

Project 047 - Workflow Architecture & Future Roadmap

AI Client Operations & Service Delivery System | Make.com flagship portfolio project

1. System Architecture

Project 047 is designed as a modular client-operations system rather than a single linear automation. Six Make.com scenarios share Airtable as the operational system of record and coordinate intake, AI triage, task generation, project setup, client follow-up, escalation, and closeout. Each workflow can run independently based on record state, which makes the design easier to maintain, test, and extend.

Layer	Core components	Responsibility
Intake	Google Forms + Google Sheets	Capture service requests and preserve a raw intake log before downstream processing.
AI decisioning	Groq LLM + structured JSON	Classify service type, priority, complexity, completeness, summary, and assigned team; generate execution tasks.
Operations data	Airtable: Clients, Service Requests, Tasks, Activity Log	Maintain client relationships, request state, task execution records, timestamps, reminder counters, and audit history.
Delivery setup	Google Drive	Create a dynamic project folder and standardized subfolders for brief, working files, review, and final delivery.
Communication	Slack + Gmail	Notify operations, send client reminders, surface escalations, and broadcast completion events.

Workflow-to-Workflow State Model

Workflow	State / trigger	Primary outcome
WF01 - Intake & AI Triage	New	Creates/updates client and creates the Service Request after AI qualification.
WF02 - Task Generation & Team Assignment	Ready for Onboarding	Generates structured tasks, assigns teams, creates Task records, and advances the request.
WF03 - Client Onboarding & Project Setup	Ready for Onboarding	Builds the dynamic Google Drive project structure and notifies operations.
WF04 - Reminder & No-Response Follow-Up	Waiting for Client	Sends a client reminder, stamps Last Reminder Sent At, and increments Reminder Count.
WF05 - Re-engagement & Escalation	Escalated	Detects repeated non-response, stops passive automation, and routes the case for human review.
WF06 - Delivery Completion & Closeout	Completed	Notifies operations, records completion time, and logs final closeout.

Key Architecture Decisions

- **State-driven orchestration:** downstream scenarios respond to Airtable status and timestamp conditions instead of being tightly chained into one fragile scenario.
- **Structured AI outputs:** AI responses are parsed as JSON before business fields or tasks are created, reducing ambiguity and keeping select-field values predictable.
- **Duplicate-client protection:** WF01 searches existing client records before creating a new client, while service-request deduplication is intentionally documented as a future reliability enhancement.
- **Dynamic Drive parenting:** onboarding subfolders use the newly created project folder ID, so every request receives an isolated folder structure automatically.
- **Auditability:** operational milestones write to Activity Log, while reminder timestamps and counters make follow-up behavior observable instead of hidden.

2. Future Roadmap

The current portfolio version is intentionally practical and understandable. The roadmap below shows how the same architecture can mature into a production-ready service-operations platform without changing its core data model.

Phase 1 - Reliability hardening	Near term
- Add Service Request deduplication using a stable submission/request key. - Add scenario-level error handlers with retry paths and failed-operation logging. - Move test timing rules (1 minute) to production thresholds such as 24-48 hours. - Add validation for required linked records and null-safe mappings before writes.	
Phase 2 - Better client communication	Short term
- Introduce Reminder 1 / Reminder 2 / Final Reminder templates based on Reminder Count. - Add reply-detection or status-change logic so follow-up stops automatically when the client responds. - Add approval checkpoints for sensitive messages or high-value clients. - Optionally send branded HTML email and include secure client portal or folder links.	
Phase 3 - Operations intelligence	Medium term
- Create SLA metrics: intake-to-triage time, onboarding lead time, first-response time, and completion cycle time. - Add workload balancing by team and active task count before assignment. - Build Airtable dashboards for request volume, priority mix, stalled work, and reminder/escalation rate. - Track AI confidence or rule-validation results for classification quality.	
Phase 4 - Advanced automation	Long term
- Rebuild selected workflows in n8n for deeper API control, custom JavaScript, and self-hosted execution. - Add Slack human-in-the-loop actions for approve, reassign, escalate, or close. - Integrate CRM, invoicing, e-signature, calendar, or project-management tools based on client stack. - Introduce event-driven webhooks instead of interval searches where APIs support them.	

Target Production Architecture

A mature version would preserve Airtable or replace it with a relational database while introducing webhooks, centralized error handling, environment-specific configuration, role-based permissions, and richer observability. The preferred direction is an event-driven model where each business state change publishes a reliable event, downstream services act only when their preconditions are met, and every important action remains traceable.

Portfolio Value

Project 047 demonstrates more than Make.com module familiarity. It shows end-to-end systems thinking: AI-assisted decisioning, state management, linked-record design, iterative task creation, dynamic file infrastructure, outbound communication, no-response handling, escalation, and completion logging. The roadmap makes clear which safeguards are implemented now and which are intentionally reserved for production hardening.