

**2026**  
Academic Validation

**2028**  
Business Transition

**2030**  
Scale & Showcase

**Thesis Completion & Empirical Validation**

- Thesis project finalization & submission
- Peer review process & academic defense
- Methodology documentation (reproducible)
- Internal KPI framework design

**Publication & Evidence Base**

- Academic paper submission / publication
- Research findings as IP asset
- Evidence package for stakeholders

**Scientifically Proven Foundation**

- Cited & validated methodology
- Credibility layer for showcas

**Outcome-Based Decision Framework**

- Define success metrics from showcase results
- Identify target stakeholder profiles
- Go / No-go criteria establishment

**Stakeholder Engagement & Partnership Build**

- Stakeholder mapping & outreach (Tier 1)
- Strategic partnership agreements (MOU/LOI)
- Business model validation with pilot partners
- Revenue / licensing structure definition
- Regulatory & compliance groundwork

**Commercial Activation**

- Contract execution with key partners
- Market entry & GTM activation
- Investor / stakeholder reporting

Define success metrics from showcase results  
Identify target stakeholder profiles  
Go / No-go criteria establishment

Core platform & technical infra setup  
Partner integration architecture  
Data pipeline & analytics layer  
Security, compliance infra

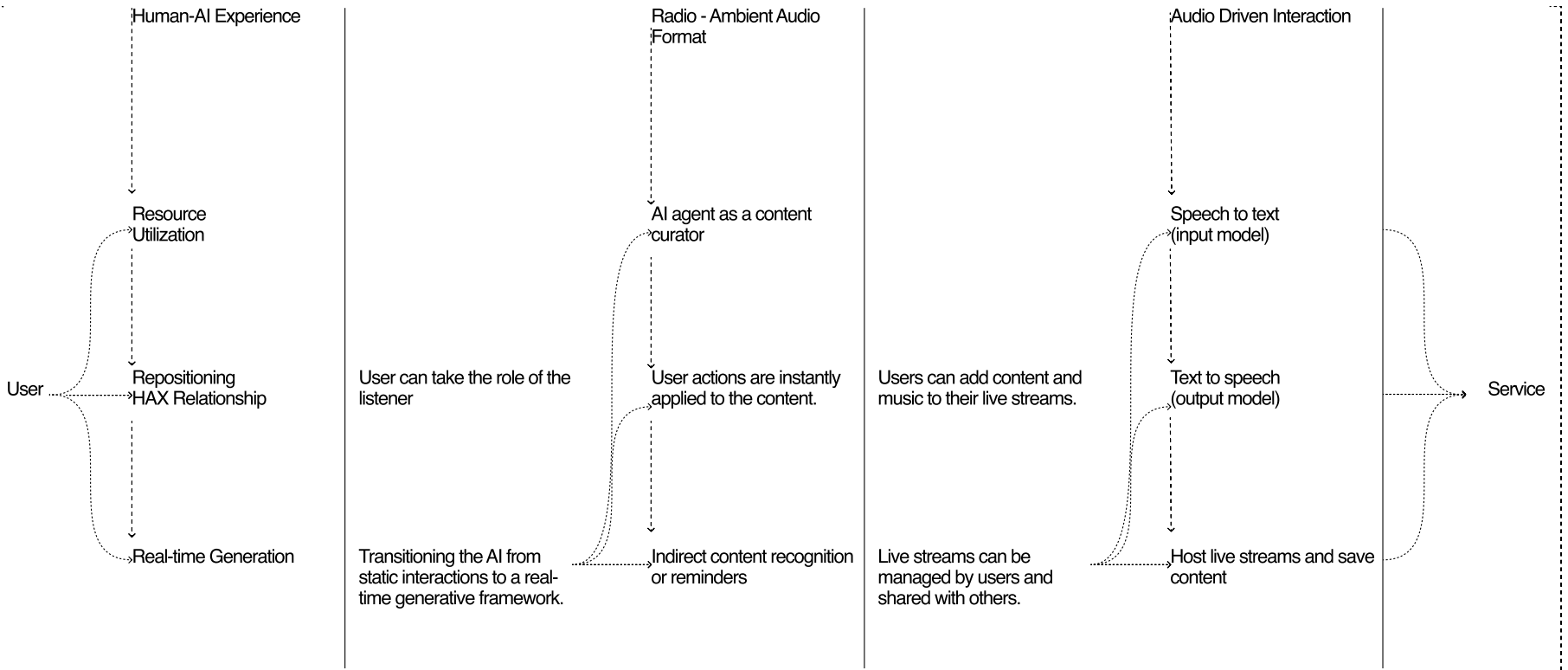
**Public Showcase & Validated Scale**

- External flagship showcase event
- Live partner & investor demonstration
- Full product & infra at scale
- Media / press & thought leadership
- Series A / growth round positioning

