

From Curiosity to Belonging

Seven months on why streaming makes fans invisible, and an adaptive UI that fixes it.

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Executive Summary

Amazon Music sponsored a five-person Carnegie Mellon MHCI team for seven months to reimagine the artist-listener relationship. Research narrowed the brief: streaming holds years of history between a listener and an artist and reflects almost none of it back. A fan with 3,200 plays sees the same artist page as someone hearing the song for the first time.

FIRST LISTEN • TODAY

3,200 PLAYS • 10 YEARS



Thinkin Bout You

Frank Ocean • 1,423,456,789





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We designed Adaptive UI: same artist, different page for every fan. The catalog stays identical; what changes is how much of that history the interface admits to knowing, across three tiers earned by listening alone. Every design decision is grounded in 85 survey responses, 22 interviews, two staged experiments and 17 tested assumptions, and the concept was evaluated head-to-head against the live Amazon Music app.

7 months, two research cycles	85 survey responses, 22 interviews	19 evaluation sessions across 3 rounds	4 product surfaces designed and tested
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About Amazon Music

Amazon Music is a global streaming service within Amazon's devices and services business, reaching listeners across phones, Echo speakers, Fire TV, and cars. The brief was wider than playback: moving from a consumption product toward closer ties between artists and listeners. Sponsors Matthew Spangenberg and Se One Park met with the team weekly for seven months.

The Opportunity

Amazon Music can make loyal fans **feel seen** and **part of an artist's tribe** through the listening experience itself, not a social

Fans build fandom outside of streaming, then return to the app to press play. Amazon Music holds the listening history but not the relationship. Fandom is felt privately long before it is expressed, and social options ranked lowest in the survey.

That reframed the question: how might an interface recognize loyal listeners without asking them to perform? Loyalty is where retention concentrates, and a catalog war cannot buy it.

What do you feel connected to through music?

Select all that apply. n = 85

INTERNAL & ARTIST FACING

A mood, a memory, or part of myself

91%

Specific songs or albums

65%

Artists

62%

SOCIAL

Other listeners

20%

Online communities

18%

Approach

Five MHCI students, full time, January to July 2026, in two cycles: find the problem, then find the solution. Desk research kept producing framings the field contradicted, so a record-store probe set the lens and a survey of 85 listeners tested it. The summer ran backwards on purpose: viability was tested before any concept was picked, five concepts ran in parallel, and the client's UX researcher reviewed every protocol.

JAN - APR • DISCOVER

Framing

PESTLE and competitive audit, 30+ hrs of device testing, a vinyl-shop probe, 22 interviews and a two-part survey.

FEB - APR • DEFINE

Choosing

600+ synthesis nodes across three affinity boards, a client workshop, four themes and 17 assumptions ranked by risk.

MAY - JUN • DEVELOP

Testing belief

Two staged experiments on social tolerance and context, plus five concepts tested in parallel, then converged.

JUN - JUL • DELIVER

Validating

A high-fidelity prototype in Amazon's design system, evaluated in 10 moderated sessions against the live app.

Key Insights

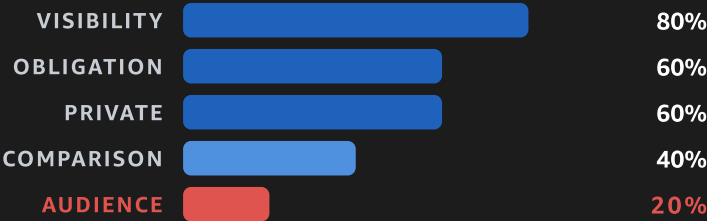
Fans reject the stage, not the recognition

Recognition was welcomed; broadcasting was not.
Evidence: Private visibility was accepted by 80% of participants; public posting fell to 20%.
Impact: Social features became inbound rather than broadcast.

Trust tracks explanation, not data type

Acceptance depended on why data was requested.
Evidence: The same data felt intrusive without explanation but helpful when its purpose was clear.
Impact: Every adaptation had to explain itself and remain reversible.

SHARE OF PARTICIPANTS WHO KEPT EACH MECHANIC SWITCHED ON [N = 5]



The wall is audience, not visibility.
Being seen is fine. Being asked to broadcast is not.

Outcomes and Deliverables

An **adaptive UI that reshapes itself**, not just its content, across three listener tiers, layering functional, recognition, and belonging needs so fans feel seen by an artist's platform without ever being reduced to a stat.

- TIER 1 **New here:** The deterministic artist record, unchanged. What any listener sees.
- TIER 2 **Returning:** Recognition emerges, ambient signals that the listener is seen, not just a visitor.
- TIER 3 **Longtime fan:** Community, shame-free return framing, and eras of their journey with the artist.

Prototype

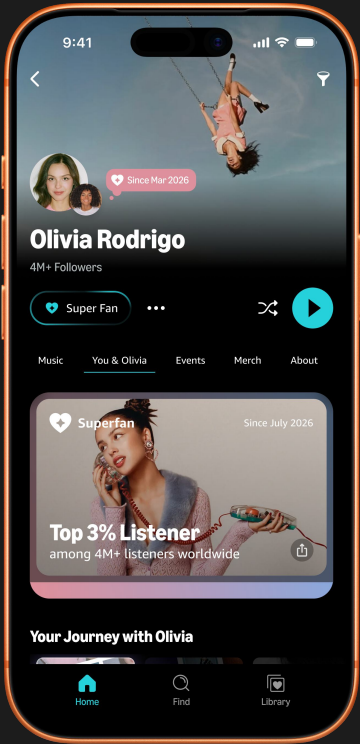
We created a prototype with the adaptive UI system that serves as a high-fidelity product vision built in Amazon Music's design system. Across three core surfaces, the interface progressively recognizes listener loyalty through listening history, milestones, and contextual personalization while preserving familiar navigation.

Evidence

Every major interaction traces back to validated research, resulting in thirteen tenets, four design principles, and reusable evaluation methods.

Future Value

The project reframed personalization as recognition rather than recommendation, providing Amazon Music with both an implementable concept and a framework for future product decisions.



Superfan view for the You & Artist tab that reflects their journey

Impact

Organizational

Turned debate about social features into measurable design criteria and eliminated two weak directions before engineering.

User

Showed how Amazon Music could recognize long-term loyalty without requiring public participation, ranking, or self-promotion.

Long-term

Provided reusable principles, tiers, and test protocols for evaluating future personalization concepts before implementation.

Recognition compounds into deeper relationships

- 1 **Identify meaningful loyalty**
Behavioral signals reveal a strong artist relationship.
- 2 **Recognize the relationship**
The interface reflects what the listener has earned.
- 3 **Unlock more relevant experiences**
Adaptive UI reveals what matters most at this stage of fandom.
- 4 **Deepen the relationship**
Recognition encourages continued exploration and belonging
- 5 **Strengthen loyalty**
Continued listening creates richer signals for future recognition.

