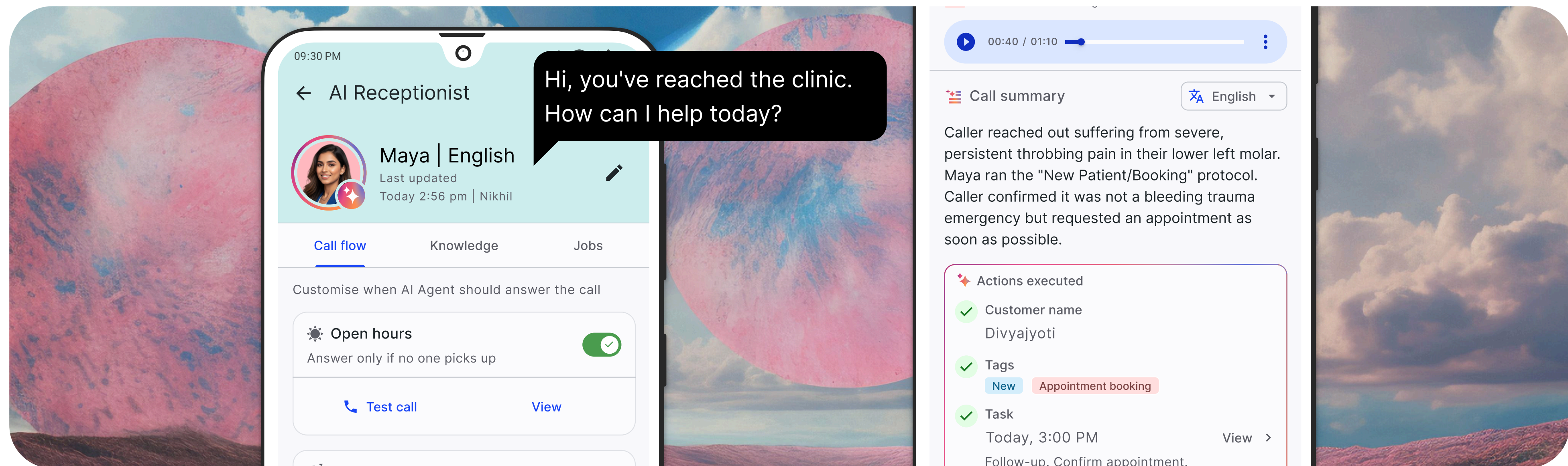


SUPERFONE AI RECEPTIONIST

AI Call Agent for Small Business Owners

Designing an autonomous, zero-code 24/7 receptionist that non-technical managers can set up and trust like a real team member.



OVERVIEW

⚡ SUPERFONE		LEAD DESIGNER	
2025	04 WEEKS • CONCEPT → LAUNCH		
MOBILE • ANDROID		LIVE IN PROD	

Role & Responsibility

Lead Product Designer (Sole Designer). Owned end-to-end design from problem framing, product strategy alignment with the co-founder, technical UX architecture, prompt engineering UI, adversarial QA testing, to engineering implementation.

Project Parameters

4-week timeline from concept to Android live production release.

Core Value Statement

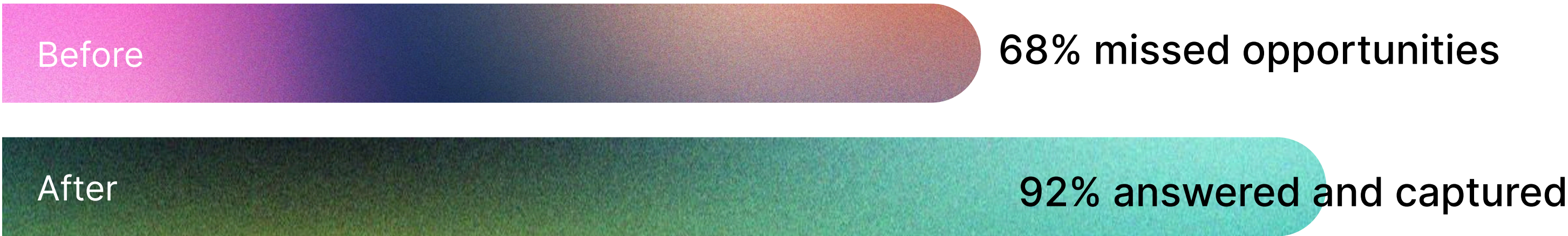
Transforming missed calls into logged leads by designing an autonomous AI call agent that non-technical business owners can configure like a human employee.

Shifted Superfone from a shared virtual number into an AI-powered business number with sales and support engine.

Executive Deliverable

Proved that non-technical SMB owners will entrust high-stakes customer calls to an AI agent if governed by mental models they already understand.

Inbound lead capture increased from



72% autonomous resolution without human intervention	91% CSAT rating on post-call summary and overall satisfaction	42% return to refine knowledge/job settings within 14 days
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PROBLEM

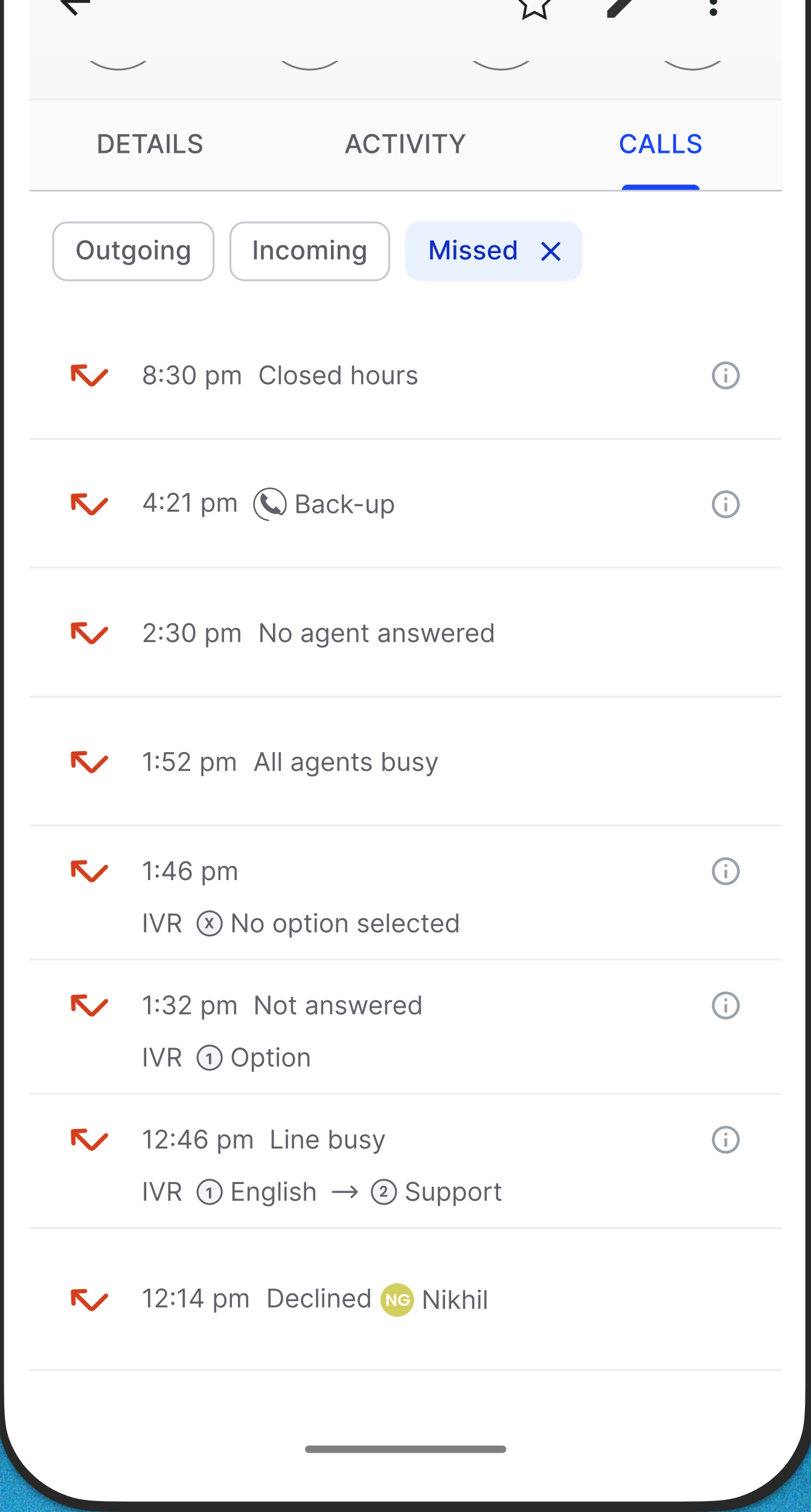
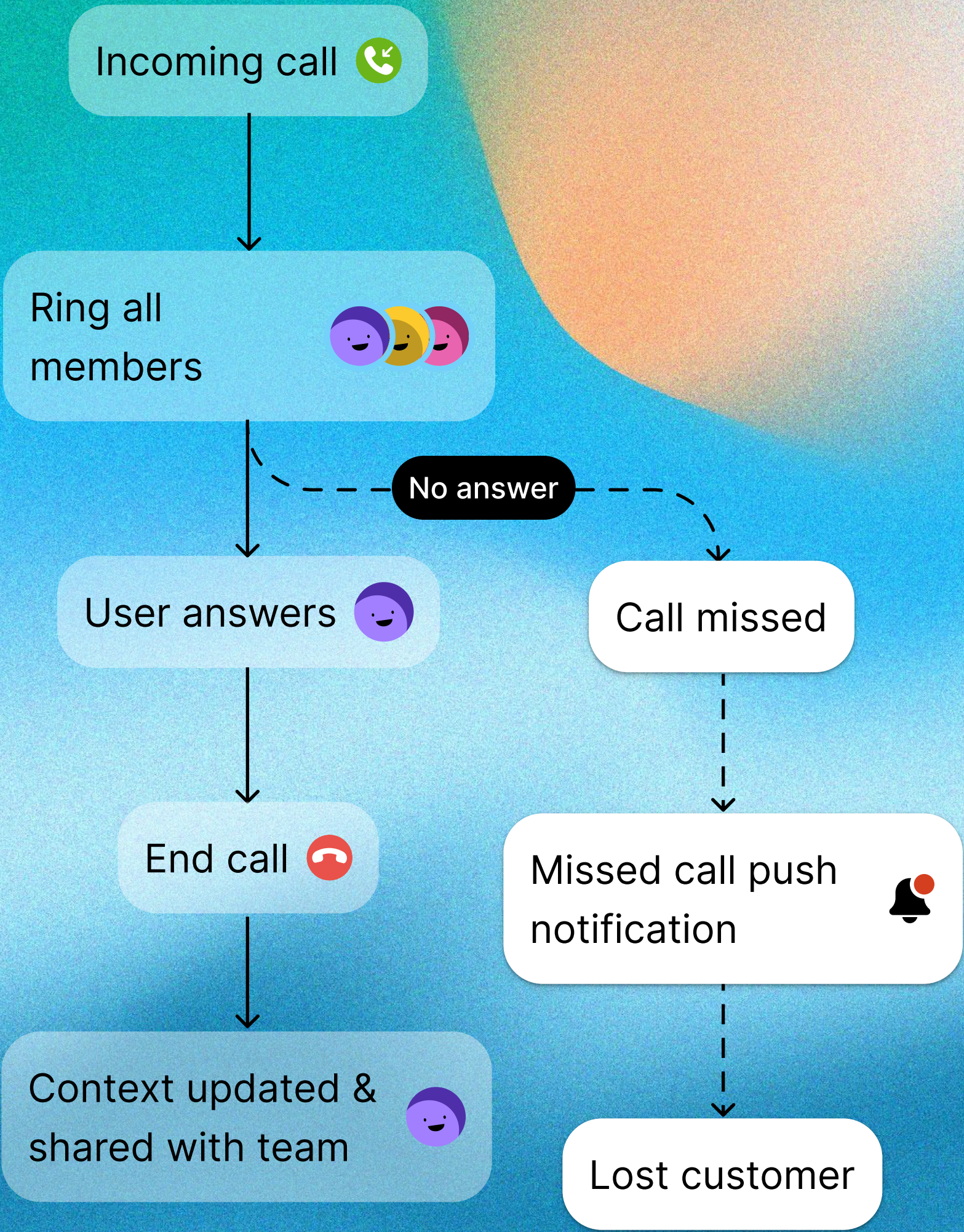
Market landscape