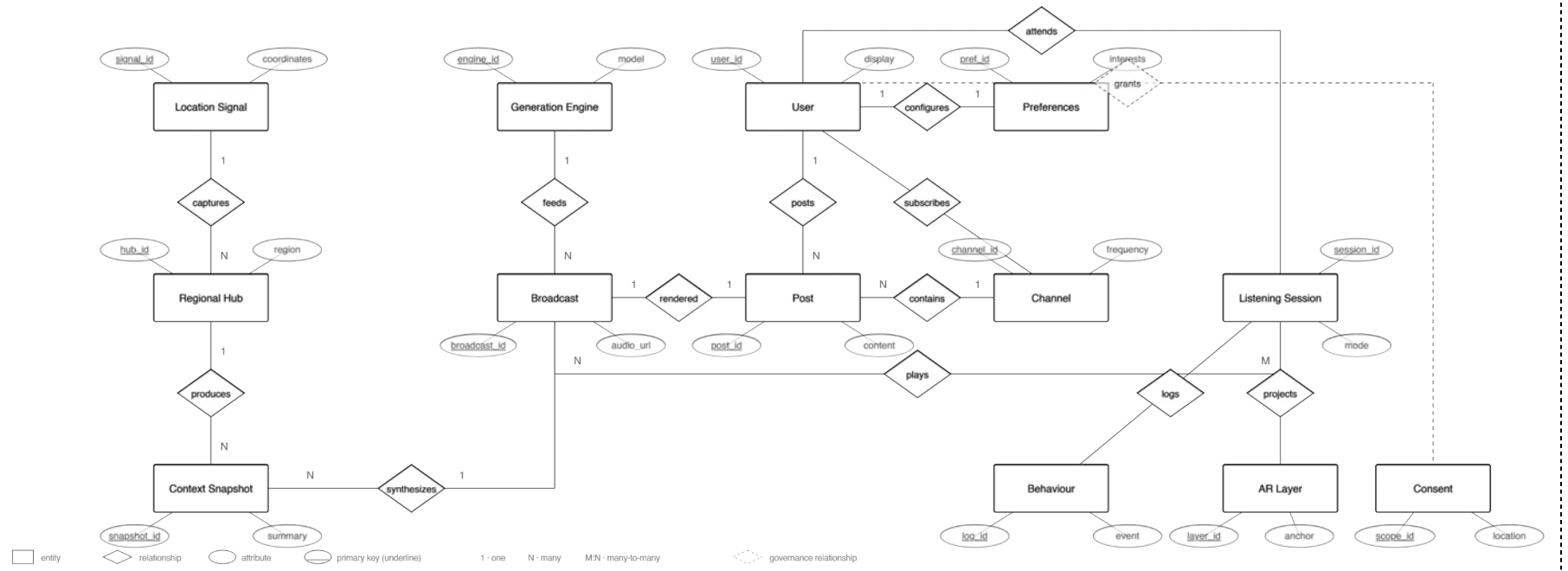
Key Initiative - I

Key Initiative - II

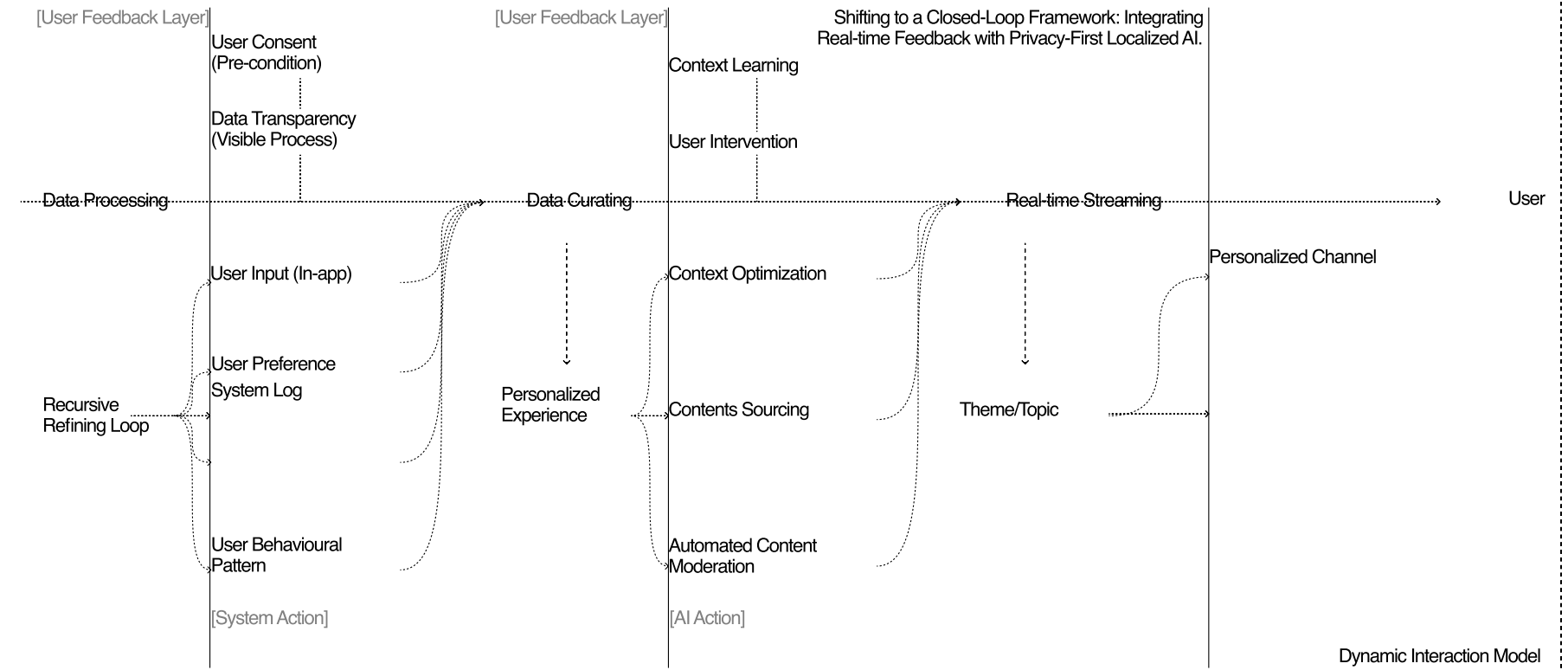




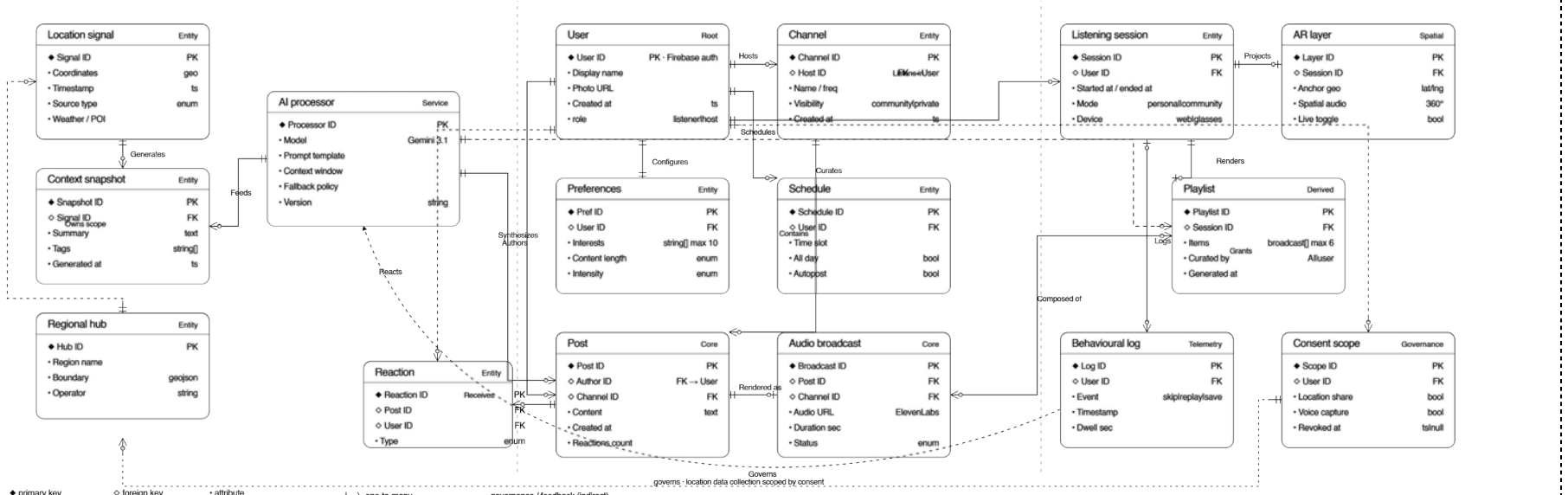
Process Flowchart - HAX Overview



ER Diagram (Overview)



Propositional Model/Interaction



ER Diagram (Technical)

SM



Typography · Helvetica Neue

Display 01

# Living Frequency

Display 02

## Native AI Radio in AR

Body

A radio that listens to you, so it knows what to play next.

Meta

Regular / 400 · Light / 300 · Letter-spacing -0.05em

Rooted in the visual language of the 70s, retro-futurism, and continuity

Podcast/Transmission  
Iconicity

O

-

N

Service Mark  
Legal Register

SM

Skeuomorphism  
On-Off(Power) Button

G

E

N

Bauhaus 93 based  
Black-weight

### Contextual

Every signal is bound to place, time, and self.

Content emerges from where users are, who they are with, and what the moment asks for. OnGen refuses to be content-agnostic.

### Ambient

A layer beneath the eyes, not in front of them.

Audio-first, background by default. OnGen leaves hands and vision free, resisting the attention economics of the screen.

### Living

Design that morphs with and without intervention.

Audio-first, background by default. OnGen leaves hands and vision free, resisting the attention economics of the screen.

### Collective

The signal is shared, the voice is many.

Every listener is a potential broadcaster. Community stories cycle back into the stream. Participation is structural, not decorative.

