

Lead Reactivation Voice Agent

Re-engage Cold & Warm Leads Using n8n + Vapi.ai + OpenAI

Voice AI

Lead Reactivation

n8n Workflow

Automation

AV

Autviz
Solutions



Schedule
Trigger



Get &
Filter Leads



Set Script
& Make Call



AI Decision
Maker

📞 Outbound AI Call in Progress

Lead: John D. | Status: Warm | Prior Call: 12 Jan

AI: "Hi John, following up on your interest..."

📄 Call Answered · OpenAI Analyzing...

📄 Lead Updated: Warm → Hot | Transcript Saved ✓✓

Google Sheets — Lead Pipeline

Sarah M.

Warm

Tom K.

Cold

Priya S.

Not Reachable

AI Voice Call — Real-Time

"Hi! I'm calling to follow up on your previous conversation about our services..."

Live · Vapi.ai

✓ Lead Upgraded: Warm → Hot Lead

Transcript saved · Status updated · Sheets synced

Powered by OpenAI GPT

Overview

The **AI-Powered Lead Reactivation Voice Agent** is an intelligent automation workflow that re-engages previously contacted leads by analysing past conversations and determining renewed interest via outbound AI voice calls. Built using the **n8n** workflow engine, it integrates **Vapi.ai** for voice calls and **OpenAI's language model** to assess intent — at scale, without human effort.

It automatically checks Google Sheets for eligible leads, generates personalised scripts using prior call history, places AI-powered follow-up calls, and updates lead status and transcripts in real time — completely hands-free.

Challenges

Before automation, sales teams struggled with:



Manual Follow-Up Bottleneck:

Sales teams spent hours re-contacting cold leads manually, leading to missed opportunities and burnout.



Generic, Impersonal Scripts:

One-size-fits-all scripts failed to reference prior conversations, reducing engagement rates significantly.



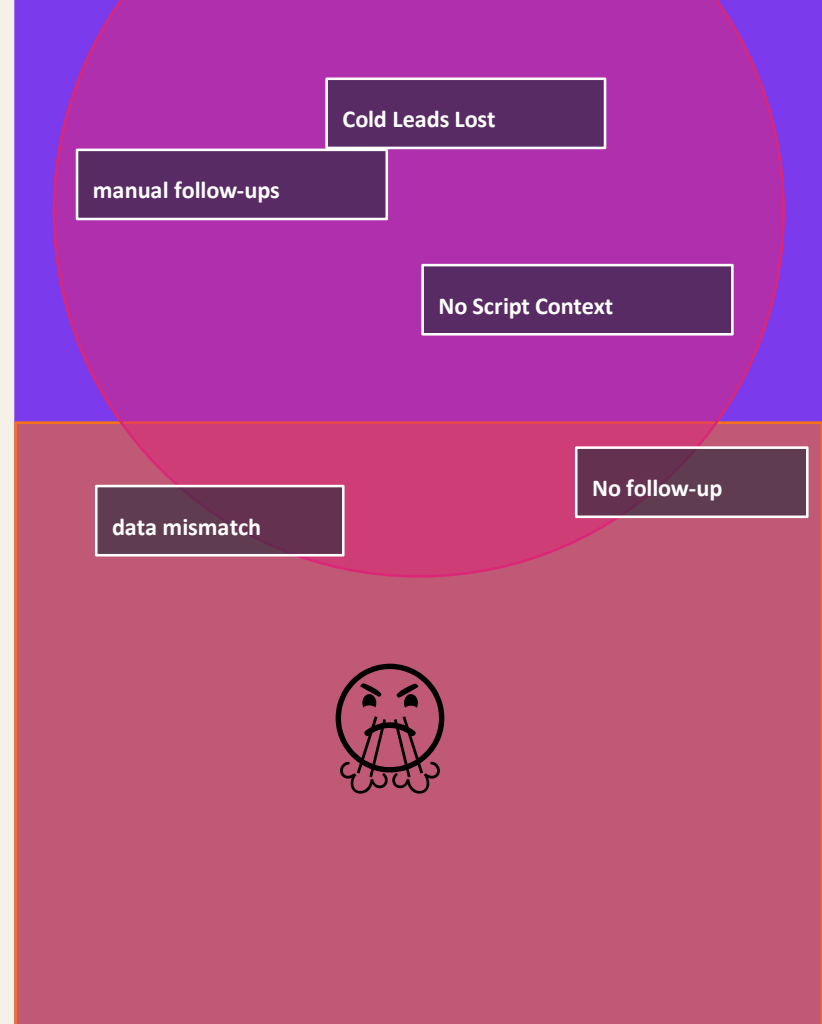
Inconsistent Lead Tracking:

Lead status updates were delayed or missed, making it hard to prioritise and manage the pipeline.



No Scalable Call Process:

No infrastructure existed to scale follow-up calls as the lead database grew, creating a capacity gap.



