

Product Brief: Life Review Conversational AI (MVP / Beta)

Purpose

Create a **conversational AI companion** that guides older adults through structured life review sessions. The system captures their stories, processes transcripts, and generates a **psychographic profile** that summarizes values, motivations, archetypes, and potential behavioral barriers. This profile becomes the foundation for future therapeutic personalization (med adherence, wellness engagement, behavior change).

Core User Flow

1. Welcome / Onboarding

- Senior user is greeted warmly via voice or chat.
- They are told: “I’ll ask you questions about your life and capture your stories so your family (and care team) can understand you better.”

2. Life Review Sessions

- 5–10 minute guided sessions with **story prompts** (e.g., “Tell me about a time you overcame a challenge,” “What was your proudest accomplishment at work?”).
- Conversational AI follows up naturally: “That sounds meaningful — how did you feel in that moment?”

3. Capture & Processing

- Voice → Speech-to-text transcription.
- Transcripts stored securely.
- Basic NLP extracts: key entities (people, places, events), sentiment/emotion, recurring values, motivational language.

4. Psychographic Profile Generation

- After 3–5 sessions, system generates a structured profile:
 - **Values** (e.g., independence, family, faith, achievement).
 - **Motivation style** (approach vs. avoidance).
 - **Archetype weighting** (e.g., caregiver 0.7, explorer 0.4).
 - **Behavioral barriers** (e.g., forgetfulness, low self-efficacy, tech anxiety).
- Profile is shown in **human-readable summary** (“Mary is motivated by family duty, values independence, and prefers collaborative guidance.”).

5. Output / Reporting

- User receives a **story digest** (short narrative summary of what they shared).
- Developers deliver an **API-accessible psychographic profile object (JSON)** that downstream apps can use to personalize interventions.

Key Features

- **Conversational AI Front-End**
 - Simple, warm, voice-enabled chatbot (phone, smart speaker, or mobile app).
 - Scripted but flexible life-review prompts (10–20 starter prompts).
- **Story Capture**
 - Audio recording + transcription (via ASR API).
- **Profile Engine**
 - NLP pipeline for:
 - Topic detection

- Sentiment/emotion tagging
 - Value/motivation/archetype extraction (rules-based + ML)
 - **Profile Output**
 - JSON object with psychographic scores.
 - Human-readable one-page “Whole-Person Snapshot.”
-

Technical Requirements

- **Frontend:** Simple conversational interface (Twilio for phone, WebRTC for web, or mobile app prototype).
 - **Backend:**
 - ASR (e.g., Whisper, AssemblyAI, Google Speech-to-Text).
 - NLP layer (OpenAI/GPT API for extraction + Python rules engine).
 - Database (Postgres, Firebase, or DynamoDB) for transcript + profile storage.
 - **Output:**
 - JSON profile object.
 - PDF/HTML snapshot report.
-

MVP Deliverables

- Functional conversational prototype that:
 - Greets a user.
 - Asks 3–5 life review questions.

- Records and transcribes answers.
 - Runs NLP extraction.
 - Generates a basic psychographic profile (JSON + human-readable summary).
 - Developer handoff should include:
 - API endpoints for “start session,” “submit transcript,” “generate profile.”
 - Demo app (web or mobile) where flow can be tested end-to-end.
-

Success Criteria (MVP)

- Can complete a 10-min guided life review session without failure.
- Produces transcripts with $\geq 85\%$ accuracy.
- Generates a psychographic profile with at least 5 dimensions (values, motivation, archetypes, barriers, tone preference).
- Outputs both a JSON object and a summary report for human review.