

# LEO Activation

## 12-Day Execution Plan

AI-first Customer Activation Platform

Sprint Plan + Jira Tasks + Definition of Done

Owner: Product / Tech

Version: v1.0

## LEO Activation Architecture

## 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.