



UX Take Home Challenge: Pandora

Marshall Robbins - 4/8/19

PROCORE[®]

WHY PANDORA?



I'm a Musician

As an educated musician, I enjoy working with products that help people work with or experience music.

I'm Not a User

As someone who has not actively used Pandora, I was able to approach the challenge with an open mind.

Opportunity

After quickly exploring each app for evaluation, I thought Pandora had the most room for improvement.

SUMMARY - TL;DR



What

A customization selector that lets Pandora listeners further personalize their stations in terms of relevance and variety.

Why

- Users' biggest complaint was lack of control over stations
- Implementing further customization can increase ad revenue

MY PROCESS



Research

I did 2 interviews and secondary research to learn about how users use the app. I then analyzed this data to form insights that would guide my design direction.

Ideation

I spent some time ideating on the whiteboard different ways to address the insights. I then took my top ideas and dove deeper into the business values and constraints.

Design

Once having a good idea of which design direction to take, I created some mockups of the core screens. I also looked at limitations and how it could be taken further.

Documentation

I documented through the process, as having clearly documented findings and insights can help during ideation and designing. I cleaned it up at the end.

1. RESEARCH

What insights did I form by listening to users?



I aimed to learn more about Pandora's product, and specifically user's **motivations** and **pain points**.

Secondary

- Competitive analysis
- Online reviews
- News articles

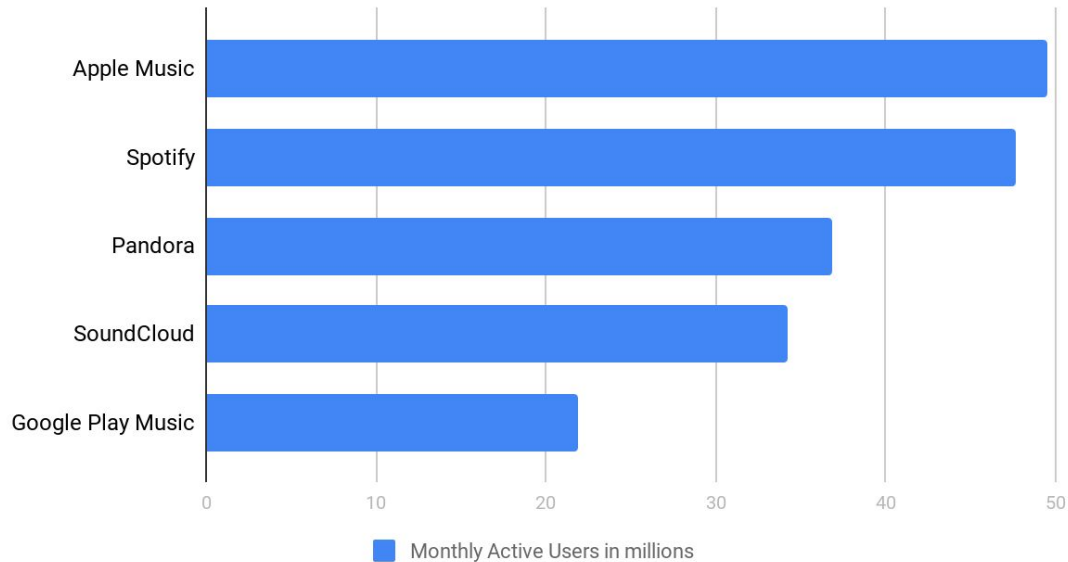
Primary

- 1 interview with a user
- 1 usability test of the current application

COMPETITORS



Top 5 Music Streaming Services



COMPETITIVE ANALYSIS



	Price	Free account	Personalized stations	Individual song plays	Content variety
Apple Music	\$10 per month (\$15 family plan)	✗	Paid only	✓	50 million tracks
Spotify	\$10 per month (\$15 family plan)	✓	✗	✓	45 million tracks
Pandora	\$5 per month (\$10 for library) (\$15 family plan)	✓	✓	Paid only	40 million tracks
SoundCloud	\$10 per month (\$15 family plan)	✓	✗	✓	More undiscovered music, less famous artists
Google Play Music	\$5 per month (\$10 for full access)	✓	✓	✗	40 million tracks

CORE VALUE PROPOSITION



Pandora has the **best station personalization** of all its competition, with many competitors not offering it at all.

“A music and podcast **discovery platform**, providing a **highly-personalized** listening experience to approximately 70 million users”



The stations do a really good job. I use it specifically to just get random assortments of artists.