SMBs (dental clinics, manufacturing, travel agencies, design studios, etc.) rely heavily on phone calls as primary revenue pipelines.

Core vulnerability points

- **Peak volume overload:** Simultaneous calls exceed available lines.
- **After-hours & weekends:** Zero coverage outside 9 AM–6 PM.
- **Single-user/small-team:** Inability to answer while servicing in-store clients.

State of a missed call

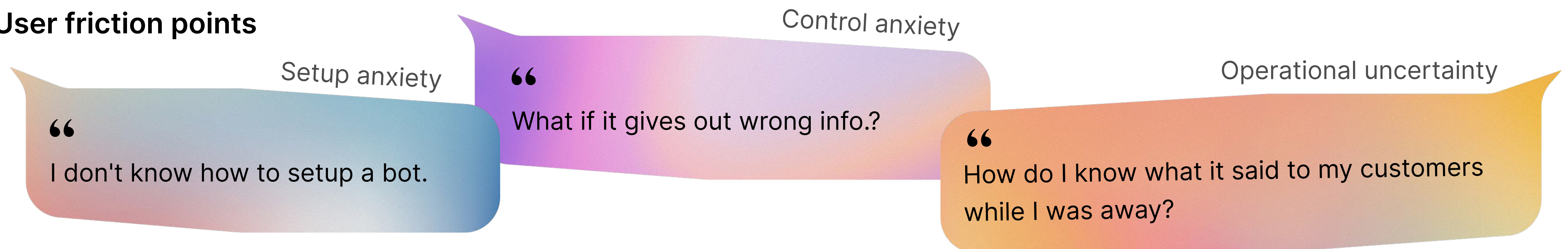


Bridge the gap between LLM orchestrations and familiar human interaction frameworks

Key user psychological traits

- Low tech-literacy; unfamiliar with AI jargon (embeddings, system prompts, vector search)
- High protective ownership over customer perception
- Skeptical of automation due to fear of wrong setup driving clients away.

User friction points



Give every user a 24/7 receptionist that they can hire, train, and manage in under 5 minutes without support.

01

Easy setup for non-technical users

Ask only what an owner would tell a new hire during their first hour.

02

Agent as a team member

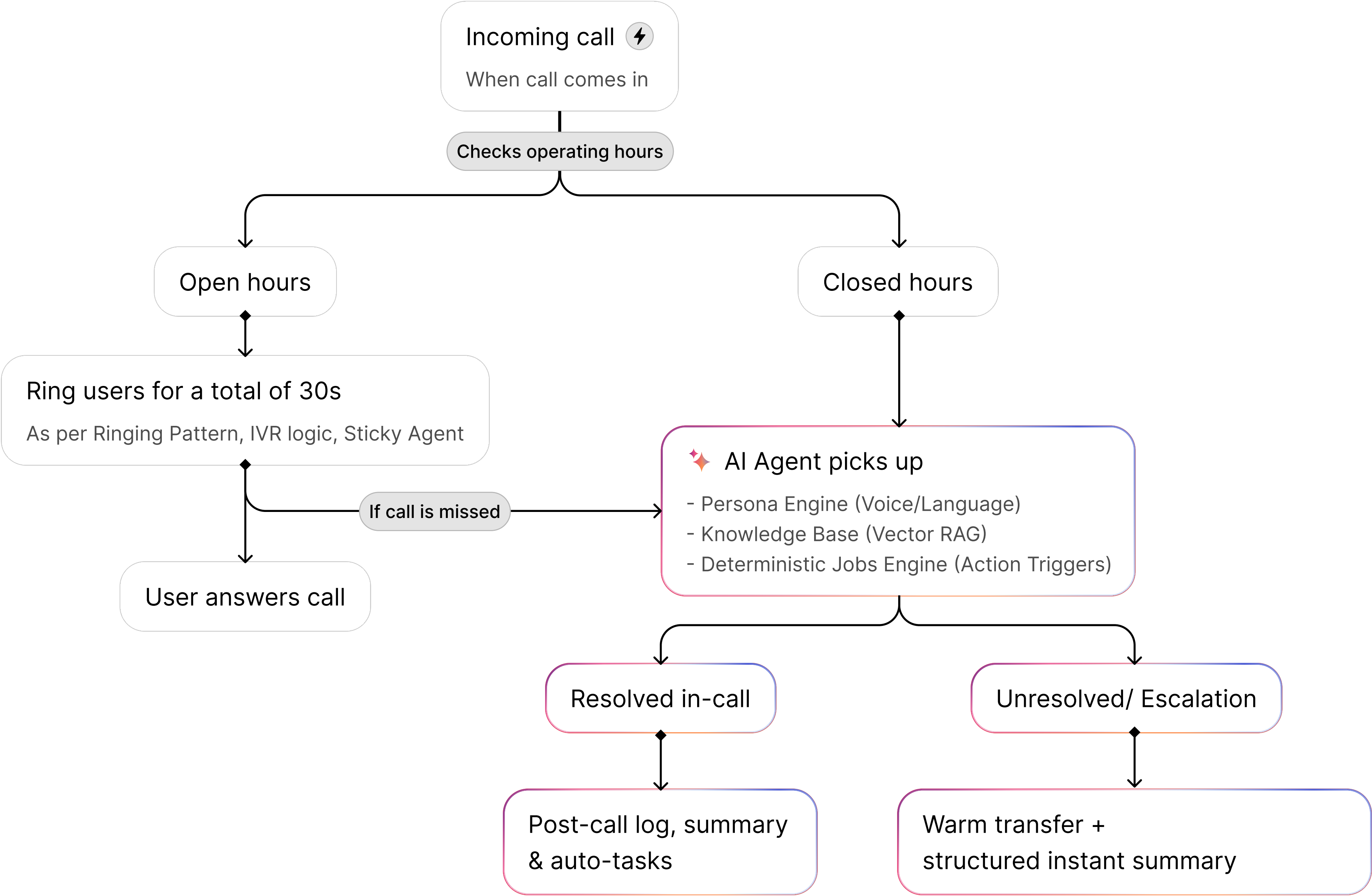
Embed the AI directly into team lists, ringing orders, and call logs.

03

Full visibility & governance

Document every call with structured summaries, tags, and tasks.

