

Final Research Proposal: Audio Streaming Service Preferences

Introduction

Spotify has changed the way that the world interacts with the music industry. In this report, we discuss how we will conduct research in order to answer two fundamental questions about Spotify. We will provide history about the platform and explain why this research will impact both the company and the industry. Lastly, we elaborate on two proposed methods for conducting the study and provide a comparison of the two methods.

Spotify is a popular streaming service that was started by a Swedish Web Designer and Entrepreneur, Daniel Ek in 2008. Ek became a millionaire at the age of 23 after selling a successful advertising company called Advertigo. Ek wanted to start Spotify to tackle piracy issues within the music industry. He observed controversial issues with Napster, another popular streaming service, and did not believe their stance against piracy was adequate. In 2006, Ek, with the help of Martin Lorentzon, initially released Spotify in October 2008. After gaining popularity, Spotify was finally released in the United States in July 2011. By October of the same year, Spotify announced that they had two million paying subscribers. Today, Spotify has more than 207 million users and is available in 65 countries in Europe, America, Asia, and Oceania (Lidsky).

Study Objectives

Popular audio streaming companies generally provide their users with similar services. Previous research has been conducted to determine the platform features that users enjoy; however, there is minimal research regarding why Spotify specifically is deemed a top streaming service. Accordingly, as Spotify employees, we plan to investigate what differentiates Spotify from other platforms.

Our chosen participant population will include both previous and current millennial Spotify users. Two research methods have been selected to sufficiently conduct our study and obtain accurate results. First, we will disseminate an online survey that will enable us to learn about participants' streaming service preferences. Second, we will administer a diary study to learn about participants' streaming service usage and habits. After synthesizing and evaluating all collected data, we seek to answer the following questions:

1. Why is Spotify a preferred audio streaming platform?
2. What Spotify features are most popular?

Why the Research Matters

There are many reasons why our findings can benefit Spotify – both the product and the company. Our study results will assist Spotify experience designers and application developers in focusing on the appropriate platform features they need to enhance. The research will direct developers to identify potential new features that will benefit users as well. Most notably, our research targets millennials – the original generation of Spotify users. The results from this study also can be used in future research with participants from other generations to understand how best to cater the platform to other older and/or younger users. By improving the platform's user experience, Spotify will gain more subscribers and followers, thus making more revenue for the company. Lastly, this research will also impact the industry. Conducting this research will allow Spotify to be more competitive with other streaming services.

Proposed Method 1: Digital Survey

The first proposed method to investigate our research questions is an online survey that's designed to learn more about participants' streaming service preferences. The targeted study participants are individuals in North America born between the years 1981 and 1995 who have used or currently use Spotify as a streaming service. Since Spotify collects users' birthdates and geographic location upon registration, this backend data can be utilized as part of the recruitment strategy for in-scope users. To recruit current users, a non-intrusive pop-up to learn more about, and register for, the study will be integrated. To recruit previous users, Spotify user utilization data and stored user contact information will be leveraged to target users who have not used Spotify for at least 45 days prior to when the study launches through an email campaign. The email will acknowledge their usage cessation and politely request their feedback through the survey link.

As there are approximately 87.7 million Spotify monthly active users (MAU) in North America, and 47.9 million of them being premium subscribers, our total sample size will be 1000 participants to account for variability and diversity in user behaviors (Dean 2021). Half of the participants will be active users, an equal distribution of non and premium subscribers, and the other half will be previous users. Between pop-up engagement and completing the survey, we assume a conservative response rate of 10% from active Spotify users and will thus initially recruit 5,000 individuals. For previous Spotify users recruited through the email campaign, we assume a lower response rate of 5% due to added engagement barriers, such as sending to an old email address or spam folder, and will thus initially recruit 10,000 individuals.

Users who engage with the pop-up or email and click the learn more button will be routed to an overview page outlining the study's purpose, expectations, and length and provide a link to register. The Spotify pop-up will link to an overview page that specifies the study is seeking current user input, while the email will link to an overview page that specifies the study is seeking previous Spotify user input. On the registration page for all, users will be presented with informed consent information on potential risks and benefits and are asked to acknowledge the information and verify that they wish to continue. To decrease possible response bias, it will be clear to participants that their responses will remain anonymous. If moving forward, they will then be presented with one of two possible digital surveys to complete depending on if they came from the Spotify pop-up or the email campaign.

Proposed Method 2: Task Observation + Diary Study

The second proposed method for the study will be a combination of task observation and a week-long diary study. This part of the study will help us quantify what makes Spotify the preferred audio streaming service and will be done as a follow up to method 1. While the first study will provide data on participants' sentiments, this study will allow us to analyze how participants are using the application. We will provide participants with an informed consent agreement where we tell the potential participant the purpose of the study, any potential risks, benefits, and any other areas of concern. The research team will identify potential ethical concerns that may impede data gathering. Upon evaluation, we were not able to identify any ethical concerns. A potential risk from this method involves the behavior of the observed in the Hawthorn Effect. The participant may fumble around to complete tasks that are otherwise done without issue. This could potentially skew the analysis from a seemingly uncomfortable interaction with Spotify's user interface (UI). We intend to mitigate any anomalies caused by the Hawthorne effect by also having the participants do a diary about their Spotify usage. The diary will include custom searches, curated content, podcasts, and any other content consumed that day. The benefits far outweigh the risks. Benefits of this study include being able to understand what makes Spotify preferred to other streaming apps like Pandora, Apple Music, and Google Music. This method will allow us to see the path taken by participants to complete tasks. We can also gather data on how the participant interacts with Spotify when not being observed to see a much more organic picture of how Spotify is used.