- Lisa



“Spotify used to have the thumbs up and thumbs down feature, and I missed it when they took it away because sometimes you’re just busy and you end up listening to music you don’t really like”

- Eliza

PAIN POINTS



I analyzed reviews of Pandora on [BestCompany](#). I took the 20 of the most recent posts that included a negative comment, and grouped them by pain points. 70% involved wanting more control over stations.

★★★★☆ Ponch Thompson

February 12th, 2019 South Jordan, UT

[DETAILS](#) ▾

We use Pandora, but the requirement to listen to other artists in the same genre is frustrating. We use it less than other streaming services.

★★★★☆ Jeff Blackett

February 1st, 2019 Orem, UT

[DETAILS](#) ▾

I have used Pandora for quite some time. I feel that its functionality is above average for a streaming music service. The one place I feel that Pandora lacks is the repetitive nature of their playlists. I would recommend their services for anyone looking for music streaming.

★★★★☆ Myah Smith

February 11th, 2019 American Fork, UT

Pandora was a good app to use for a while. I enjoyed having the playlists made for me based on what I like, but I wanted to be able to pick my own songs.

★★★★☆ Kate Gregson

December 3rd, 2018 Gilbert, AZ

I personally do not like Pandora. I find that they repeat the same songs over and over again, at times with no connection to the selected genre of the user. I would not recommend it.

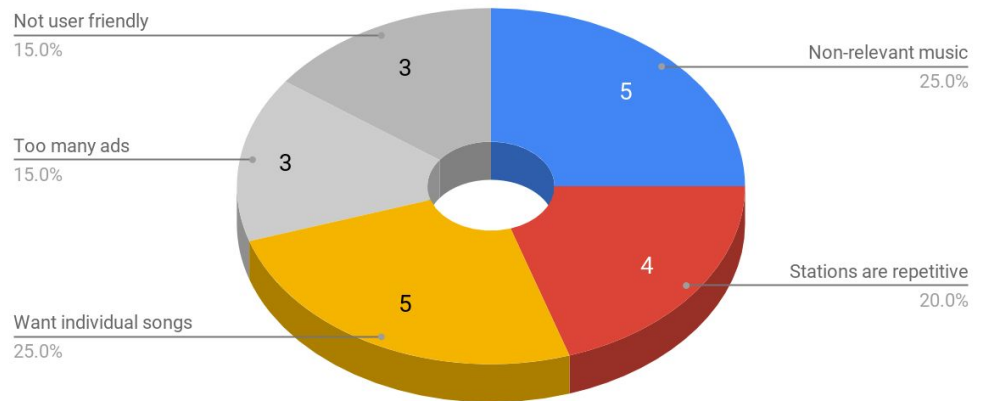
PAIN POINTS



Generally users either wanted **less repetition** in stations or **less variety**. I assume those who wanted to play individual songs are also motivated by wanting either less repetition or variety.

(I didn't focus on comments about ads because that is Pandora's main business model. I ignored comments about user friendliness because they were too vague.)

BestCompany Reviews



INSIGHT 1 - Customization



Users want more control over their stations, but often in very differing ways.

- 14 of 20 recent negative reviews involved wanting more control
 - 5 specifically wanted less repetition
 - 4 specifically wanted less variation
- 65-75% are of music streamers are likely “lean-back listeners”, wanting curated content but without having to pick themselves

“I find that they repeat the same songs over and over again, at times with no connection to the selected genre” - Kate Gregson, reviewer

INSIGHT 2 - Busy Users



Users are generally driving, working out, or otherwise preoccupied when listening to stations

- 85% of all listens come from mobile devices
- 44% of US consumers listened to online radio while in a car
- 71% of users exercise weekly
- Lisa mentioned doing most station customizing very early on

"I will generally listen for a few hours a day while I am walking around setting my room up for classes" - Lisa, Pandora listener

INSIGHT 3 - Better Ads

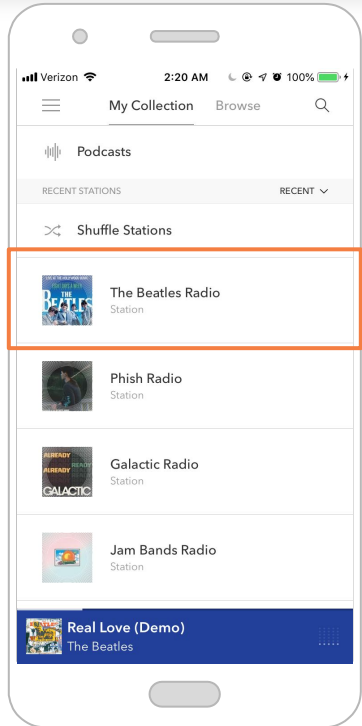


Increasing station personalization options and interactions can help increase ad revenue.