ARCHITECTURE



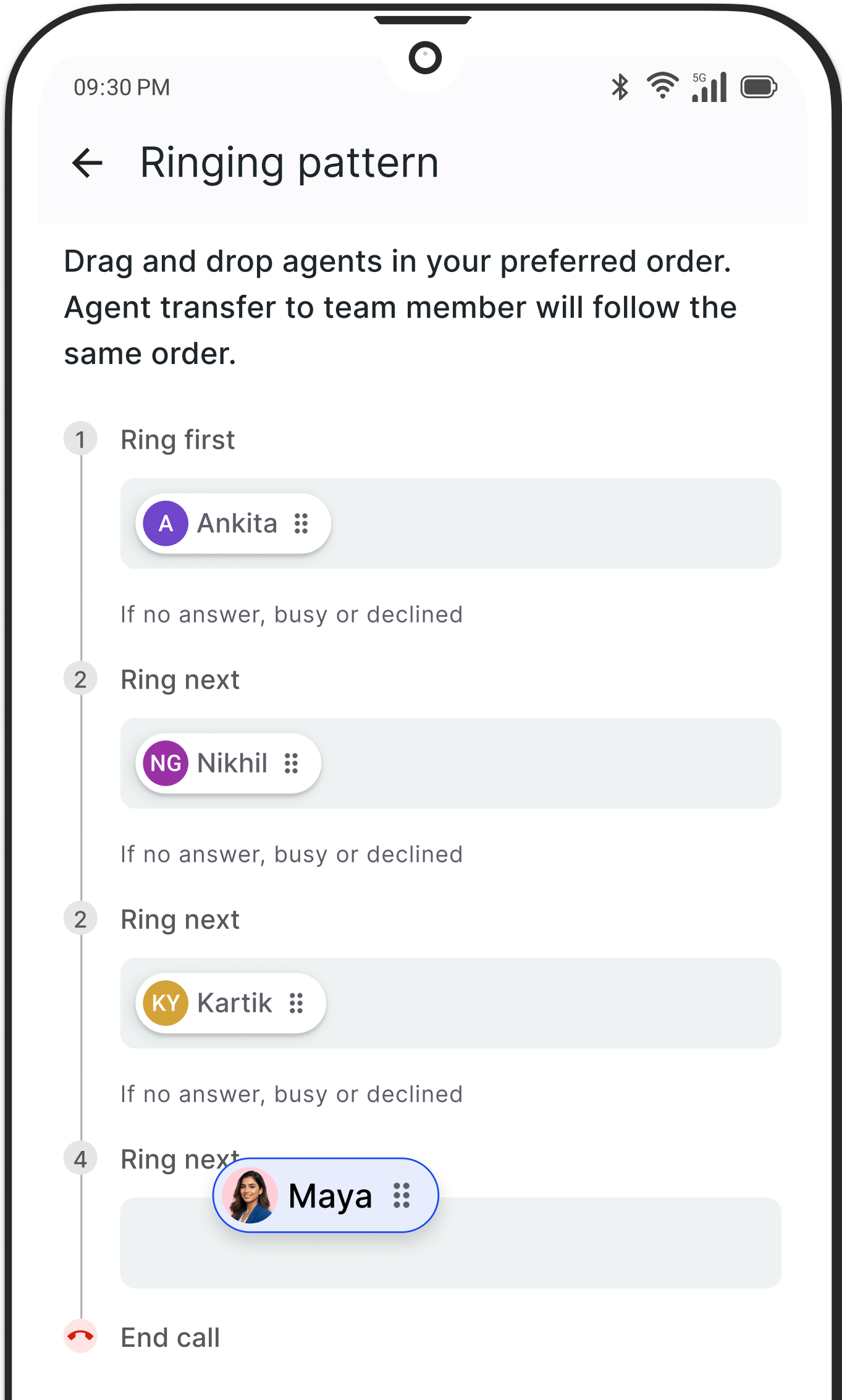
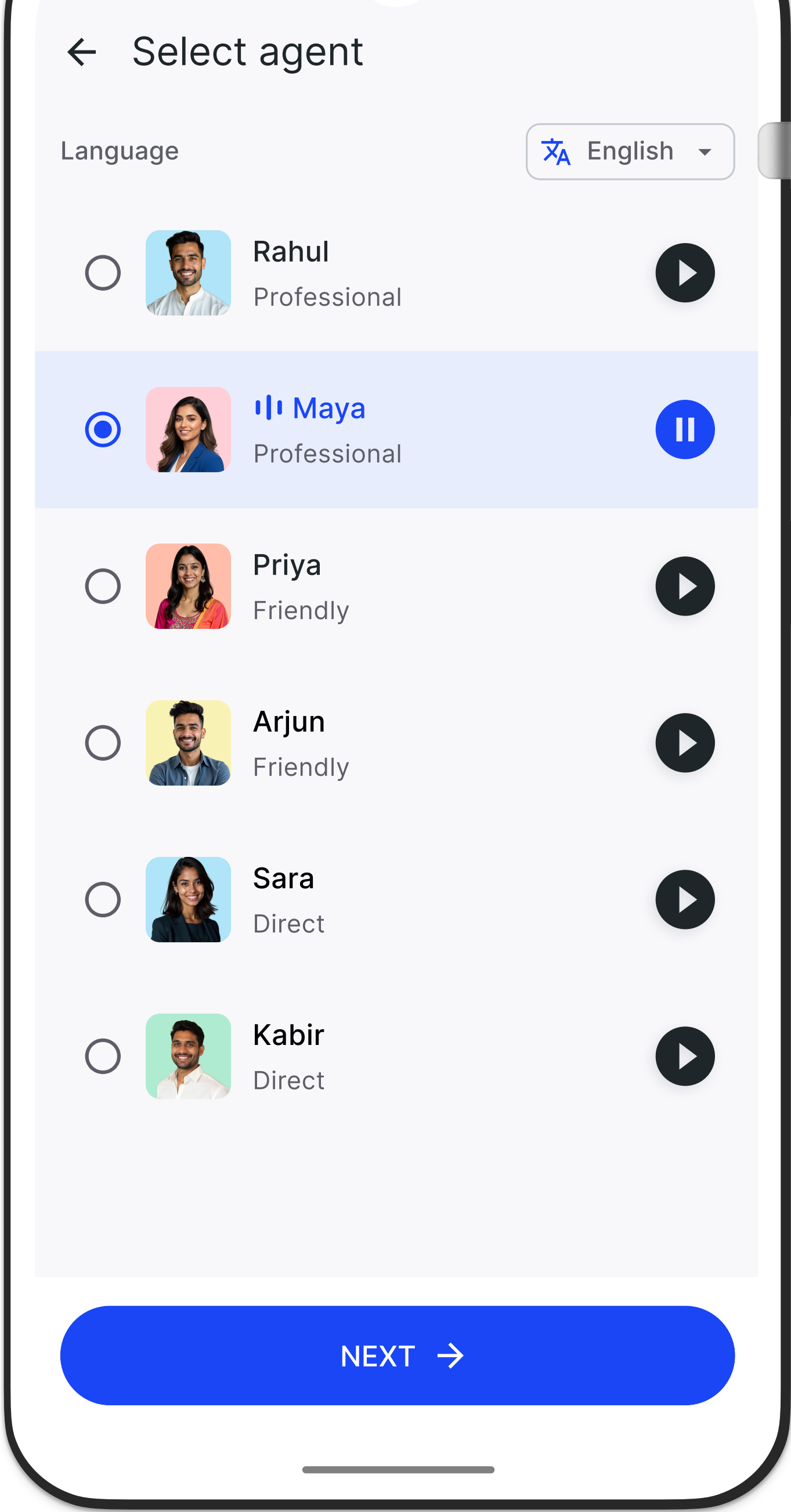
STAGE 01 : TEAM INTEGRATION & PERSONA DESIGN

Decision 1 : Humanising the AI Agent

- Created a persona library with distinct voice profiles.
- Native multi-lingual support focusing on regional Indic accents.
- Setup treats persona selection like hiring an actual receptionist.

Decision 2: Native Ringing Order Integration

- Positioned the AI agent directly inside the existing Ringing Pattern list.
- Allows owners to drag-and-drop the AI agent into step 1, step 2, or as a final fallback.

