Mohammed Hammaad Founder & Chief Technology Officer (CTO) of ZupFam

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Executive Role Summary

Proven Backend Architect and AI/ML specialist with 3 years of production experience at Xiaomi India. Expertise in delivering high-volume financial solutions (UPI/MiPay) and sophisticated ML systems, demonstrating the necessary technical leadership to architect ZupFam's scalable Hyperlocal Digital Out-of-Home (HDOOH) platform. The focus is on rapid, intelligent execution.

Work Experience

Backend Developer – Xiaomi India

Aug'21-Oct'24

- High-Traffic Platform Architect: Coded the backend for the Quiz module within Mi Summit, serving over 50,000 participants per season from top graduate schools in India.
- Scale & FinTech: Delivered highly valuable contributions to high-traffic, mission-critical products including MiPay (UPI).
- Applied ML: Built a Plagiarism Detector using Machine Learning and developed an internal AI knowledge base utilizing a RAG architecture with Faiss similarity search and vector databases, skills essential for ZupFam's AI core.

AI & Product Milestones

Global Winner: Ottomator AI Hackathon – 1st Rank Globally on Public Voting Feb-Mar 2025

- Streambuzz: Built a multi-agent YouTube live stream moderator using Pydantic AI, demonstrating advanced competency in agent-based systems.
- Recognition: Achieved the 1st rank globally based on public voting, validating product utility and rapid prototyping skills.
- GitHub: github.com/hammaadworks/streambuzz
- Leaderboard: Leaderboard Link
- Demo Link: StreamBuzz: Control Your Live Chat Like a Pro with A!! (Demo)

Academic Background

PES Institute of Technology (Bangalore South Campus)

2017 - 2021

- B.E. in Information Science and Engineering (CGPA 8.8)
- Certifications: Completed the Huggingface AI Agents Course. (View Certificate)
- 2. Executive Summary: ZupFam

VISION AT A GLANCE

ZupFam is creating the first scalable, AI-driven Hyperlocal Digital Out-of-Home (HDOOH) advertising network for Small and Medium-sized Local Enterprises (SMLEs), starting in Bengaluru. We solve the high-cost, low-ROI problem of local advertising by turning existing **ZupPartners**' (Host Retailers) Smart TVs (our **Display Units**) into affordable, measurable media space. Our proprietary AI (Ad Generator, Geo-Temporal Optimizer, and FTL Reporting) creates a **Data Moat** and **Two-Sided** Network Effect (TNE), offering Advertisers a measurable ROI and ZupPartners passive income and full control. We have validated strong partner intent (60% at Rs.500/month) and are building the MVP to scale the network to 100 ZupPartners.

3. Problem Statement

Small and Medium-sized Local Enterprises (SMLEs) are currently excluded from effective modern media due to a severe gap in the Hyperlocal Digital Out-of-Home (HDOOH) market.

- The Broad Inefficiency: Existing city-wide DOOH results in exorbitant costs and low geographical specificity. A single billboard campaign is often 10x the cost of digital media with minimal relevant eyeballs.
- The Specific Pain Point: Geo-fenced social media, while affordable, fails to solve the most critical need: influencing purchasing decisions at the crucial moment of action. These channels cannot engage customers who are *already* physically present on a neighborhood street, missing the spontaneous and impulse buy window.

4. Solution & Value Proposition

ZupFam solves the Hyperlocal Media gap by transforming existing, internet-enabled **Smart TVs** (**Display Units**) within local businesses into a managed **Hyperlocal Media Network**.

Value Proposition

- For the Advertiser: Achieve measurable 10x cost reduction by advertising to the precise foot traffic radius (e.g., 500m).
- For the ZupPartner: Earn passive income via the Incentivization Per View (IPV) model, with the full veto power to blacklist/hide disliked ads.
- Content Utility: The Display Unit seamlessly reverts to playing the ZupPartner's essential in-store media (product lists, promotions) during non-ad time.