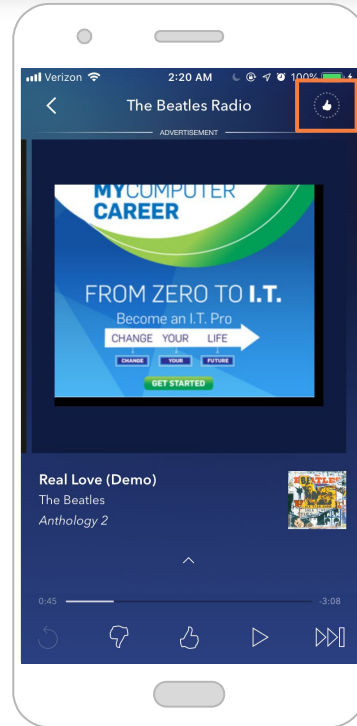
- Only 5% of users pay for premium
- 81% of revenue comes from advertising
- This [NYTs article](#) suggests that collecting further data about users station preferences would improve behavioral targeting

"It's becoming quite apparent to us that the world of playing the perfect music to people and the world of playing perfect advertising to them are strikingly similar" - Eric Bieschke, Pandora's chief scientist

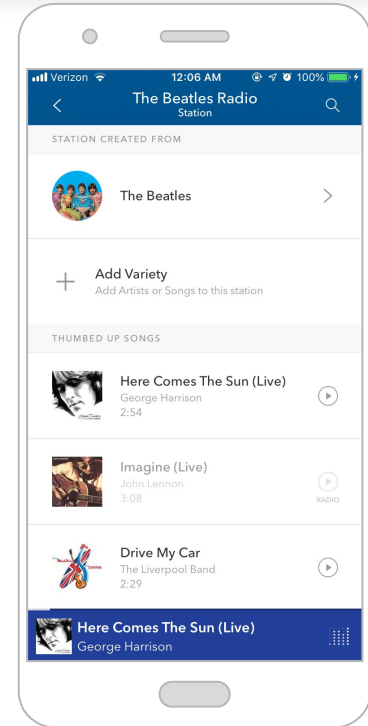
CURRENT DESIGN



My Collection - pick a station



Station - vote while listening



Station Editing - edit station



**How might we
increase ad revenue
while helping busy
users further
personalize their
stations?**

2. IDEATION

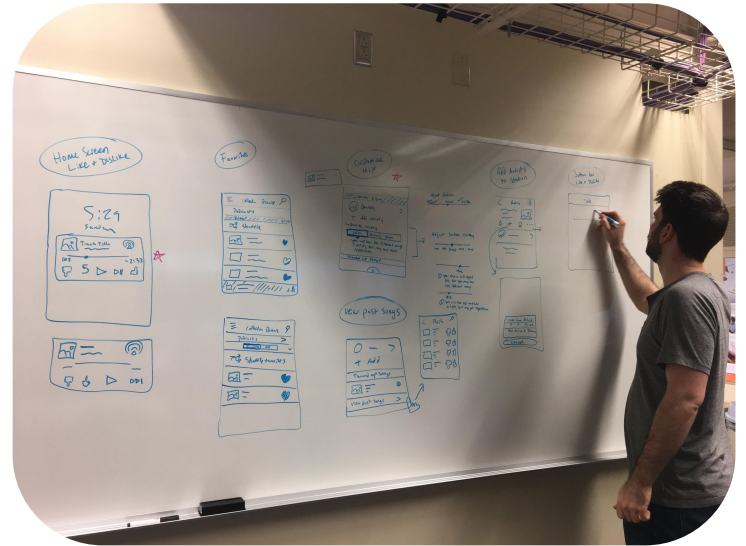
How did I narrow my focus and explore options?