### Native

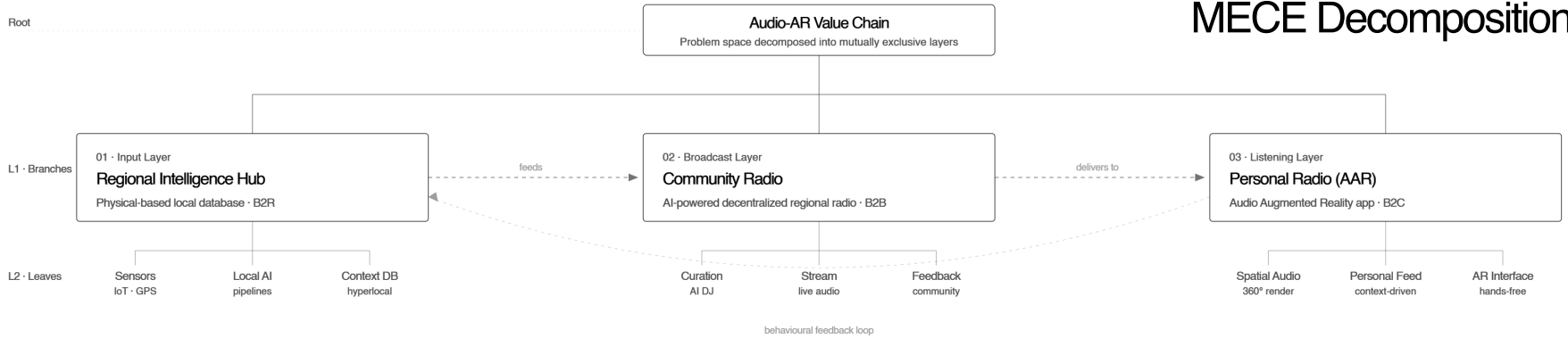
Built for AR, not retrofitted into it.

Generative, real-time, spatially aware. OnGen is designed for an audio-first AR era, not as a port from existing screen paradigms.

OnGen's identity emerges from five commitments that shape its tone, visuals, and user experience. Each value is expressed not only through design, but through how the service listens, speaks, and restrains itself.

<b>Key Partners</b> Location Data Providers: APIs for hyper-local context (POI, events, weather). Hardware Mfgs: Meta (Ray-Ban), Apple (Vision Pro), or mobile OEMs for AAR integration. Community/Cultural Institutions: OCAD University (GradEx 111) for initial user testing and spatial exhibitions.	<b>Key Activities</b> Spatial Audio Rendering: Creating 360° immersive radio environments. Content Curation: Automating the transformation of raw data into broadcast-ready audio. Contextual Translation: Processing visual/GPS data into real-time audio narratives.	<b>Value Propositions</b> For Individuals: A "Personalized radio station" that narrates the world around them in real-time. For Communities: A "Collective Voice" that bridges individual insights into shared radio experiences. AAR Experience: Audio AR that bridges the physical and digital.	<b>Customer Relationships</b> Co-Creation: Users evolve the service as they contribute more personal journals and data. Follower-Broadcaster: A social dynamic where users "tune in" to each other's spatial vibes.	<b>Customer Segments</b> Urban Explorers: People who want a narrated, social layer to their city experience. Local Communities: Campus or co-working groups looking for shared spatial audio experiences. AAR Early Adopters: Users with smart glasses or those seeking "heads-up" interaction.
<b>Key Resources</b> AAR Media Engine: Proprietary logic for "processing" reality into audio. Spatial Interaction Design: Expertise in non-visual UI/UX. Brand Identity: Radio station aesthetic and spatial interaction design.		<b>Channels</b> Web Application: Primary touchpoint (ongenradio.web.app). Smart Glasses Integration: Direct audio-out for wearable tech. Social Sharing: AI-curated audio shared across platforms.		<b>Cost Structure</b> Computing & Inference Costs: Server expenses for real-time audio generation. R&D: Integration with AR devices and design engineering. Operational Costs: Marketing, branding, and exhibition maintenance.

## MECE Decomposition



### Question Marks dominate

Mutually Exclusive

Each service component occupies a distinct layer in the value chain and addresses a distinct customer (B2R, B2B, B2C). RIH processes data, Community Radio broadcasts it, and AAR App delivers it to the listener. A task performed by one is never replicated by another. Data capture does not happen in AAR, and spatial audio rendering does not happen in RIH. No semantic overlap exists at either Level 1 or Level 2.

### Together they cover the full chain

Collectively Exhaustive

The union of three components spans every required function for audio-AR delivery: physical context → processing → broadcast → listener experience → feedback. No external system is needed to complete the loop. The behavioural feedback loop returning from AAR back into RIH closes the cycle, meaning OnGen's portfolio is self-contained and structurally whole.

## VRIO Analysis

Testing OnGen's key resources and capabilities against four criteria of sustained competitive advantage: Value, Rarity, Imitability, and Organization. Used to identify which assets warrant strategic investment and which require protection.

Resource / Capability	Description	Valuable	Rare	Inimitable	Organized	Strategic Implication
AAR Media Engine	Audio-first AR translation of real-time context	Yes	Yes	Yes	Partial	Sustained Competitive Advantage. Priority asset, organize to capture
Spatial Interaction Design	Non-visual UI/UX expertise for ambient media	Yes	Yes	Partial	Yes	Temporary Competitive Advantage. Scarce talent pool, defend while it lasts
Brand Identity	Radio-rooted aesthetic, retro-futurist voice	Yes	Partial	Partial	Yes	Temporary Competitive Advantage. Differentiating today, copyable long-term
Community Partnerships	OCAD, cultural institutions, GradEx 111 pilot	Yes	Yes	Yes	Partial	Sustained Competitive Advantage. Relational moat, formalize governance
Location Data Pipeline	Hyperlocal POI, weather, event aggregation	Yes	No	No	Yes	Competitive Parity. Commodity layer, partner don't build
Gemini API Dependency	Core AI inference via external service	Yes	No	No	No	Competitive Disadvantage. Risk vector, plan migration path

## BCG Growth-Share Matrix

### Question Marks dominate

01 Current

All three OnGen units enter market as Question Marks. High growth category, no share yet. Capital-intensive phase requiring deliberate investment.

