

## **TEAM PROMPTSTORM**

### **Problem Statement**

Customer service calls are still outdated and annoying in the modern digital world. The user experience gets worse by lengthy wait times, confusing IVRs, robotic voices, and getting to repeat issues with multiple agents. This is particularly important in India, where limited digital access, regional language preferences, and varying literacy levels have made voice-based support the predominant channel.

Millions of people still use phone calls for services like banking, healthcare, food delivery, and more, even in the age of chatbots and apps. The inability of current systems to provide prompt, individualized, and human-like support leads to inefficiencies, low customer satisfaction, and high operating expenses. It's time to use voice and general artificial intelligence to reinvent the experience.

### **Target Audience & Context**

Our target market consists of both enterprise customer support centers that continue to handle high call volumes and local Indian businesses, such as delivery agents, pharmacies, and clinics. Poor phone support systems particularly impact senior citizens, users from Tier 2/3 cities, and speakers of regional languages, causing over 50 million support calls per day in India.

These users need multilingual, quick, welcoming voice support. However, local dialects, tone, and flexible query resolution are not supported by the tools available today. Our voice automation solution bridges this gap by being accessible, intelligent, and scalable.

### **Relevance of the Problem**

In India, traditional phone-based customer service is still widely used, particularly by Tier 2/3 city users and senior citizens. Existing systems lack emotional support, regional language, and are robotic and slow. High operating costs and subpar user experiences result from this. With more than 50 million support calls every day, intelligent, human-like voice automation is obviously needed. Support that is multilingual, scalable, and emotionally intelligent is made possible by Gen-AI. SayHello AI uses cutting-edge, inclusive technology to directly address this disparity.

## **Use of Gen-AI**

With the help of Gen-AI, our solution makes phone support more intelligent, organic, and customized. We apply real-time voice to text using Google STT or Whisper. Intent detection, context-aware responses, and multi-turn dialogues are all powered by an LLM such as GPT-4 Turbo.

ElevenLabs, PlayHT, and Amazon Polly Neural are examples of text-to-speech tools that produce human-like voice responses with tone and emotion control. Sentiment analysis modifies decisions about handoffs and voice tone. Communication in the main Indian languages is made possible by language support provided by IndicNLP, AI4Bharat, and Bhashini.

When combined, these resources produce a voice assistant that is emotionally intelligent, responsive, and sensitive to local contexts.

## **Solution Framework**

We introduce SayHello AI, a voice-activated customer support system that:

Recognizes and reacts in natural language; modifies tone based on sentiment in real time. Responds to basic inquiries from beginning to end. When necessary, it seamlessly switches to human agents.

Overview of Workflow:

1. Voice Input → Google STT or Whisper Speech Recognition
2. NLU & LLM → GPT-4 Turbo for intent detection and contextual comprehension
3. Response Generation → Emotional Conversational TTS (Polly / ElevenLabs)
4. Language Handling → AI4Bharat/Bhashini translations for Tamil, Telugu, Hindi, and other languages.
5. Handoff Logic → Call summary and complex queries are automatically routed to humans
6. Feedback Loop: Over time, the analytics engine raises CSAT scores and success rates.

## **Scalability & Impact**

SayHello AI is designed to grow both vertically (from small to enterprise level) and horizontally (across sectors). In India alone, millions of calls are made every day; automating just the first two to three minutes can cut down on human labor by 30 to 50%. Language flexibility ensures adoption in rural and semi-urban areas, enabling businesses to offer consistent, cost-effective, and human-like support at scale.

### **Conclusion & Minimum Lovable Product (MLP)**

SayHello AI transforms customer service by fusing the friendliness of human connection with the effectiveness of artificial intelligence. Our MLP will be primarily focused on clinics and pharmacies, handling basic health inquiries, scheduling appointments, and verifying the availability of medications. We're creating the customer call of the future—today—with multilingual voice support, robust natural language processing, and modular architecture.

### **References**

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