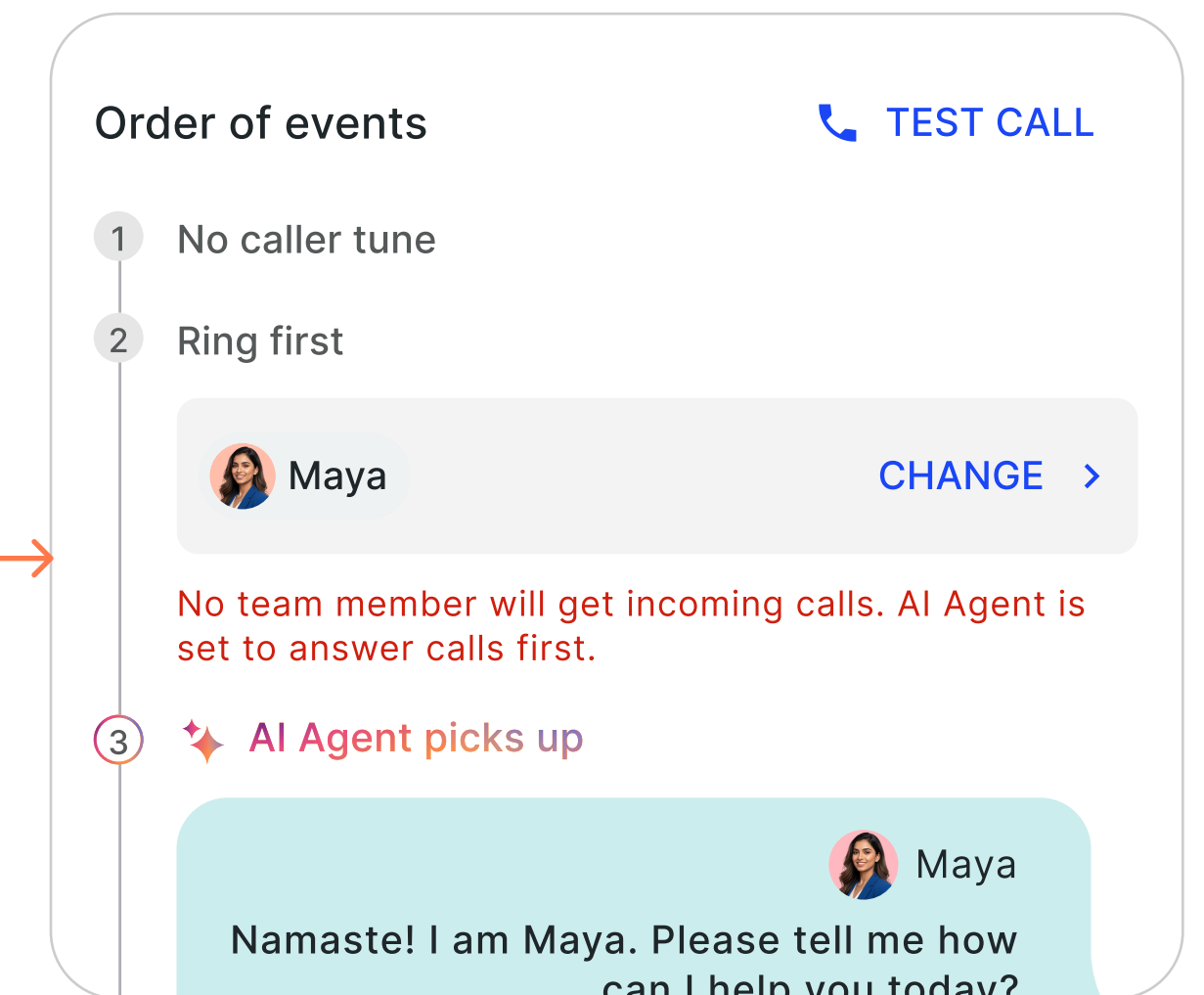
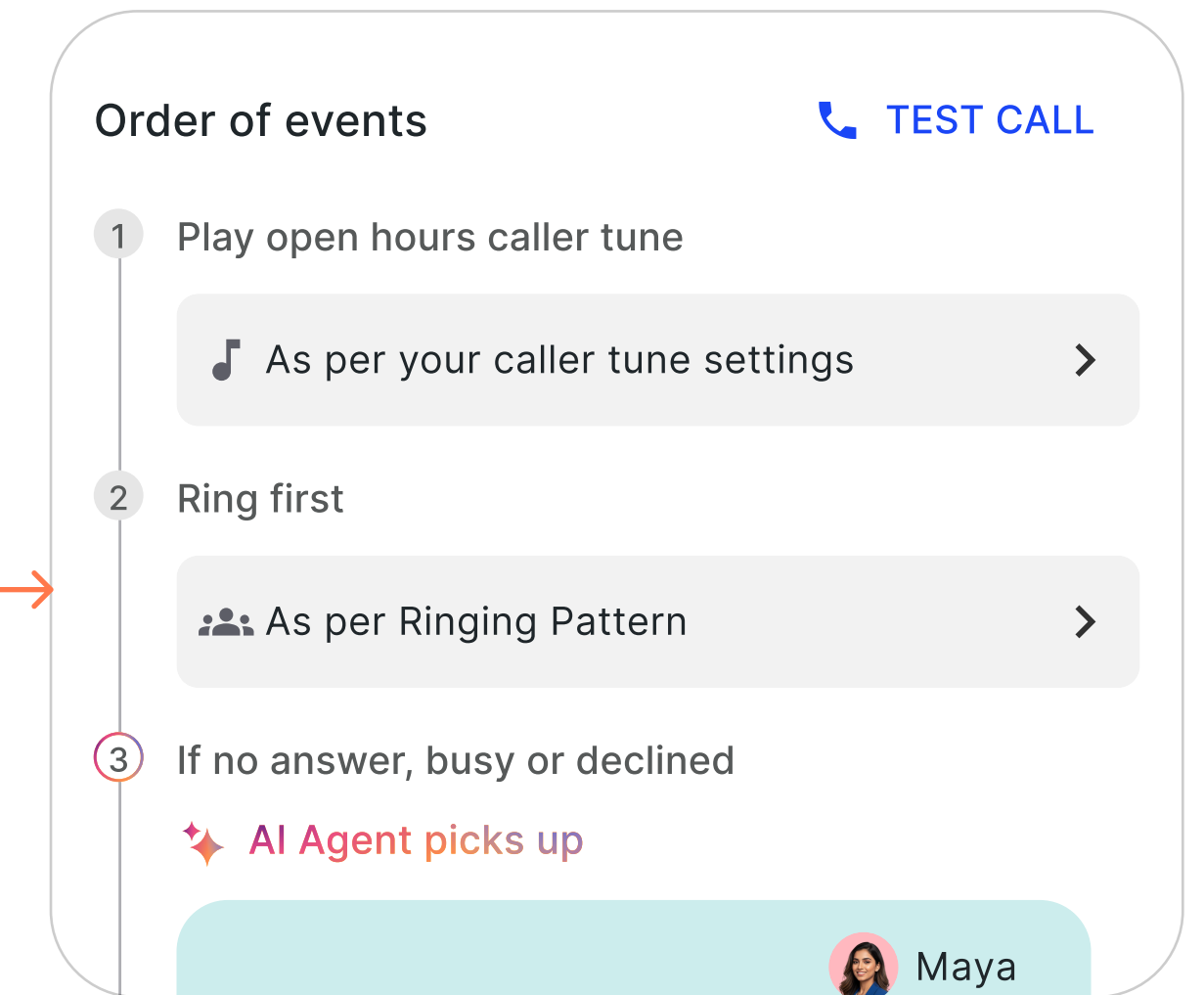
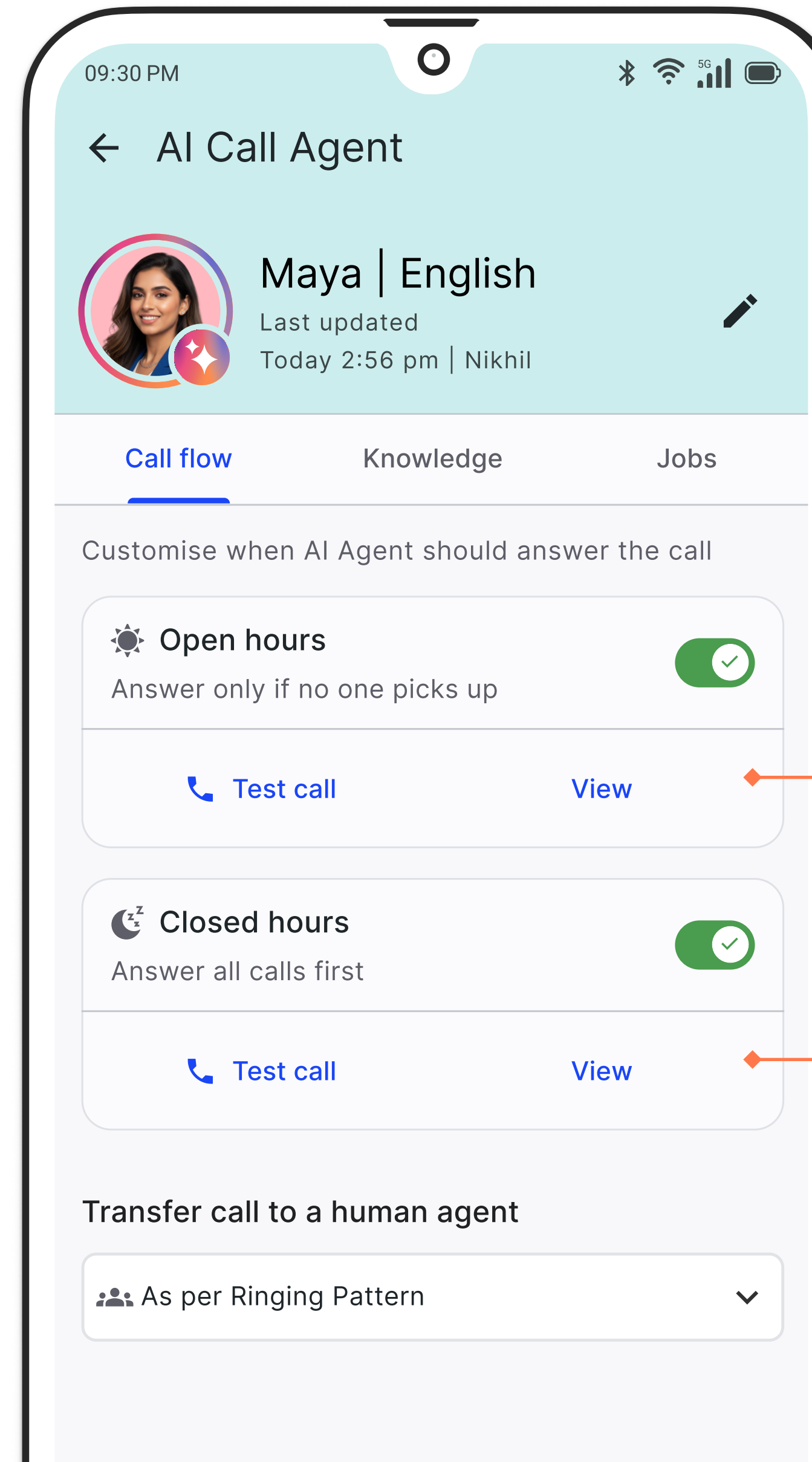


STAGE 01 : TEAM INTEGRATION & PERSONA DESIGN

Decision 3 : Dual Operating Schedules

- **Open Hours** : AI acts as a passive safety net. Phone rings human staff first. AI answers only if calls go unanswered, busy, or declined.
- **Closed Hours** : AI takes primary position. Answers calls instantly, saving staff from after-hours interruptions while ensuring zero missed leads.

Low-Risk Onboarding: Owners test AI risk-free by enabling it only for closed hours or as a last-resort backup during peak hours.