### AAR App targets Star

02 Projected

All three OnGen units enter market as Question Marks. High growth category, no share yet. Capital-intensive phase requiring deliberate investment.

### Incumbents lack locality

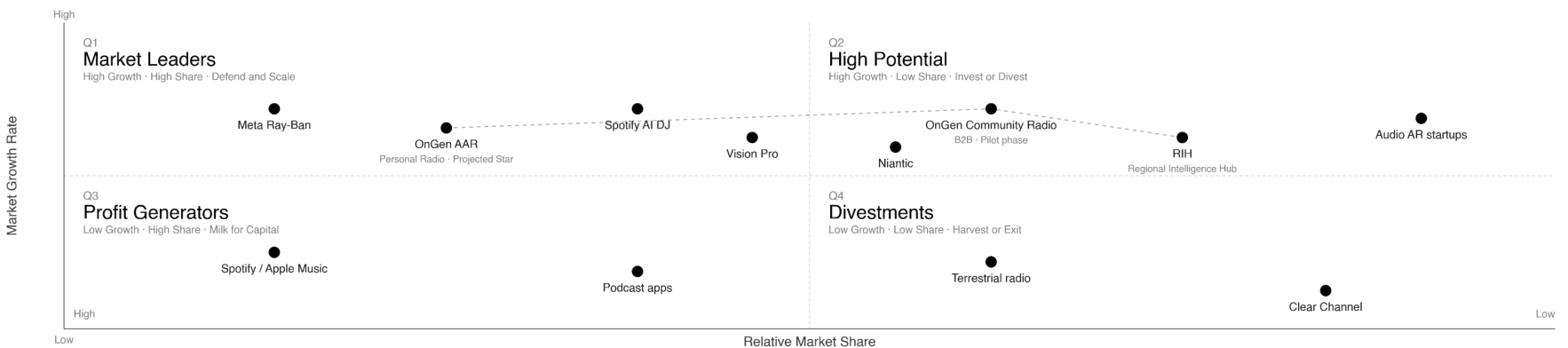
03 Moat

All three OnGen units enter market as Question Marks. High growth category, no share yet. Capital-intensive phase requiring deliberate investment.

### Collapse scenario

04 Risk

All three OnGen units enter market as Question Marks. High growth category, no share yet. Capital-intensive phase requiring deliberate investment.



# 30%

### KPI I

## Habit Formation Rate

7-Day Return Rate  
 Beyond a one-time experience, the service is now a weekly routine. This shows retention power far stronger than mere subscriber numbers.

# 15min

### KPI II

## Audio-to-Session Ratio

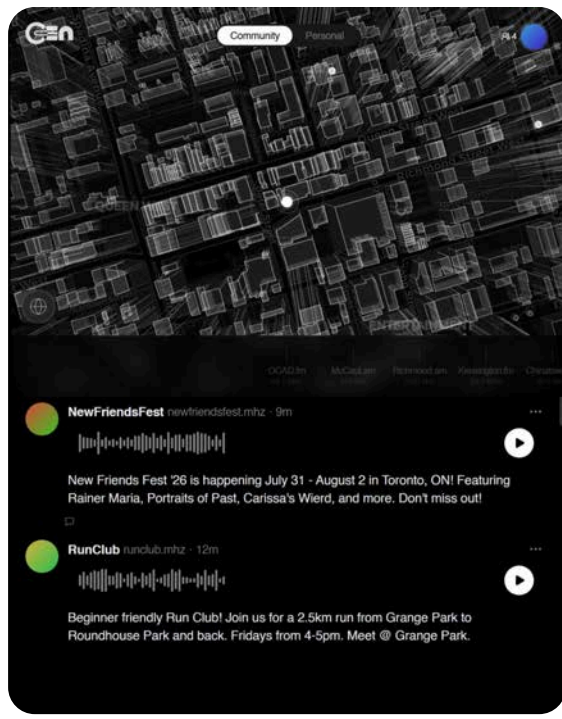
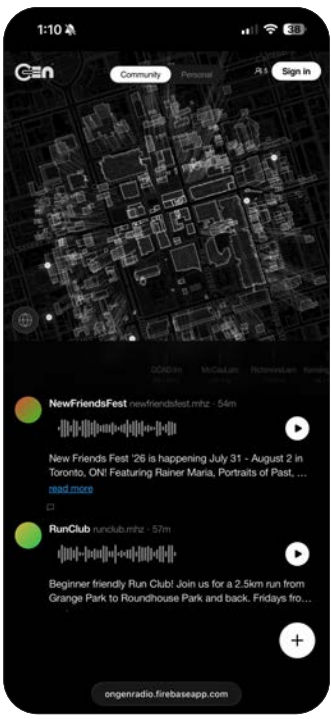
Background Listen Duration  
 This signifies securing a real share of the user's background. Unlike screen-based rivals, it achieves invisible immersion by occupying "time."

