

AI VOICE AGENT – TECHNICAL DEVELOPMENT PROPOSAL

1. REAL-TIME LEAD INGESTION

1. **Google Ads Integration**

- We'll use the **Google Ads API** to pull lead form data.
- A backend service will regularly poll for new leads and insert them into the database.

2. **Meta (Facebook/Instagram) Ads Integration**

- We'll subscribe to lead events using the **Meta Graph API Webhooks**.
- When a user submits a form, Meta will send us the data instantly.
- This lead will be saved and queued for calling.

3. **Website Form Integration**

- A secure **REST API endpoint** will be built to receive form submissions directly.
- Any third-party form (like Typeform, Elementor, etc.) can POST data here.
- Data will be processed and stored immediately.

4. **Excel Upload Support**

- A simple uploader interface will allow Excel sheet uploads.
- We'll use **ExcelJS** to read rows and parse them into leads.

5. All leads from these sources will be stored in a central DB and pushed into a **job queue system** to be picked up by the calling agent.

2. LEAD QUALIFICATION

1. Rule-Based Filtering

- Filters like location, budget, and required fields will run automatically.
- Leads that don't match the criteria will be excluded before calling.

2. Optional ML-Based Scoring (Phase 2)

- An ML model (trained using past lead data) will score new leads as high/medium/low priority.
- This will help order the calling queue.

3. VOICE AGENT – TWO OPTIONS

OPTION A (PREFERRED): ELEVENLABS CONVERSATIONAL AI

ElevenLabs provides a complete real-time Conversational AI platform that handles STT (speech-to-text), natural language conversation, and TTS (text-to-speech) through a unified API.

Component	Technology
Voice Input	ElevenLabs STT
Voice Output	ElevenLabs ultra-realistic TTS
Conversation	ElevenLabs AI with Agent Profile
Control Layer	WebSocket API

Features:

- Extremely natural, human-like voice with tone and emotion
- Real-time conversational capabilities (interruptions, silence handling)

- Configurable agent persona, behavior, and prompts

ElevenLabs pricing works on a **credit-based system**. On average, **1 outbound call costs ~1000 credits, which equals roughly 10 cents per call**.

OPTION B: CUSTOM AI VOICE AGENT (BUDGET ALTERNATIVE)

Component	Technology
TTS	Google Cloud Text-to-Speech
STT	OpenAI Whisper
NLP Engine	LangChain + OpenAI GPT-4
Backend	NestJS

Trade-offs:

- Slightly robotic voice compared to ElevenLabs
- More manual effort to manage
- Lower long-term cost, but reduced conversational naturalness

4. TELEPHONY INTEGRATION – TWILIO

SETUP INCLUDES:

- Twilio Programmable Voice API integration
- Outbound call routing and audio streaming
- Call recordings, event tracking via webhooks
- Voice stream bridging with ElevenLabs or custom agent

Twilio usage is also billed based on call minutes and destination. Twilio pricing varies and operates on a **per-minute rate**, with additional charges for call recording or phone number registration.

5. DASHBOARD

We will provide a custom-built dashboard tailored to the client’s requirements. It will allow the team to:

- View all uploaded and ingested leads
- Monitor call activity in real-time (calls made, calls remaining)
- Check call outcomes (interested, follow-up, not interested, etc.)
- Access call recordings and transcripts
- View data in an interactive and visual format (charts, filters, tables)

The dashboard will be web-based and mobile-friendly, designed with a clean, intuitive interface.

6. DEVELOPMENT TIMELINE

Phase	Timeline	Description
Planning & Setup	Week 1	Architecture, lead intake setup
Voice Agent Build	Week 2–3	ElevenLabs or Custom voice agent development
Telephony Integration	Week 3	Twilio call setup, webhook testing
Dashboard & Testing	Week 4	Basic call status UI + internal QA
Client Testing & Fixes	Month 2	Feedback loop, improvements, optimization

Total Duration: 2 months (1 month development + 1 month testing & improvements)

7. TEAM MEMBERS

- Sabhya Lokhande
- Priyansh Arora
- Wachas Pati

8. COSTING

Item	Amount (₹)
Development Charges (2 months)	₹3,00,000 (negotiable)

Note: ₹3,00,000 covers complete development by the team. All external API subscriptions (e.g., ElevenLabs, Twilio) and infrastructure costs (e.g., AWS, hosting, phone numbers) are **to be paid from your end**.

NOTE

This is an initial implementation plan and costing for the POC (APIs and elevenlabs credits requirement). Based on feedback, technical constraints, or evolving requirements, some aspects may change in the later stages of development.