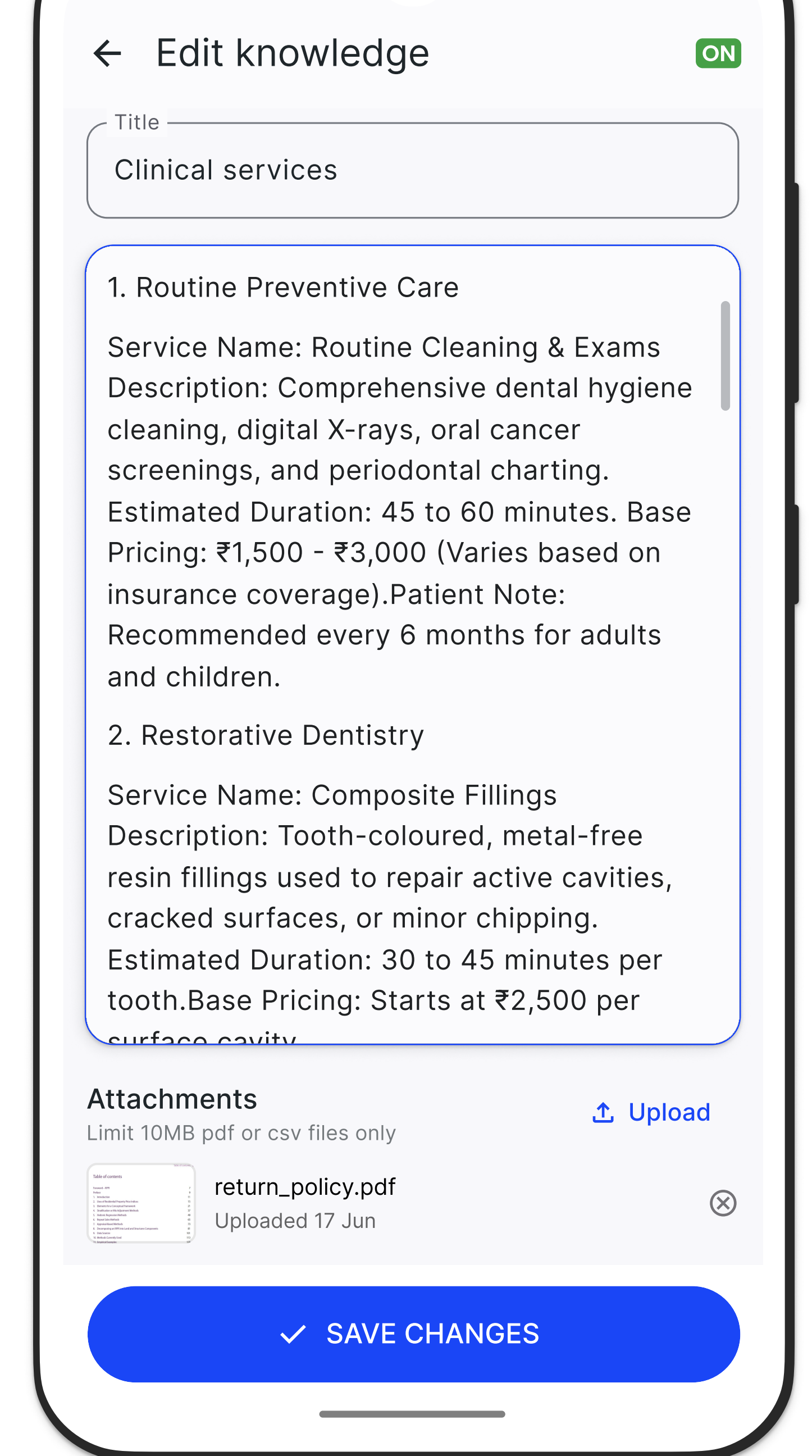
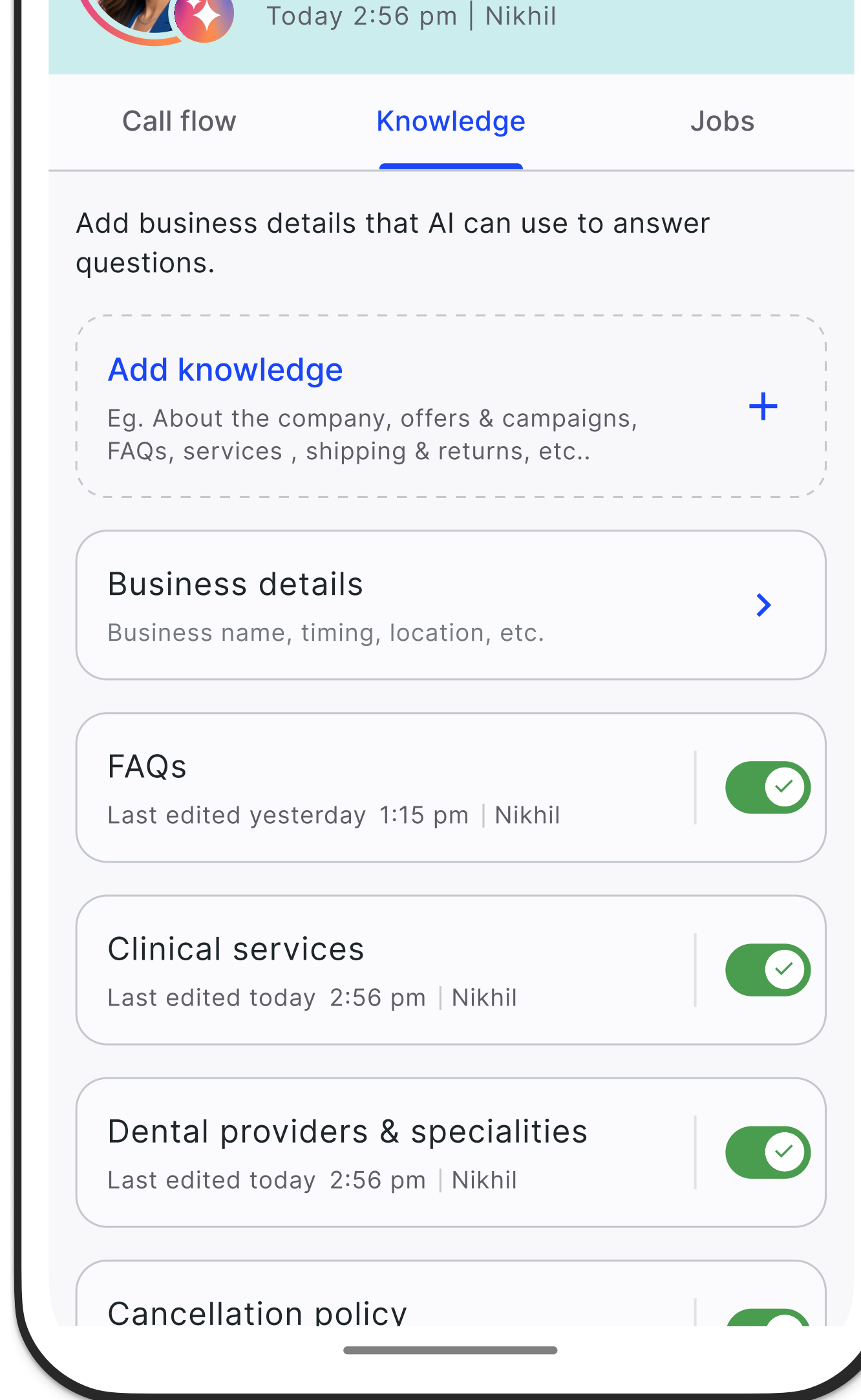


STAGE 02 : GROUNDING AI MODULAR KNOWLEDGE BASE

Decision 4 : Abstracting RAG & Embeddings into "Knowledge Packets"

- Eliminated monolithic prompt text boxes.
- Introduced modular structured knowledge blocks.
- Direct file intake: PDF, CSV, and plain text uploads auto-convert into vector search indices.
- Active Toggles: Simple UI switches allow owners to turn specific knowledge packets on or off instantly.