# 3+

### KPI III

## Interaction-to-Listen Depth

Average Interactions per Session  
 Active response to audio content ensures high data density. This is a core asset for precision in future recommendations and ads.

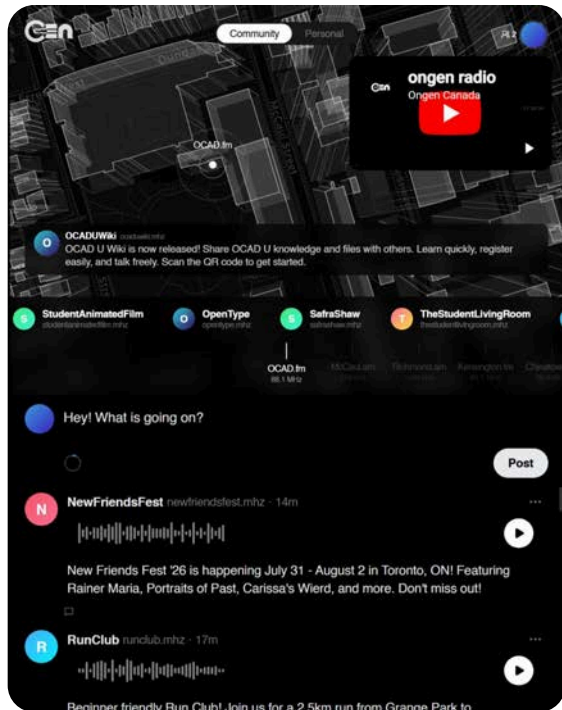
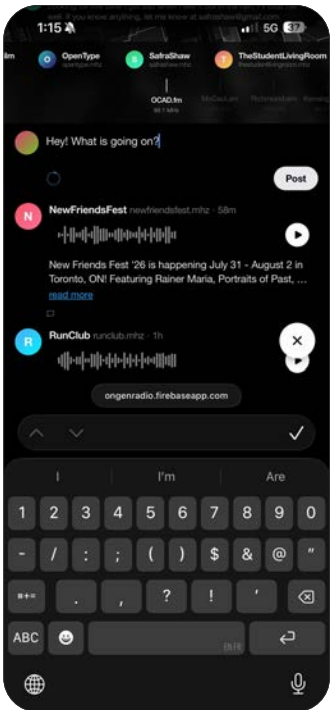
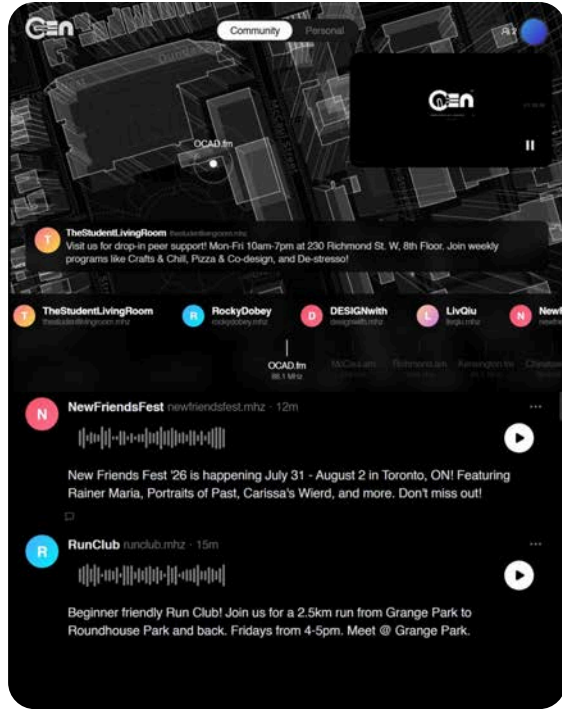


### Open Community Space

As previously mentioned, Community Radio is a space where community members communicate directly and actively influence the shared stream in real time. In other words, it functions as an open space for communities, where visitors can discover what communities exist and what activities and information they offer.

### Local Information

The stream represents locally specific information. It surfaces special local events, local issues and happenings, and the unique elements and culture of a locale that are often difficult to capture in digital spaces.

