



STRATEGIC PROJECT REPORT

HeyLola

RESTAURANT HOSPITALITY & CONVERSATIONAL AI

01 / THE BUSINESS CHALLENGE

Solving the High-Volume Call Bottleneck

A busy restaurant environment often creates a unique operational conflict: the staff must choose between serving the patrons physically in the room or answering the phone. Prior to AegarTech's involvement, our client faced significant revenue loss through missed bookings and frustrated customers left on hold. With only one staff member dedicated to phones, the Information Bottleneck was impacting both the customer experience and the restaurant's seat-occupancy rate.

02 / ENGINEERING INNOVATION

The Real-Time AI Voice Concierge

We engineered HeyLola, a 24/7 AI Voice Agent designed to assist and not replace the restaurant team. Built on a low-latency audio-to-audio streaming architecture, the agent handles high-volume FAQs and direct table bookings via a real-time API integration with the restaurant's existing management platform. By containerizing the core logic and leveraging serverless functions for orchestration, we ensured that patrons get an immediate, context-aware human-like response, even during peak service rushes.

03 / CONVERSATIONAL ARCHITECTURE

Key Technical Milestones:**ULTRA-LOW LATENCY**

Implemented real-time audio streaming to ensure natural, instantaneous dialogue.

BOOKING SYNC

Direct API orchestration with the restaurant's booking engine for live availability.

CONTEXTUAL FAQ

Engineered a dynamic knowledge base for accurate answers on dietary and venue info.

SEAMLESS HANDOFF

Smart transfer logic to move complex queries to live staff instantly.

Focus: Shifting administrative cognitive load away from floor staff through AI-driven automation.

BUSINESS IMPACT

ZeroMISSED BOOKINGS DURING
PEAK SERVICE RUSHES**24/7**AUTOMATED AVAILABILITY
FOR RESERVATION GROWTH

THE AEGAR STACK

Interface: Real-time Voice API**Backend:** Node.js (Containerized)**Database:** Real-time Store (Latency)**Orchestration:** Cloud Functions

CONTINUITY

Engineered to act as a Reliable Bridge between the digital world and the physical dining room, securing every lead.