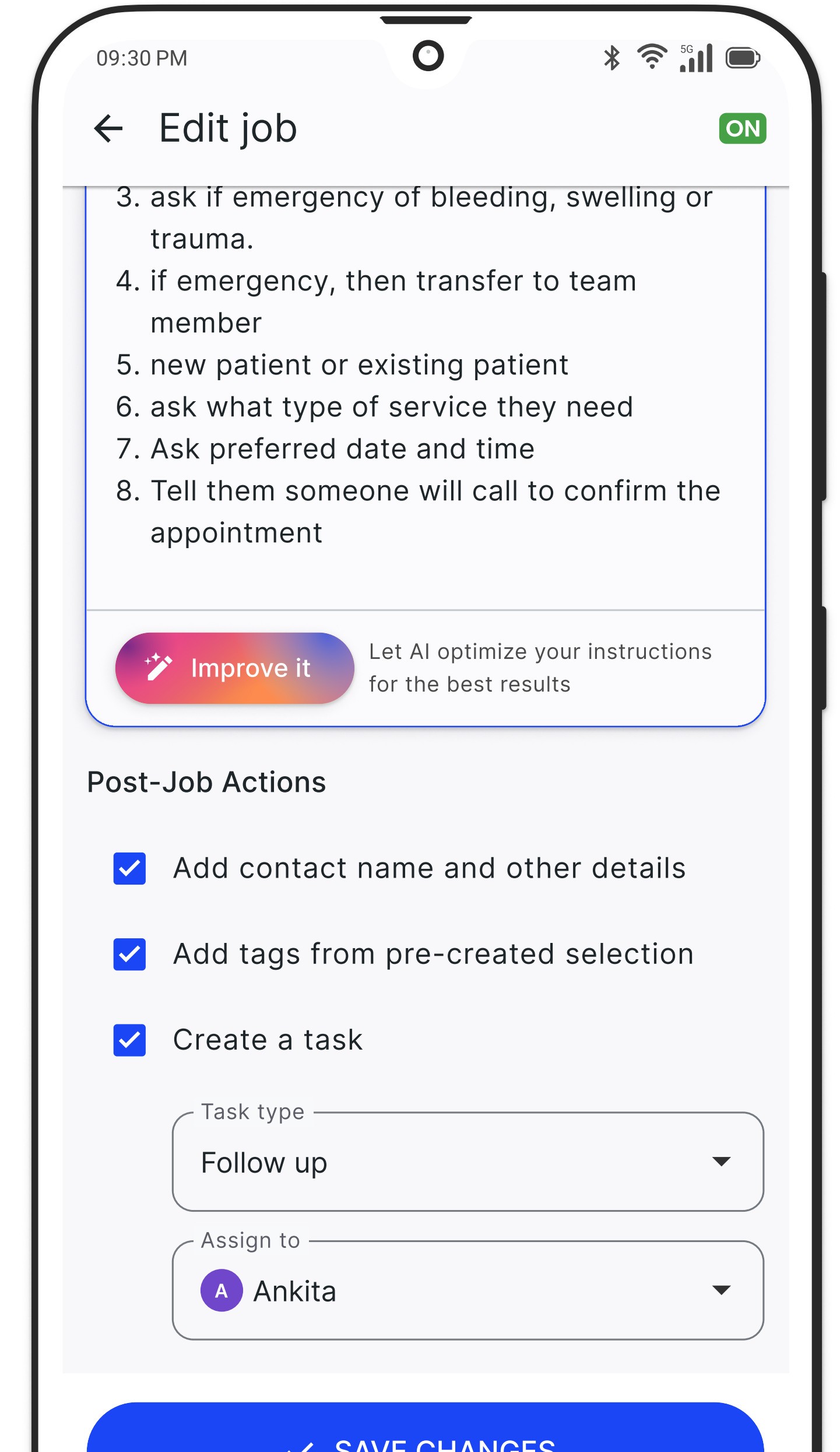
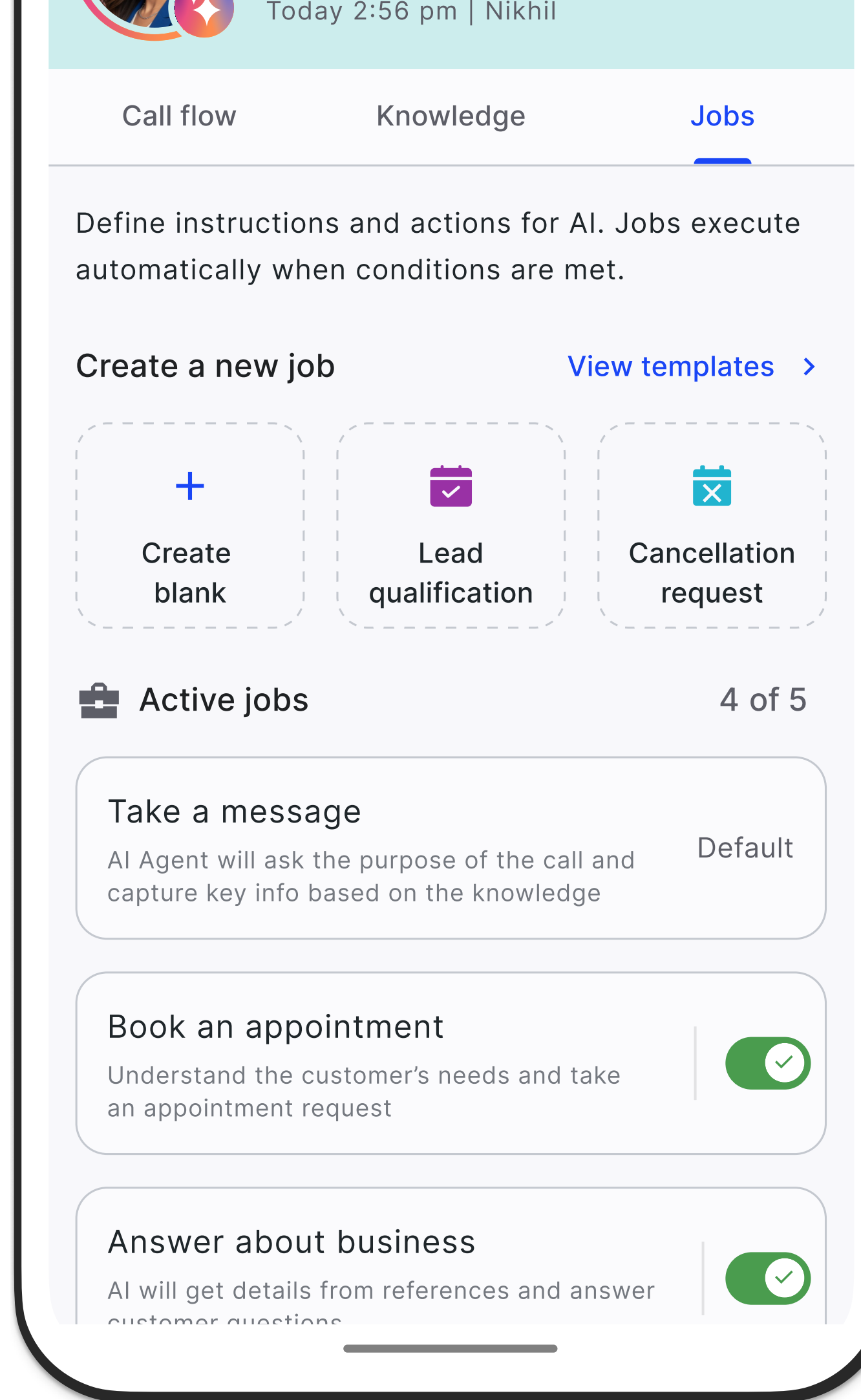
Future roadmap : TTS upload, conversational input



STAGE 02 : JOBS, WORKFLOWS & DETERMINISTIC EXECUTION

Decision 5 : Conversational Intent Triggers & Post-Job Actions

- **Jobs Definition:** Functional tasks the AI must complete (e.g., Book Appointment, Process Cancellation, Take Message, Transfer Call).
- **Intent Triggers:** Defined in natural language (e.g., "When a caller asks for severe tooth pain emergency...").
- **Post-Job Actions:** Structured outputs trigger internal software actions such as updating contact details, tagging calls, or assigning follow-up tasks to staff



STAGE 02 : JOBS, WORKFLOWS & DETERMINISTIC EXECUTION

Decision 6 : In-Context Prompt Refinement Engine

- **The Problem:** Non-technical users write ambiguous or incomplete instructions.
- **The Solution:** An integrated AI-assisted writing module.
- User inputs raw conversational bullet points; the system rewrites them into strict, deterministic, system-level instructions tailored for voice execution.
- Includes a built-in "Test Call" sandbox, allowing owners to simulate caller interactions on a dedicated test line before deploying to live lines.

09:30 PM

← Edit job ON

Title

Book an appointment

Write instructions for this job

If the caller says they want to book an appointment, then

1. ask their name
2. verify phone number
3. ask if emergency of bleeding, swelling or trauma.
4. if emergency, then transfer to team member
5. new patient or existing patient
6. ask what type of service they need
7. Ask preferred date and time
8. Tell them someone will call to confirm the appointment

Improve it Let AI optimize your instructions for the best results

Post-Job Actions

☒ Add contact name and other details

SAVE CHANGES

09:30 PM

← Edit job ON

Trigger

Book an appointment

Write instructions for this job

Run this job if the caller expresses an active desire to schedule a visit, book a routine cleaning, check dentist availability, or reports a physical dental issue (e.g., toothache, broken crown, cavity, wisdom tooth discomfort, or a loose filling). Look out for keywords like 'appointment', 'check-up', 'booking', and 'emergency'.

1. INITIAL SCREENING: Ask the caller if they are experiencing a severe dental emergency like uncontrollable bleeding, acute swelling, or extreme trauma.
 - If YES: Immediately invoke the action: /Transfer call to "Human Agent". Stop this job.
2. COLLECT PATIENT TYPE: Ask if they are