IDEATION

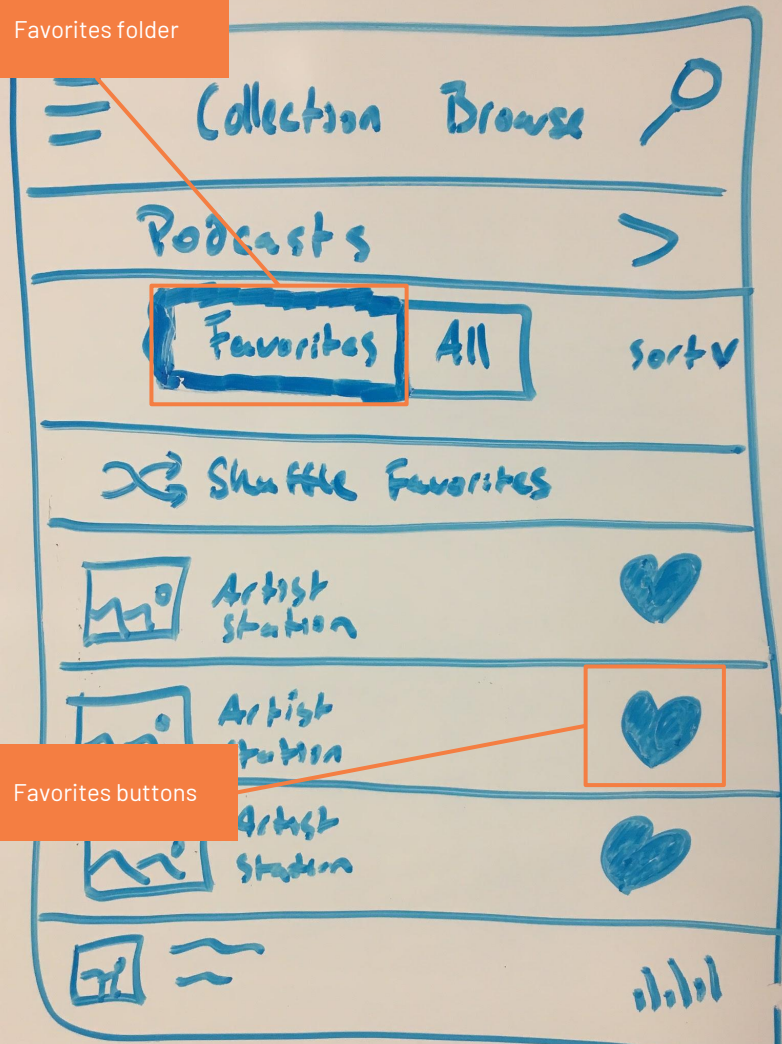


I generated about a dozen potential ways we could address this problem on the whiteboard.

I further weighed my **top 3 concepts**



Favorites folder



Favorites buttons

CONCEPT 1



Station Favoriting

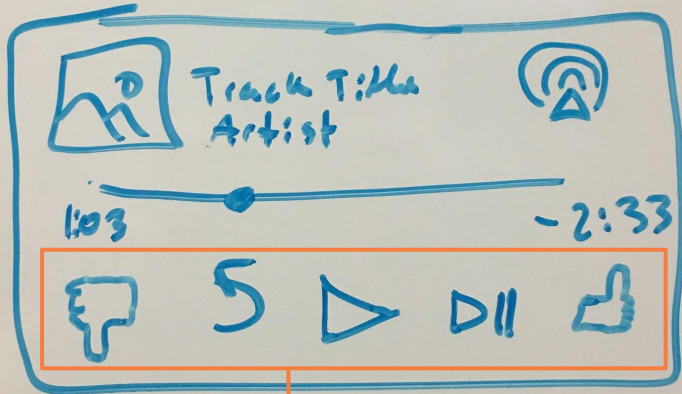
Currently the only way to play previous stations is through the “recent” list under “my collection.” This concept would allow users to favorite any playlist that they particularly like, and access them in a separate folder in “my collection.”

While this would give users more access to the stations that work for them, it does not guarantee that it will always be the right balance between variety and repetition. In addition, it only provides minimal extra data for Pandora to improve ads.

CONCEPT 2



5:22
Sunday April 8



5 buttons instead of the standard 3

Home Screen Widget

An updated music player widget that allows users who may be running or driving to do the main actions (like, dislike, skip) from the home screen, without having to unlock their phones.

This would be extremely valuable in helping customers personalize their stations and help Pandora gain data for ads. Unfortunately, I spoke to a developer who said that **this was not feasible on iOS**, because of Apple restrictions. Therefore, I did not pursue this as my main concept though I still believe it is a strong option for the android version.