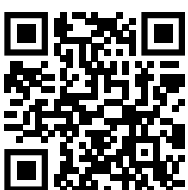
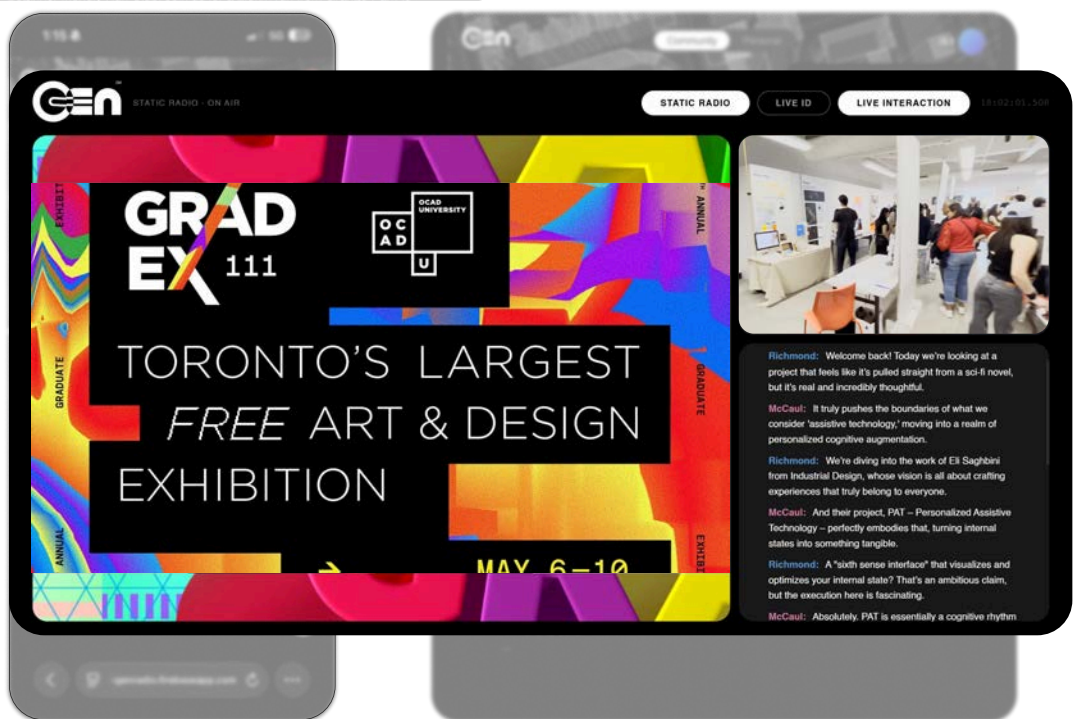


### User Reactions & Digital Participation

Furthermore, in the current format (web app-based), users can leave reactions on the feed, which then cycle back into the stream. This not only increases user engagement but also activates participation from those in the digital layer. (In the case of the AAR app, the interaction shifts to audio-based participation.)

### Visual Radio Streaming

On-site footage and community updates can be streamed not just as a podcast format but as a visual radio format. Through this, it goes beyond simply capturing the presence of the venue and maximizes immersion.



# Maya Chen

Urban Explorer / Graduate Student

Username

38.72hz

Age

27

Education

Media Studies  
University of Toronto

Location

Toronto, ON  
Queen West

Archetype

The Wanderer

## Background

Maya walks through the city with earbuds in, treating streets like a soundtrack to her day. She resists the algorithmic feed but still wants to discover what's happening nearby: exhibitions, pop-ups, community events. For her, the city is a living text she'd rather listen to than scroll through.

## Motivation

- Discover local culture without active searching
- Replace doomscrolling with ambient information
- Feel rooted in the neighborhood she moves through
- Keep her walks screen-free but informed

## Pain Points

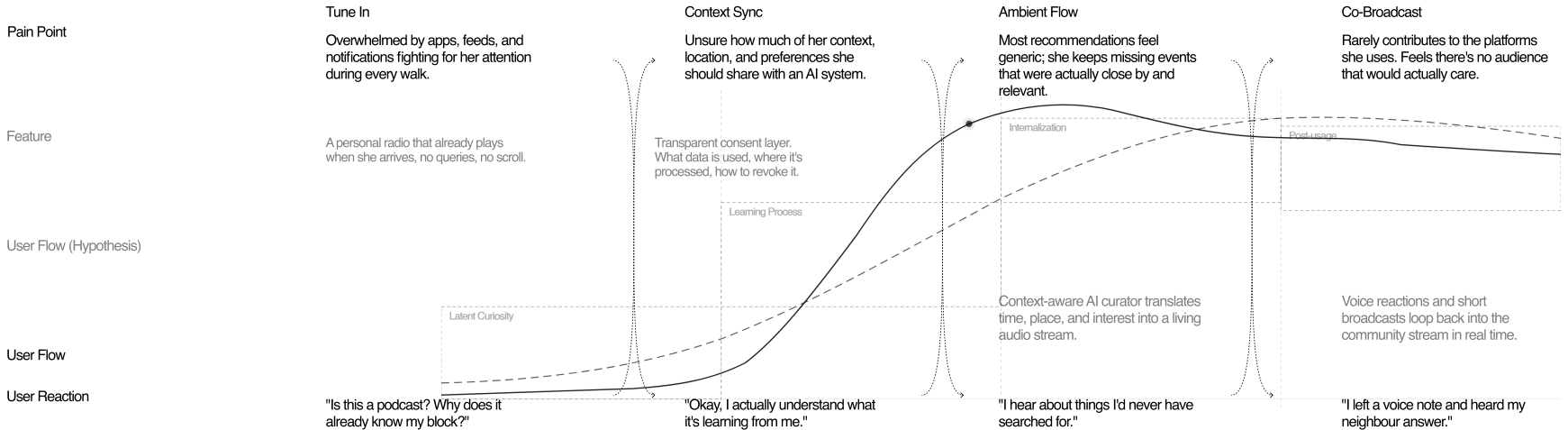
- Information overload across apps
- Missing local events until after they happen
- Navigation apps feel cold and transactional
- Discovery feels like work, not serendipity

## Daily Behaviors

- Walks 45+ min daily, always with AirPods
- Listens to podcasts, indie music, ambient sets
- Checks Instagram maps for "what's nearby"
- Saves events she forgets to attend

## Technology

- Smartphone
- AR Glasses
- Wearables
- AI Assistants
- Social Media



# Jordan Campbell

Community Member / Coworking Space Manager

Username

107.06hz

Age

31

Education

Business Admin  
Toronto  
Metropolitan U.