Improve it Let AI optimize your instructions for the best results

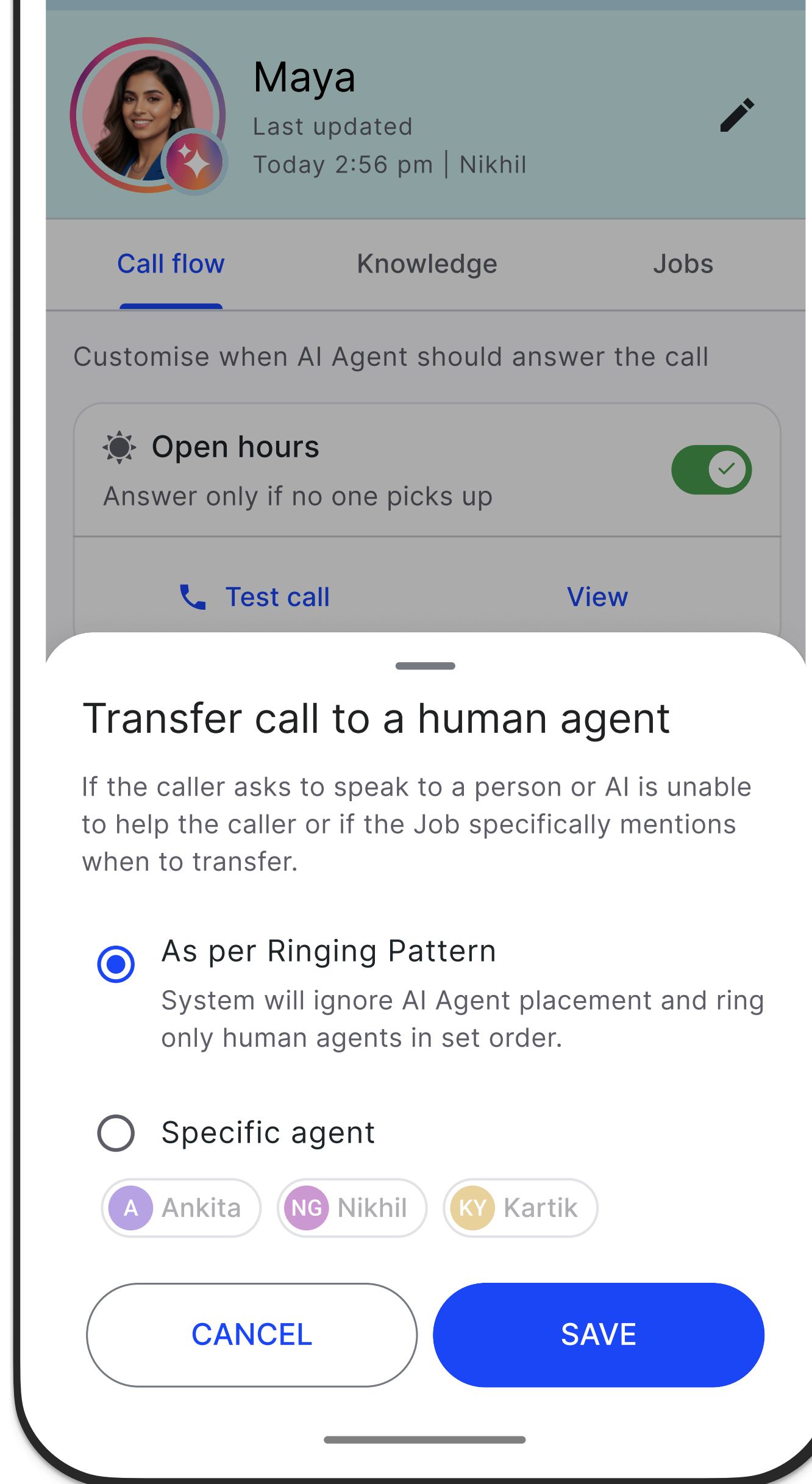
Post-Job Actions

SAVE CHANGES

STAGE 03 : HUMAN HANDOFF & CONTEXT TRANSFER

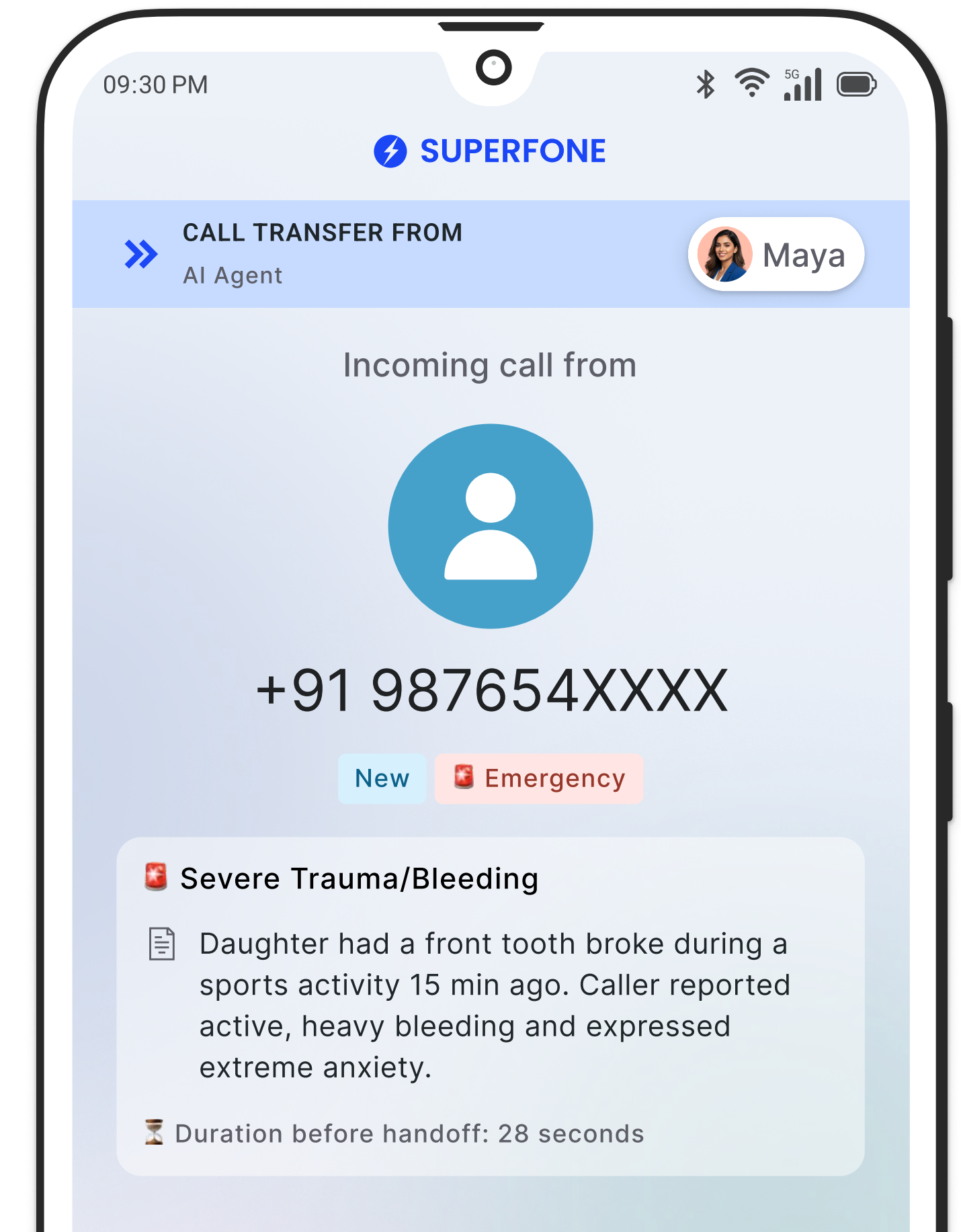
Decision 7 & 8 : Seamless Escalations & Contextual Warm Transfers

- **The Failure Mode** : Standard AI bots either refuse to hand off calls or perform cold transfers, forcing callers to repeat themselves.
- **Agent Handoff Protocol**:
 - a. AI detects boundaries (intent out of scope or caller requests human).
 - b. AI initiates transfer to designated team member based on call flow rules.
 - c. While the human staff's phone rings, the app pushes an real-time notification with a structured call summary.



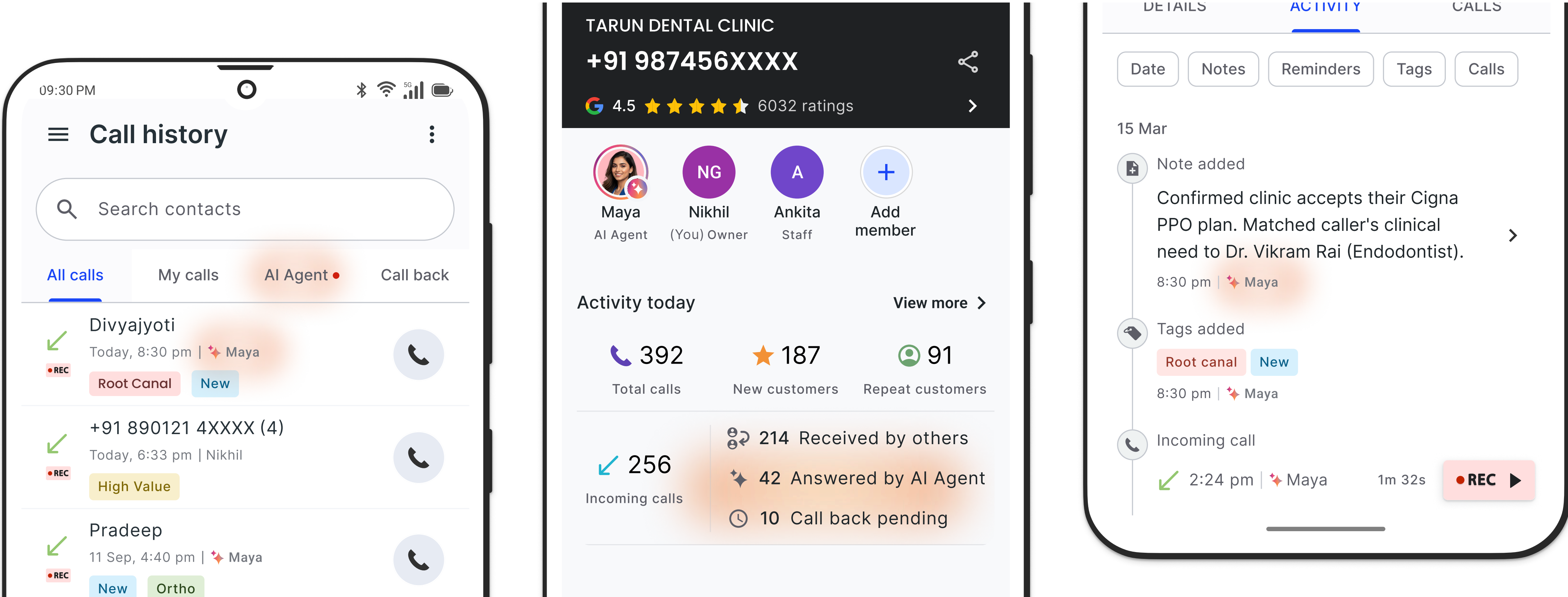
Hi, it is an emergency. My daughter's front tooth broke while playing sports 15min ago. She's is bleeding heavily

❖ I am so sorry to hear that. Please hold for one moment while I connect you directly to our on-call dental team.



Decision 9 : Unified Call History Integration

- AI calls are logged alongside human call history rather than hidden in a separate analytical dashboard.
- Successful AI interactions are logged as [Handled by AI Agent], clearing missed-call backlogs.
- Includes dedicated dashboard filters [Answered by AI Agent] [Pending Call Back] for auditing.