CONCEPT 3



Customization Selector

Pandora already has a feature where you can go to manage your likes and add new artists to a station. But this still doesn't let a listener control how much **variety** or **repetition** they will get. I want to add a toggle that lets them do just that, so they don't have to do as much when they are busy.

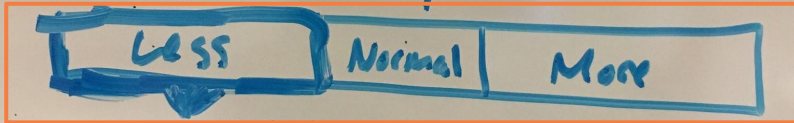
I chose to move forward with this because it aligns both customers personalization and Pandora behavioral ads. In addition, it will be a pretty low development cost, and has a lot of potential for expansion if successful.

Identified from / / / / /

Beetles >

+ Add variety

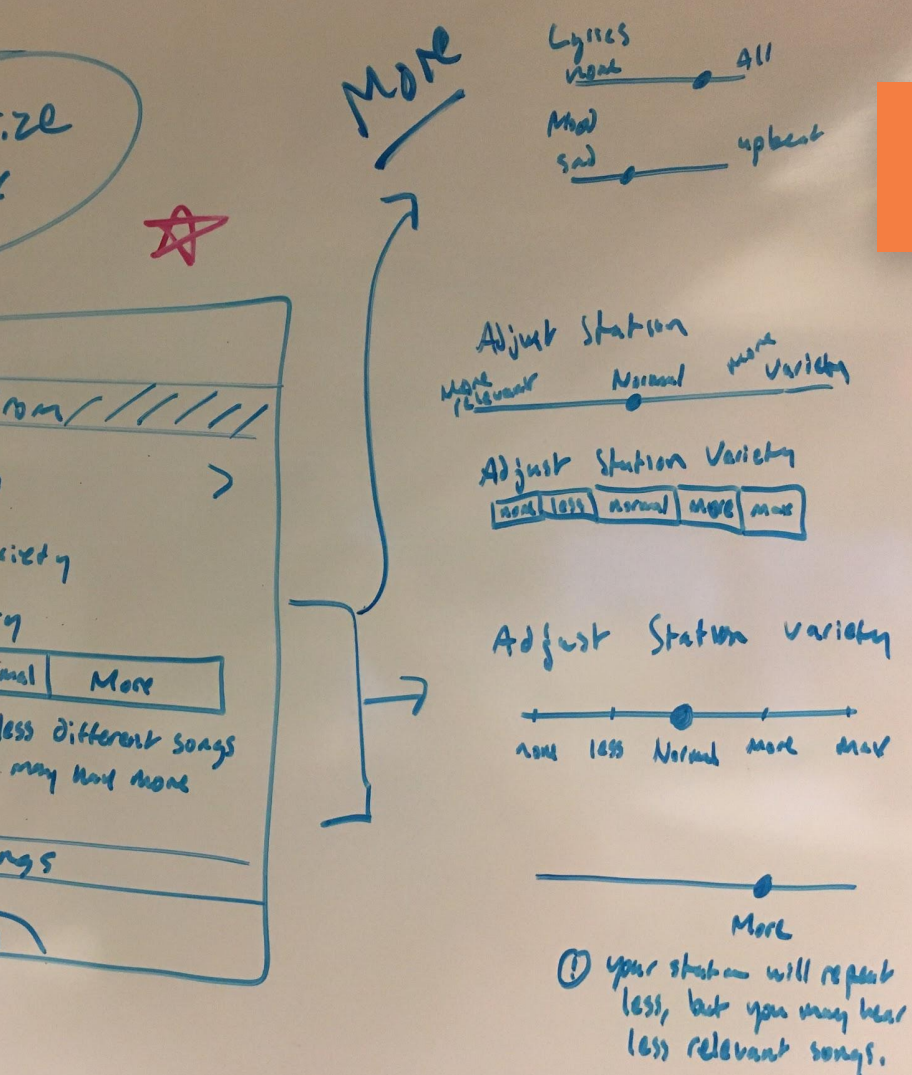
Customize variety



You will hear less different songs + artists, but may have more repetition.