Location

Toronto, ON  
Kensington Market

Archetype

The Connector

## Background

Jordan runs a coworking space in Kensington and organizes open-mic nights, pop-ups, and monthly socials. His work is making strangers feel like regulars. Social platforms dilute the local culture he's trying to build; he wants a channel that belongs to the neighborhood, not to an algorithm 3,000 km away.

## Motivation

- Amplify voices of the people he works alongside
- Coordinate events with minimal friction
- Preserve the identity of Kensington culture
- Give members a reason to show up in person

## Pain Points

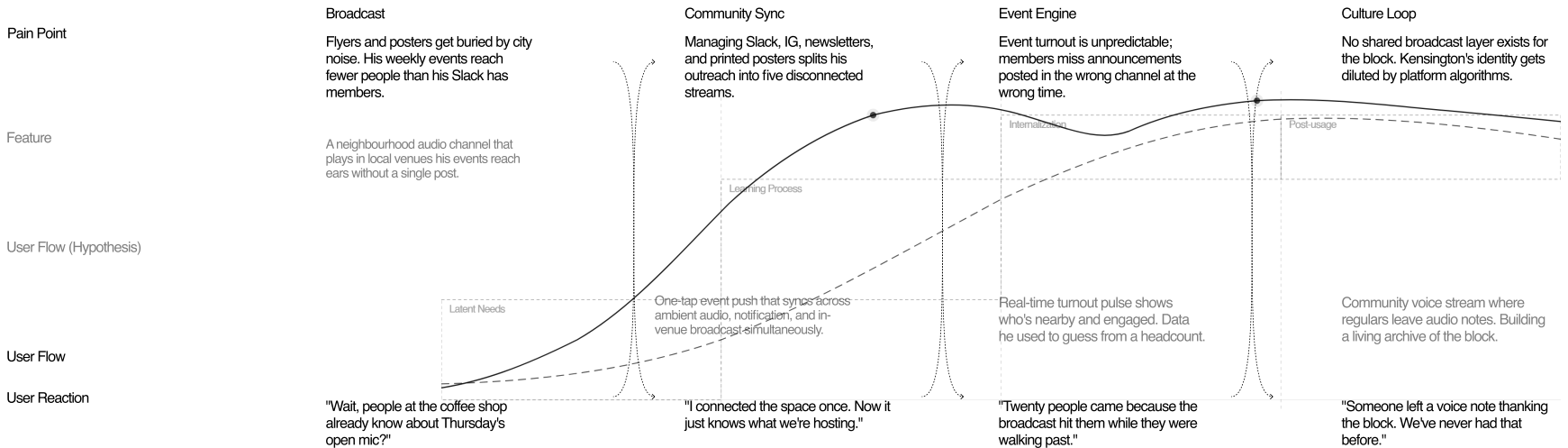
- Flyers and posters buried by city noise
- Instagram reach keeps shrinking for local posts
- Members miss announcements across channels
- No shared broadcast layer for the block

## Daily Behaviors

- Hosts 2-3 community events every month
- Manages Slack, IG, newsletter, and posters
- Chats with every regular who walks in
- Tracks turnout in a spreadsheet by hand

## Technology

- Smartphone
- AR Glasses
- Wearables
- AI Assistants
- Social Media



# Alex Rivera

AAR Early Adopter / Senior UX Designer

Username

86.51hz

Age

35

Education

HCI  
Carnegie Mellon  
University

Location

Toronto, ON  
Distillery District

Archetype

The Pioneer

## Background

Alex has been wearing smart glasses daily since the first Ray-Bans launched. She designs products for a living and tests every new AR/AI device that ships. Visual AR has disappointed her: clunky, battery-hungry, attention-stealing. She is convinced the real breakthrough is audio-first AR, where the interface fades into the environment.

## Motivation

- Interact with AI hands-free, eyes-free
- Stay ahead of emerging interaction paradigms
- Reduce screen time without losing capability
- Test audio-AR as a serious productivity layer

## Pain Points

- Visual AR disrupts focus and drains battery
- Voice assistants only respond when summoned
- No ambient AI layer between apps and reality
- Context is always manually entered

## Daily Behaviors

- Walks 45+ min daily, always with AirPods
- Listens to podcasts, indie music, ambient sets
- Checks Instagram maps for "what's nearby"
- Saves events she forgets to attend

## Technology

- Smartphone
- AR Glasses
- Wearables
- AI Assistants
- Social Media