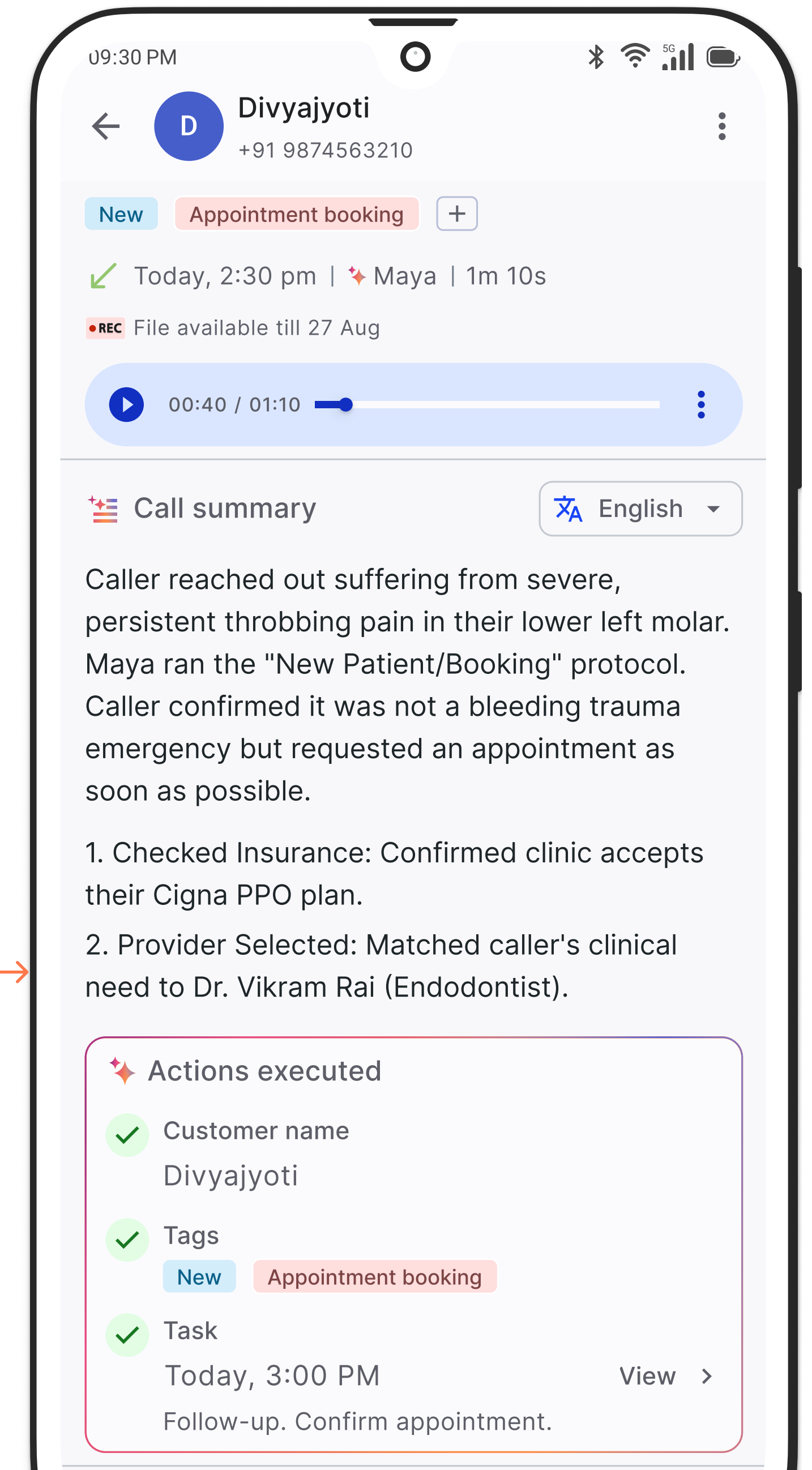
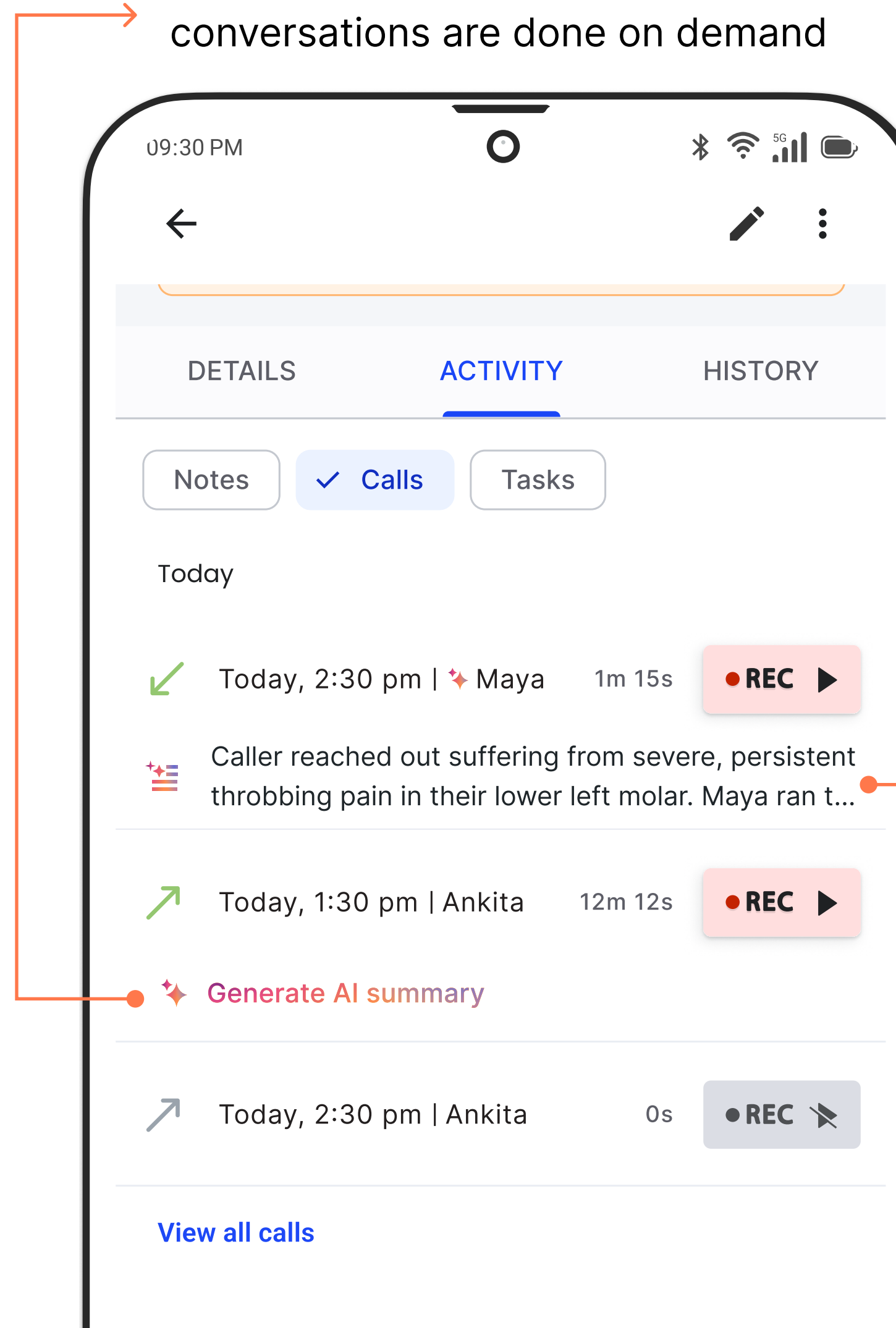


STAGE 04 : ACTIONABLE SUMMARIES & FEEDBACK LOOPS

Decision 10 : Structured Post-Call Outputs

- **Instant summarisation:** Output a structured set of AI Call Summary directly below the recording playback bar.
- **Bulleled call summary:** A high-level overview detailing the core reason for the call and what information was shared.
- **Multi-language:** Translate the summary to a selection of Indian native languages
- **Next steps:** Actionable items extracted from the conversation to tell the team exactly what follow-up task is required next

Call summaries for Human Agent conversations are done on demand



EDGE CASES, SYSTEM FAILURES & SAFETY PROTOCOLS

Adversarial Testing & Failure Mitigation (UX Safeguards):

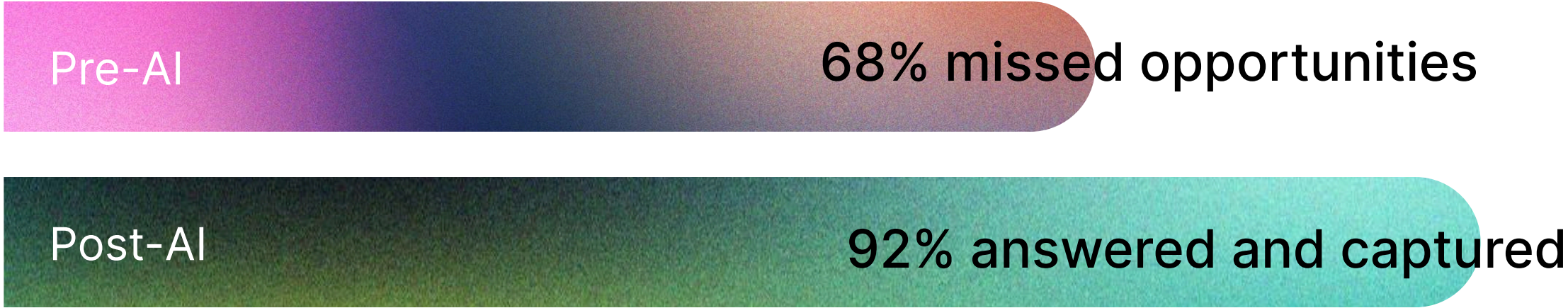
- **Hallucination Containment:** If RAG retrieval confidence falls below threshold, AI explicitly states: "I want to ensure I give you the exact details. Let me have our specialist call you back right away."
- **Accidental Disconnections:** If a call drops mid-job, the system logs caller input up to that point and auto-generates a high-priority call-back task
- **Bilingual Incoherence:** Auto-detects language mid-call; if a caller switches from English to Hindi, Maya seamlessly shifts voice models

Testing Methodology:

- Conducted stress testing across 100+ simulated voice scenarios before beta release.
- Tested background noise environments (e.g., busy dental clinics, traffic noise, poor cellular connection).

QUANTITATIVE IMPACT & QUALITATIVE INSIGHTS

Inbound lead capture increased from



72%	91%	42%
autonomous resolution without human intervention	CSAT rating on post-call summary and overall satisfaction	return to refine knowledge/job settings within 14 days

Performance Overview:

- **Transfer Breakdown:** Out of 28% total transferred calls, 18% were due to defined AI knowledge limits and 10% were explicit escalation requests.
- **Support Ticket Reduction:** Noticeable drop in customer setup support tickets due to the intuitive sandbox testing interface.

Shift in User Behavior:

- Owners transitioned from fear of AI to active "Management Behaviours."
- The 42% "Return to Refine" rate within 14 days proves that users treat the AI as an evolving employee rather than a static setup-and-forget tool.

REFLECTIONS

Integrating AI within familiar user environments significantly enhances its adoption.

Integration over Innovation: When introducing a new AI feature, the instinct may be to create a separate interface with its own settings and management options. While this approach reflects the novelty of the technology, it can create a steep learning curve for users, particularly those who may not be technically inclined or familiar with AI systems.

Determinism Builds Trust: While this integration can be challenging and may limit the potential of the AI, it ultimately leads to greater user engagement. By enhancing existing experiences rather than overhauling them, we increase the likelihood that users will embrace and benefit from the new technology.

FUTURE ROAD MAPS

Multi-Modal Communication: Enable AI agent to send instant WhatsApp follow-up messages with booking links during live calls.

Outbound Telephony Workflows: Expand agent capabilities from inbound reception to automated outbound appointment reminders and payment follow-ups.

Advanced Voice Analytics: Provide sentiment analysis and trend tracking across all incoming call logs (e.g., identifying top requested products or peak query hours).



Let's talk!

Have thoughts on this case study, or working on something similar?
I'd love to hear from you.

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Linkedin : <https://www.linkedin.com/in/shailaja-riva/>