Cost Estimation for IT Copilot Project:

Workflow Breakdown (Node-by-Node)

Component	n8n Node / Service Used	Frequency per Ticket
Frontend form	Lovable.dev → Vercel (or client frontend)	1× per ticket
Ticket creation & ID generation	Webhook → Set (Ticket ID) → Supabase (Insert Row)	1×
RAG Knowledge Base search	Prepare Query → Pinecone Vector Store → Code (dedupe) → OpenAI GPT-4o-mini → Code (HTML builder)	1×
Rich email with escalate button	Gmail → Resend (recommended)	1–2×
Escalate button clicked	Webhook (escalate-Jira v1) → Supabase lookup → Jira Create Issue → Respond with HTML	~10–20% of tickets
KB ingestion pipeline	Manual trigger → Google Drive / Upload → Pinecone upsert	Monthly or on update
Slack linking & notifications	Slack Trigger / Webhook → n8n → Supabase update	Once per user / per event

AI Support Automation – Complete Cost Estimation (2025-2026)

n8n + OpenAI + Pinecone + Supabase + Vercel + Jira + Slack

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1. Paid Components Overview:

Core Automation & Infrastructure

Component	Provider	Pricing Model	2025 Cost Estimate
n8n Automation Engine	Self-hosted	Free software + VPS	$50 – $800 / month
Server + Redis	Railway / Hetzner / Contabo	Dedicated VPS (16GB RAM, 8 vCPU)	$299 – $420 / month
OpenAI (GPT-4o-mini)	OpenAI	$0.00015 / 1K input, $0.00060 / 1K output	~$0.0003 blended avg
Pinecone Vector DB	Pinecone Serverless	Storage + Read/Write Units	$0.05 – $0.12 per 1,000 requests
Email Sending	Resend	10k free → $0.001/email	$0 – $40 / month
Database & Auth	Supabase Pro	Base + usage	$25 – $80 / month
Frontend Hosting	Vercel Pro / Cloudflare	Hosting + bandwidth	$0 – $20 / month
Domain	Cloudflare / Namecheap	Annual	~$12 / year

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2. Additional Required Integrations:

Jira Integration (Ticket Syncing & Logging)

Component	Provider	Pricing Model	Estimated Cost
Jira Software Cloud	Atlassian	Standard	$8.15 / user / month

	Premium		$15.25 / user / month
API Rate Limits	Included	—	$0

==**Typical setup:** 3–5 users → **$25 – $75 / month**==

==Slack Integration:==

Component	Provider	Pricing Model	Estimated Cost
Slack Workspace	Slack	Free / Pro	$0 – $8.75 / user / month
Slack Bot & Webhooks	Slack API	Included	$0
Slack Notifications & Actions	n8n + Slack API	No usage fee	$0

✔ ==**Slack enables:**==

- **Ticket notifications**

- **Escalation alerts**

- **Agent collaboration**

- **Optional slash commands**

Typical deployment:

- Free plan for internal alerts → **$0**

- ==Pro plan (3–5 users) → **$25 – $45 / month**==

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3. Monthly API & Integration Costs:

(Based on ~600 tickets/month)

Service	Monthly Usage	Estimated Cost
OpenAI GPT-4o-mini	~1.08M tokens	$11 – $15
Pinecone Serverless	600 searches + vector storage	$55 – $85
Resend Emails	~1,100 emails	$25 – $35
Supabase Pro	Base + DB usage	$45 – $70
Vercel / Cloudflare	Hosting + bandwidth	$0 – $20
Jira Software (3–5 users)	Ticket management	$25 – $75
Slack (Free → Pro)	Notifications & collaboration	$0 – $45

✅ **Total Monthly API & Integration Cost.**

$166 – $345 / month
(varies by Slack plan, ticket volume, and vector growth)

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4. Development & Maintenance Costs:

Task	Hours / Month	Rate	Monthly Cost
Monitoring & bug fixes	4 hrs	$100/hr	$400
KB re-indexing & prompt tuning	3 hrs	$100/hr	$300
Client onboarding & support	5 hrs	$100/hr	$500

Total Engineering Maintenance

➡ **$1,200 / month**

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5. Final Client-Facing Monthly Pricing:

Small–Medium Clients

(200–600 tickets/month)
 ➡ **$3,500 – $4,200 / month**

Large Clients

(600–1,200 tickets/month)
 ➡ **$5,500 – $6,500 / month**

Enterprise Clients

(1,200+ tickets/month)
 ➡ **$8,000+ / month**

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6. One-Time Setup Cost:

$6,500 – $9,000 (one-time)
 Includes:

- Workflow & architecture design

- n8n deployment

- OpenAI + Pinecone RAG setup

- Supabase schema & auth

- Jira integration

- Slack bot & channel configuration

- Knowledge base ingestion

- Client training & handover

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7. Summary Snapshot

Category	Monthly Cost
Infrastructure + APIs	**$166 – $345**
Maintenance & Engineering	**$1,200**
Total Operating Cost	**$1,366 – $1,545**
Client Billing Range	**$3,500 – $8,000+**