5. AI Core & Competitive Advantage

ZupFam is fundamentally an **AI-driven media engine**. Our competitive advantage (moat) is built on a proprietary data loop that automates operations and guarantees measurable ROI for our advertisers.

AI Pillars: The 3x Automation Advantage

- 1. Automated Ad Content: Our AI UGC Ad Generator instantly creates high-quality Hyperlocal Media from simple text inputs, eliminating the costly content creation barrier for small businesses (SMLEs).
- 2. Dynamic Ad Optimization: The Geo-Temporal Ad Optimizer uses real-time local data (weather, traffic) to dynamically place and price ads, ensuring every campaign is shown at the precise moment for maximum impact.
- 3. Measurable ROI (Foot Traffic Lift FTL): We achieve FTL credibility through a phased approach:
 - a. MVP Proof: Use Coupon/QR Redemption Rates and anonymized mobility data (Proxy Metrics) to prove ad exposure leads to customer action.
 - b. Scaling Goal: The Optimizer's historical data is used to predict a traffic "baseline". The difference between actual and baseline traffic is the measurable incremental FTL attributed to ZupFam.

The Network Moat The combination of Cheap Pricing (for advertisers) and zero ZupPartner CapEx (using existing Smart TVs) drives a powerful, self-reinforcing Data Moat. High volume rapidly improves our AI's FTL prediction accuracy, which in turn increases Advertiser ROI and drives massive network scale.

6. Market Size & Opportunity

Market Size & Opportunity (Bengaluru Focus)

- TAM (Total Addressable Market): Annual total B2B advertising spend across all local media channels in Bengaluru, estimated at |300 Crores.
- SAM (Serviceable Available Market): The addressable spend by Bengaluru's SMLEs on pure Hyperlocal media, valued at approximately |75 Crores.

Notes on Market Size Calculation

- TAM Calculation: The |1.2 Crore figure is estimated by multiplying the total number of registered SMLEs in the Bengaluru Urban district (approx. 500,000) by an estimated average annual local advertising spend per SMLE (|6,000) across all channels (print, radio, social, DOOH).
- **SAM Derivation:** The |**75** Crores SAM specifically targets the portion of SMLE budgets dedicated to **proximity-based marketing**. We conservatively estimate this dedicated hyperlocal budget to be around **25**% of the total TAM, representing our direct revenue pool.

7. Business Model & Monetization

Primary Revenue Stream: Advertiser Pricing

• Core Metric: We utilize a Pay-Per-Display (PPD) metric, where Advertisers purchase slots on specific Display Units. The pricing is positioned to be very cheap for mass adoption.

Network Growth: ZupPartner Incentivization

- Incentive Structure: ZupPartners are paid on an Incentivization Per View (IPV) model, earning revenue based on the measurable exposure the ads receive in their location.
- 8. Competitive Landscape & Moat

Competitive Categories

- Direct Digital Signage (e.g., Screenox): Closed networks using proprietary hardware.
- Traditional DOOH (e.g., Times OOH): High-cost, city-wide operators offering no granular targeting.

The ZupFam Moat: Technical and Economic Defensibility

- Proprietary AI Moat: Our AI models rely on a proprietary, ever-improving pool of geo-fenced ad performance data—a feedback loop that increases Advertiser ROI.
- Economic Moat: Cheap Pricing and zero ZupPartner CapEx drive a powerful Two-Sided Network Effect (TNE), achieving critical density faster than proprietary hardware solutions.
- 9. Traction & Milestones (Pre-Seed Momentum)

Market Validation & Proof Points

• **High Partner Intent:** Initial market surveys show strong commercial viability: **60**% of local stores expressed clear intent to join the network for a compensation rate of |**500** per month. This de-risks the supply acquisition model.

Product Status & Immediate Goals

- Product Status: The Idea Phase is complete, and the Minimum Viable Product (MVP) is in active development.
- Immediate Goal (Next 3-6 Months): Complete the MVP and secure a critical launch network of at least 100 ZupPartners (Host Retailers) in Bengaluru.
- Key Transaction Goal: Achieve and report the first 500 successful Pay-Per-Display (PPD) transactions.