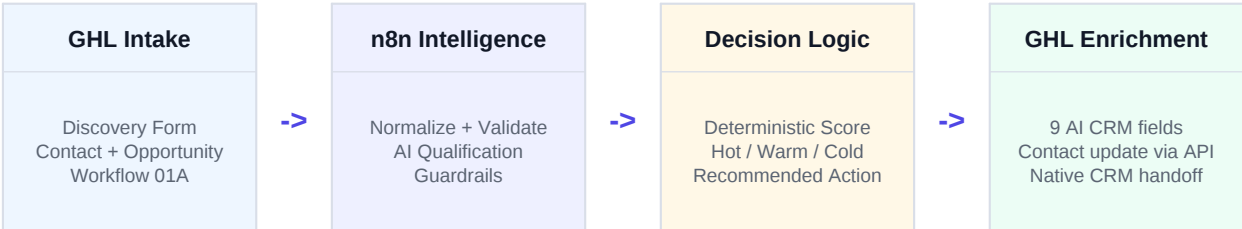


AI-Powered Lead Intelligence & CRM Orchestration System

Workflow Architecture | GoHighLevel + n8n + AI/LLM + JavaScript + REST API

Architecture principle: GoHighLevel manages the CRM; n8n makes the CRM smarter.

1. End-to-End System Architecture



GHL Workflow 02 - AI Lead Priority Routing



2. Workflow Responsibilities

01A - New Lead Intelligence Intake	GoHighLevel	Trigger on discovery form submission and send the live contact payload to the n8n production webhook.
01B - AI Lead Intelligence & CRM Enrichment	n8n	Normalize, validate, qualify with AI, validate model output, score deterministically, assign priority, and update the GHL contact.
02 - AI Lead Priority Routing	GoHighLevel	Find the active opportunity and execute CRM-native routing: tags, stage movement, sales tasks, alerts, and nurture handling.

3. Intelligence and Guardrail Design

AI outputs Intent level Service fit Buying readiness Budget fit Urgency AI summary Recommended action	Deterministic decision layer Validated model signals are converted into a 0-100 rules-based lead score. Final lead priority is assigned by business thresholds, not by the LLM itself.	Failure protection Invalid lead data and invalid AI output are stopped before scoring or CRM enrichment. Both exception paths generate staff-facing Gmail alerts for human review.
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Production Hardening and Growth Roadmap

Extend the system without changing its core design: GHL remains the operational CRM while n8n handles intelligence, external logic, and integration-heavy work.

Roadmap Priorities

1	Production Hardening Make the current build safer and easier to operate.	• Add duplicate-contact and repeat-submission safeguards. • Add retry/error handling for failed GHL API updates. • Use consistent workflow naming, versioning, and execution notes. • Add explicit handling when no active opportunity can be found.
2	Lead Intelligence v2 Improve the quality of prioritization and salesperson context.	• Add industry, lead source, service value, and engagement signals to scoring. • Introduce configurable scoring weights by client or campaign. • Add AI-generated discovery-call talking points and objection cues. • Requalify leads when high-value CRM fields materially change.
3	Lifecycle Orchestration Carry intelligence deeper into the sales journey.	• Use priority and AI summary in consultation booking and follow-up workflows. • Add native GHL no-show recovery and re-engagement tied to lead priority. • Trigger human approval for high-value or high-risk outbound actions. • Add SLA-style follow-up timing for Hot leads.
4	Analytics and Optimization Turn workflow data into measurable sales improvement.	• Track lead priority vs. booked calls, proposals, and wins. • Compare source quality across Facebook, website, referral, and organic leads. • Review score thresholds against actual conversion outcomes. • Create GHL dashboards for lead mix, response speed, and pipeline movement.

Recommended Future Architecture

Contacts, opportunities, pipeline stages, tags, tasks, appointment workflows, nurture, sales alerts, lifecycle state.	AI qualification, scoring logic, model guardrails, API orchestration, cross-platform handoffs, advanced personalization, exception handling.	Slack/Teams alerts, ad platform lead metadata, external enrichment APIs, calendar or proposal tools, reporting destinations.
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Roadmap Success Criteria

Reliability No silent failures; exceptions route to human review.	Sales usability CRM users see concise intelligence and clear next actions.	Measurability Priority and score correlate with downstream conversion behavior.	Maintainability Native GHL actions stay in GHL; custom intelligence stays in n8n.
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Portfolio positioning: Project 049 proves the ability to extend a working CRM with an external AI intelligence layer while preserving native CRM ownership of sales execution.