Music Recommendations: Why People Don't Use Them

#Qualitative #Heuristic evaluation #Journey mapping #Usability testing

Context

The product was a mobile app for music streaming service. The team launched a new recommendation feature 3 months ago, but only less than 2% of the total user base accessed it. Team leaders wanted to know “why” users didn’t use the system.

Challenges

- The product was a complex combination of many features, which I had never used it before
- UX resource was highly limited - I was the first and the only UX researcher in the team
- Low UX maturity - The team consisted of data scientists and ML engineers who had never worked with UX experts

Actions

To solve the problem, I chose a qualitative approach to answer "why" rather than "how many/much". My strategy was to start with a lightweight method to get the result quickly, and then move onto the next one to maximize understanding and efficiency with scarce resources. When I got the result, I shared it with my stakeholders to improve their understanding of UX.

Research process

Heuristic evaluation: I adopted this method to quickly grasp any obvious issues in the feature. Adapting Jacob Nielsen’s 10 Usability Heuristics for User Interface Design, I operationalized criteria and conducted a comparative analysis across pages in the feature.

Information architecture analysis: For the next step, I wanted to capture the “big picture” of how the recommendation feature was connected to other parts of the product. I created an information architecture and analyzed it to find any bottleneck in user flows.

Journey mapping (Current state): Then I created a journey map as the overview of the current UX design. At this stage, I was able to articulate the assumption of “why” the majority of users did not access the feature, as well as an additional question about long-term user behavior.

Usability testing: Finally, I ran 30-min usability testing sessions with two user groups, six-month usage vs. 5-year usage, to validate the assumption. For the task, users asked to play their favorite music under normal vs. specific circumstances like driving or jogging, using think-aloud protocol.

Results

Heuristic evaluation revealed that too many redundant features packed in limited page spaces, lacking visual saliency, and most of them were not customizable.

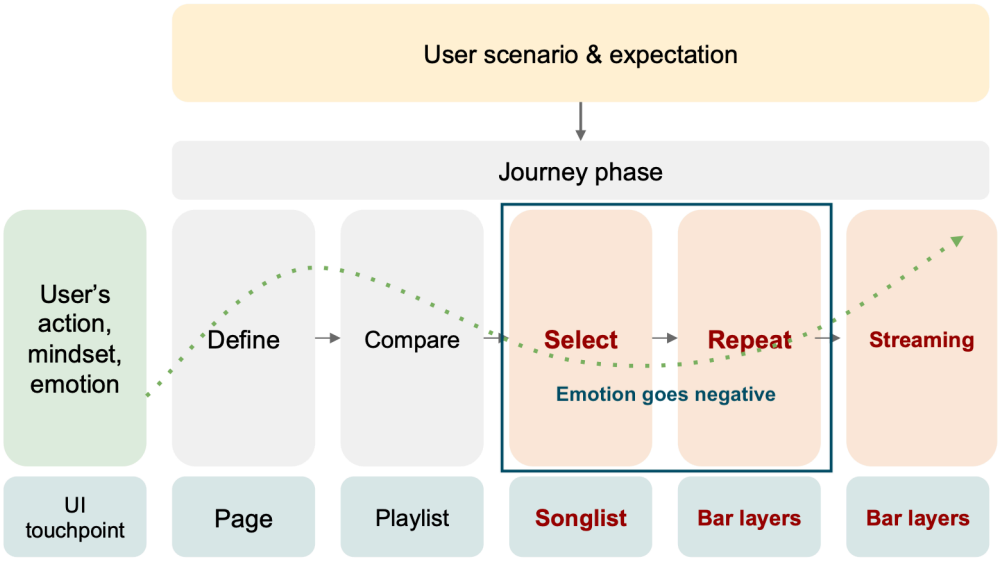
Criteria		Page A	Page B	Page C
1. Visibility of system status	purposefulness	Y	Y	N
	feedback	Y	Y	Y
2. Match b/w system and the real	language	Y	Y	Y
	order	Y	N	Y
3. User control and freedom	escape option	Y	Y	Y
	undo/redo	N	N	N
	visual saliency	N	N	N
4. Consistency and standard	consistency	Y	N	Y
	no redundancy	N	N	N
6. Recognition rather than recall	memory minimization	Y	Y	N
	readability	N	N	Y
	visual intuitiveness	N	N	N
7. Flexibility and efficiency of use	shortcut	Y	Y	Y
	customization	N	N	N
8. Aesthetics and minimal design	no irrelevance	N	Y	N
	visual hierarchy	N	N	Y
10. Help documentation	resource	Y		
	easy search	Y		
	efficiency	N		

Information architecture showed that recommended song lists were not connected to the actual streaming feature. This was a critical finding because the team's main KPI was streaming count of recommended songs.

Moreover, **the journey map** indicated a possibility of user dissatisfaction in the “selecting” phase:

- User selects a song in the recommended list
- Then manually adds it to the streaming bar
- Repeats two actions until all desirable songs were added

Below is the overview of the journey map. Identifying details have been removed to maintain confidentiality.



Assumption: Too complicated UI, broken connections, and tedious tasks would prevent users from accessing newly launched recommendation pages.

One interesting point, however, was that unexpected **hidden "shortcuts"** were randomly connecting different pages and functions, which might help users stream music faster.

Would long-term users be aware of these shortcuts? If so, would they behave differently from short-term users?

Yes, it was. **Usability testing** suggested four findings:

1. While short-term users hesitated or made mistakes throughout the task, long-term users actively relied on detours by using shortcuts, mainly due to complexity in UI.
2. Such behavioral patterns prevented both groups from accessing recommendation features: Short-term users used up cognitive resources before reaching the page while long-term users simply bypassed it with shortcuts.
3. When exposed to the recommended song lists, all users recognized and seemingly preferred familiar songs from the list.

4. When asked to play music under “driving” or “jogging”, users’ behavioral patterns became conservative - they tended to skip searching and selecting phases but entirely relied on a chosen playlist.

Impact

The research results brought several impacts:

- **Major reasons for low feature usage were illuminated: complicated UI design and disconnections in the user journey.** These issues prevented both short and long-term users from discovering and using the recommendation feature.
- **A novel insight shed light on the importance of familiarity in the recommendation feature.** Specifically when users are in busy contexts, they tend to rely on familiar playlists instead of exploration.
- **The insight led to further quantitative research that significantly improved the team's KPI.**