Thumbed up songs

Selector to choose variety of artists in station



CONCEPT 3 - ITERATION



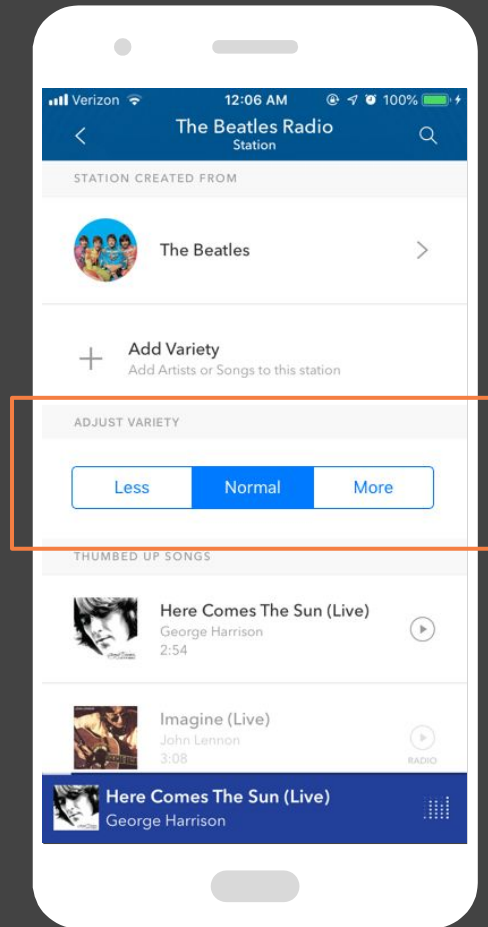
Once I had decided on the customization selector, I did multiple iterations of what this selector should look like.

At the top, I ideated some other customization options for the future (if successful).

3. DESIGN

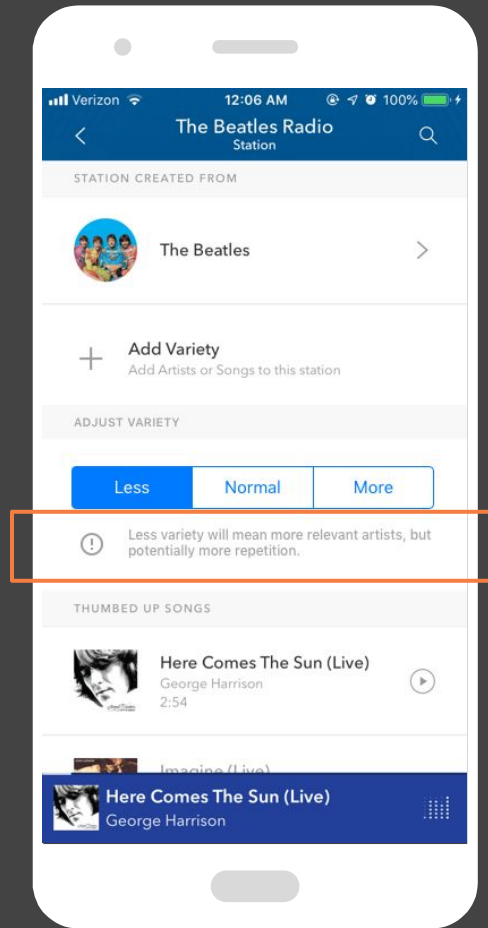
How does the design work?

MOBILE PROJECT

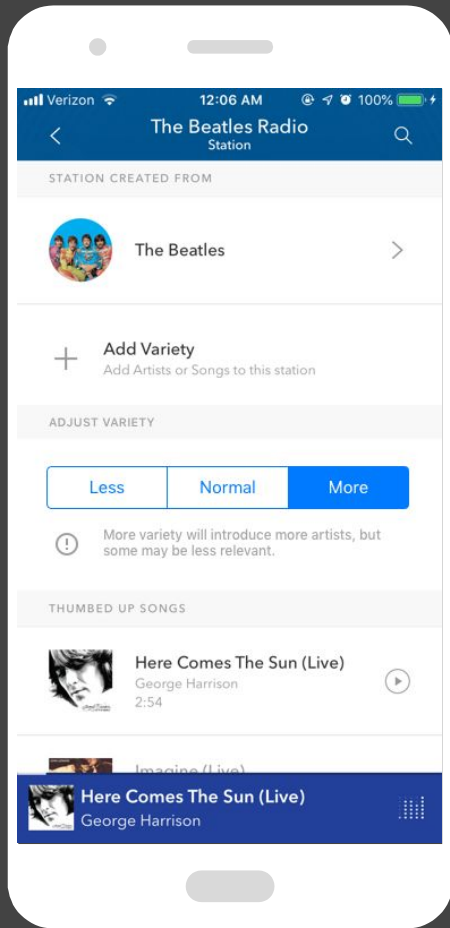


This added section on the station editing page will give users a simple choice of how much variance from the selected artists they want to include.

