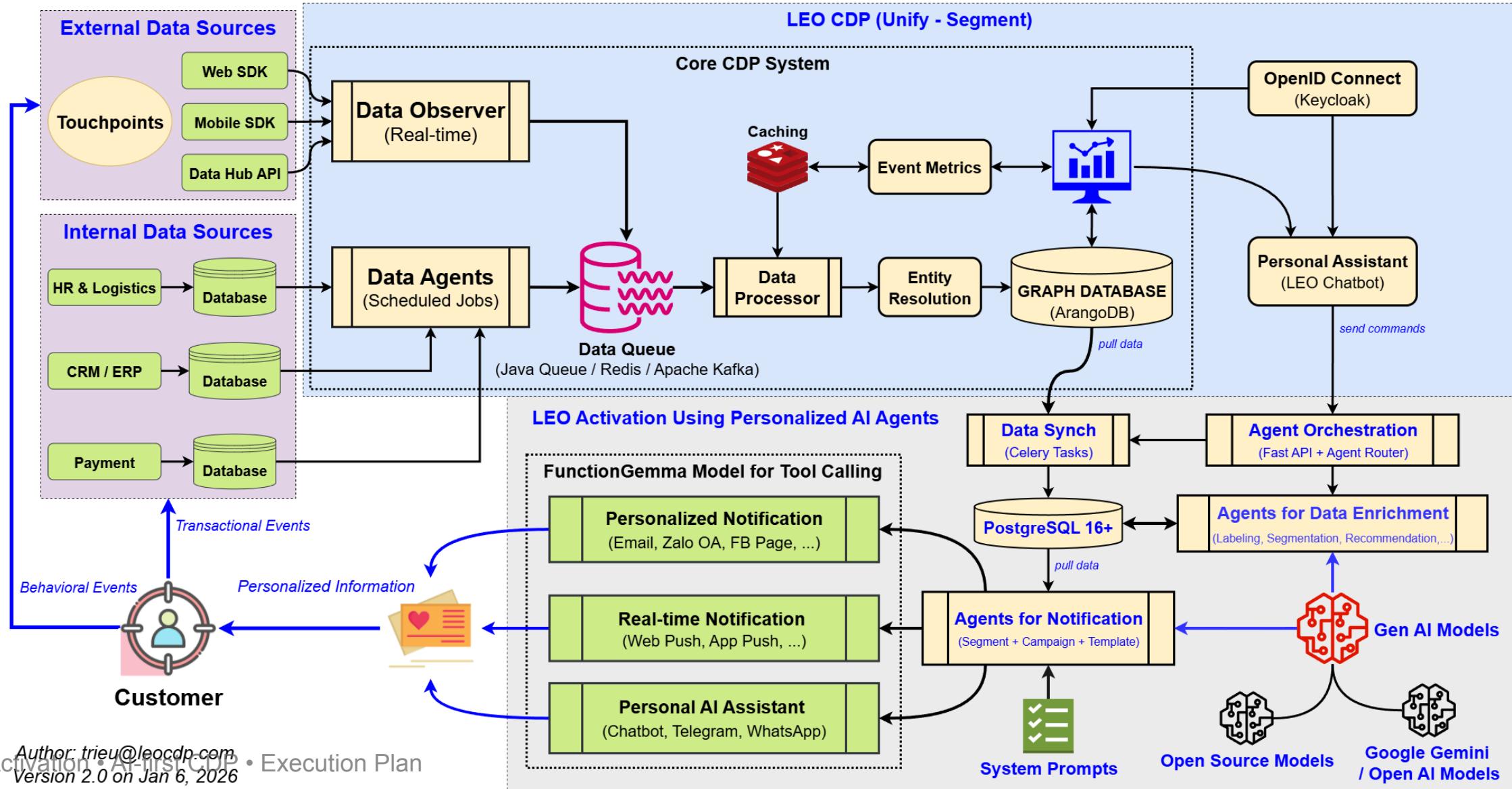
Sprint Plan + Jira Tasks + Definition of Done

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.