Automation Objectives



Scheduler



Google Sheets



Vapi.ai

Auto re-engage
Warm, Cold &
Not Reachable leads



OpenAI

Generate AI
personalised
voice scripts



Auto Update

Update Sheets
with status &
transcript

Objectives

The automation aimed to:

Automatically re-engage leads marked as Warm, Cold, or Not Reachable

Initiate AI-powered outbound calls via Vapi.ai to reassess lead interest

Automatically update Google Sheets with new lead status after every call

Generate dynamic, personalised voice scripts using full prior call history

Analyse end-of-call summaries to update lead classification in real time

Filter out already-followed-up leads to prevent duplicate outreach

Solution

Using **n8n** as the workflow backbone, this solution combines scheduled triggering, AI voice calling, intelligent lead analysis, and automatic CRM updates:

1

Trigger & Lead Filtering

- Schedule Trigger runs on a set interval automatically
- Reads Google Sheets for all previously contacted leads
- Filter node selects only Warm, Cold, or Not Reachable leads
- Skips leads that already have a second call logged

2

Dynamic Script Generation

- Set Script node builds a personalised voice script per lead
- Uses current lead details + full prior call transcript as context
- PATCH call injects the script into Vapi.ai before dialling
- Every call is unique — no generic templates

3

AI Voice Call & Capture

- Make Call node triggers outbound call via Vapi.ai POST /call
- Webhook node captures real-time call result and transcript
- If call not picked → lead marked Not Reachable automatically
- If answered → transcript passed to OpenAI for analysis

4


AI Analysis & Sheets Update


- OpenAI Regeneration Decision Maker analyses call summary
- Determines if lead should be upgraded to Hot Lead status
- Update Lead Status node writes new classification to Sheets
- Add Transcript node appends full call log to the record


Lead Reactivation Voice Agent Workflow



Key Technologies


 **n8n**
Workflow Automation


 **Vapi.ai**
AI Voice Call Platform


 **OpenAI GPT**
AI Analysis Engine

 **Google Sheets**
Lead CRM & Data Store

Duration & Resources

 **Time Taken: 60 Hours**

 **Resources: 1 Automation Engineer**

 **Engineering Time Saved: 10+ hrs/week**

Use Cases



Cold Lead Revival:

Automatically identifies and calls Cold leads — re-engaging prospects who showed initial interest but never converted.



Missed Call Recovery:

Reaches out to Not Reachable leads from prior attempts, ensuring no opportunity is permanently lost due to unavailability.



Warm Lead Nurturing:

Follows up with Warm leads using context-rich scripts referencing prior interests, accelerating the journey to Hot Lead status.



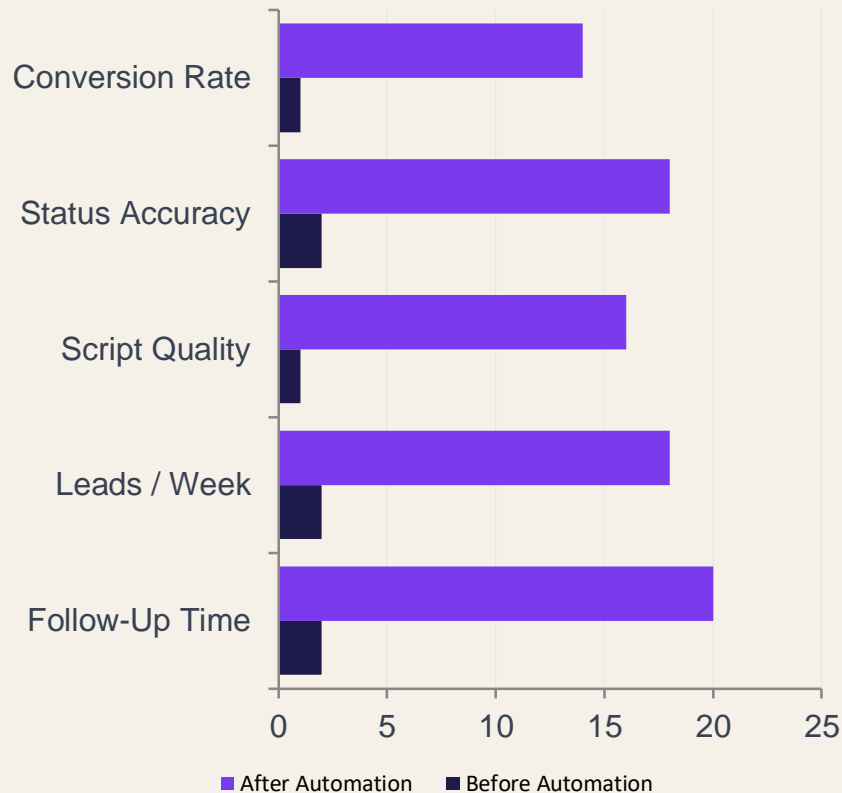
Pipeline Acceleration:

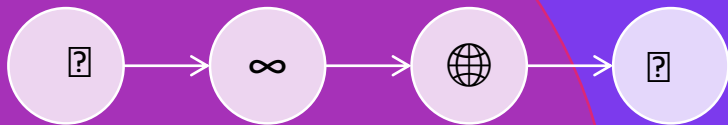
Eliminates waiting between qualification stages by triggering AI calls immediately when leads become eligible for follow-up.

Outcomes



Metric	Before Automation	After Automation
Follow-Up Time	2–5 days (manual)	<1 minute (automated)
Leads Reached / Week	15–20 (manual cap)	100+ (unlimited)
Script Personalisation	Generic templates	100% AI-personalised
Lead Status Accuracy	Inconsistent updates	Real-time auto-sync
Hot Lead Conversion	~8% from cold/warm	~24% AI re-qualified





Google Sheets

✓ Leads Reactivated This Week

✓ Hot Leads Upgraded

✓ Transcripts Saved

Automation 12,000+

Conversion ↑ 3x

Sales Hours Saved 10+/wk

WhatsApp ✓

Conclusion

The **Lead Reactivation Voice Agent** delivers a seamless, scalable way to revive dormant leads and convert them into active pipeline opportunities — completely autonomously. Whether you're managing a SaaS funnel, real estate pipeline, or any high-volume sales operation, this automation lets you **re-engage faster, smarter, and more personally** — without lifting a finger.

Built in just 60 hours by a single automation engineer, this solution delivers enterprise-grade follow-up capability at a fraction of the traditional cost.

Let AI handle the follow-ups — while you focus on closing.