MOBILE PROJECT



When selecting less, users will be prompted that “less variety will mean more relevant artists, but potentially more repetition” so they understand the option.

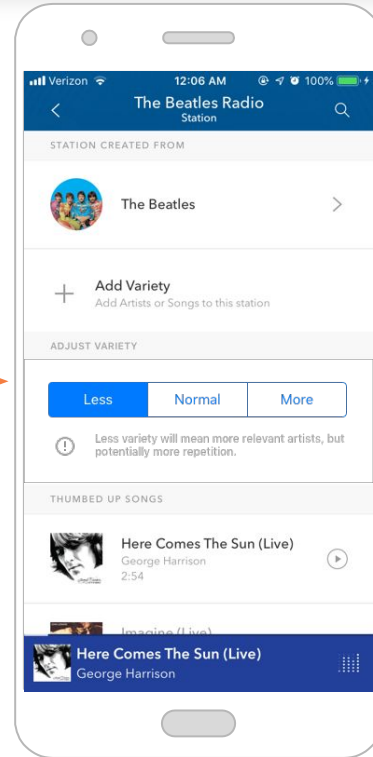
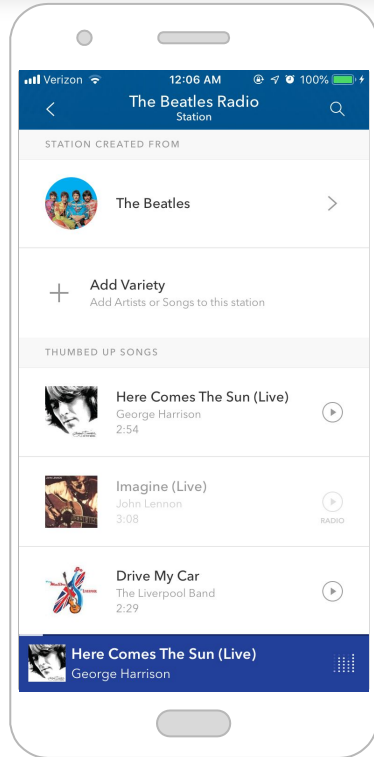


MOBILE PROJECT



When selecting more, users will be again be informed that “more variety will introduce new artists, but some may be less relevant.”

BEFORE AND AFTER



BENEFITS



- Small change, easy to implement
- Helps users have the control over stations they want - whether variety or relevance
- Gives Pandora an extra data set to work with in behavioral ad targeting
- Busy users can worry less about skipping songs
- Helps premium users as well, and doesn't discourage upgrading as the main benefit is becoming ad free.

SUCCESS METRICS



To measure success with this new feature, I would want to run an A/B test to measure:

- **Interaction Rate** - How often is this being used
 - This would help determine if people are generally finding this feature valuable
- **Interaction Time** - When are listeners interacting
 - We can learn if people are preparing new stations in advance more often with this added feature, and if they prefer to continue to edit afterwards
- **Like Rate** - How often listeners like songs
 - This will test if users are getting more of what they want

LIMITATIONS



- I would generally want to do a quick **usability test** with my mockups before moving any further with this concept
- I don't fully know how difficult it would be to edit the algorithms to adjust the variety and repetition. I would want to **talk directly to the developers** to discuss what is and isn't possible.

MOVING FORWARD



- My initial research indicated that the workflow getting to the station editing page could be **more discoverable**
- There may be more **optimal wording** to help users better understand the different choices
 - I would iterate this based on usability testing results
- Users may want to see if a station has been customized in this way from the “My Collections” page, so we could add a little **icon or text indicator**
- If successful, we may want to **expand the customization features**
 - Pandora is based on the [Music Genome Project](#) which collects 450 different musical parameters, which could be used to leverage further customization (such as vocal timbre, tempo, harmonic complexity)
 - If customization features were to be expanded, users may want to save (or favorite) different customized versions of the same playlists

THANKS!

Any questions?

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