For the first part of the study, we will have the participants perform a series of tasks. These tasks will include:

- Access their library and report on how many playlists they have

- Go to their liked songs
- Search for a
 - Song
 - Album
 - Artist
- Access shared and public playlists
- Discover a new podcast

In the Diary portion of the study, participants will be asked to record their activities each day answering the following questions:

1. How did you access Spotify today? (Multiple choice, select all that apply)
 - i. Mobile Device
 - ii. Smart TV
 - iii. Gaming Console
 - iv. Web browser
 - v. I did not use Spotify today
 - vi. Other (specify): _____

Skip logic: If 1v. is selected, diary is complete.

2. How long did you use Spotify today? (Multiple choice, select all that apply)
 - i. Less than an hour
 - ii. 1-2 hours
 - iii. 2-3 hours
 - More than 4 hours
3. What were you doing while using Spotify? (Open ended)
4. What features did you access on Spotify? (Multiple Choice: choose all that apply)
 - i. We will use the top six selections from study method 1 survey question:
 - ii. *Skip logic. If selected 3b/c/d/e:* Why is that your current subscription with Spotify? (Multiple choice, select all that apply)
5. When using Spotify, did you have it integrated across multiple devices? (Multiple choice, select one)
 - i. Yes
 - ii. No
6. Did you have any issues using Spotify? (Open ended)
7. Did you use any Spotify curated playlists? (Multiple choice, select one)
 - i. Yes
 - ii. No.
8. Was Spotify the only audio streaming platform that you used today? (Multiple choice, select one)
 - i. Yes
 - ii. No.

We will use a random large sample of current Spotify users to conduct the study. For this study method, we will randomly choose 10% of the users who participated study method 1 to participate in this follow-up study. This will allow us to analyze the difference between what users say they do and compare that to what they actually do. The goal of this method is to bridge the gap between perception and reality.

Comparison of the Proposed Methods

Both methods provide strong stand-alone results; however, using them together will provide a greater depth and analysis of the study. A survey is effective in gathering preliminary data. The

observation and diary study will look at how closely the participants' actions correlate with the survey. The second method will drive meaning to the answers presented in the survey by answering the "why's" of responses. Individually, both method types provide their own value. The observation and diary study visually presents what the participants do on Spotify as they click accordingly to their tasks. It is an organic method that provides candid data of how people use the app. Knowing this information can improve the app in the future. However, the method does come with a slight weakness as mentioned previously: due to the awareness of being observed, participants may have an altered result than usual. This could potentially skew data.

Also, to conduct this type of behavioral study may take more time and resources than other methods. This weakness is the strength of our first method. A survey can be reached by thousands of people at a fraction of the time that it takes to get the same numbers with the second method. This is exemplified by our goal to reach 1,000 participants. With these numbers, we can utilize the survey to find raw trends and patterns. However, the large volume of data comes at a potential cost. There are many biases that can come with a survey. People may not pay attention to the questions or even think with a different perspective than what their actions show. Overall, our methods are great resources to collect data for analysis. There is a good volume of knowledge to learn despite the limitations.

Proposed Research Timeline

Timeline 1:

- Conduct initial research for survey (create user profiles, present to stakeholders) (1 month)
- Finalize questions (2 weeks)
- Distribute pilot (1 week)
- Recruit participants by posting a pop-up ad on Spotify, to both free users and subscribers, and send an email to past subscribers asking for feedback and present survey (1 month or after appropriate amount of people have participated)
- Collect Survey Results after one month or appropriate amount of people have participated
- Review Survey Results and analyze the data within them (2 months)
- After compiling the data, construct a journal to announce results (1 month)

Timeline 2:

- Conduct initial research for survey (create user profiles, present to stakeholders) (1 month)
- Finalize diary study questions (2 weeks)
- Distribute pilot (1 week)
- Recruit participants by reaching out to participants from Method 1 who provided an email in Q14 and consent form (1 month or after appropriate amount of people have participated)
- Begin participant observation (length of time for daily diary questions: 1 week)
- After 1 week, collect diary questions and observation results from participants
- Review Diary and Observation results and analyze the data within them (2 months)
- After compiling the data, construct a journal to announce results (1 month)

Conclusion

In the last ten years, streaming services have grown in scale and popularity. Streaming services provide easy access to artists and albums and have now affected how songs and musicians are marketed. Spotify has contributed to that change, being one of the most popular streaming services to create and dominate the audio service market. Our survey is meant to explore *why* Spotify is so popular: what makes it stand out from other streaming services, and what features are part of that enduring popularity? In our

study, we want to understand where the value in Spotify is for its users, and as Spotify employees we can then further improve our app. Once we have our research results, we can present them to Spotify in order to present points of improvement and what is currently working well. Our research can be considered a catalyst for exploring better services that Spotify can offer and the ways in which those services can improve users' experiences with the platform. We will accordingly begin to understand the psychology behind why people choose Spotify as a streaming service and determine what inclines people to subscribe to the service instead of using the platform's free service.

In order to explore these questions, we created two survey options. Both are viable options to use in the process of our research. The first survey method will allow us to obtain more detailed answers and will have a larger number of responders and will help us explore the "why." The second survey method will allow us to gather more concrete data but will have less responders. There may also be some changes in daily behavior due to the awareness of being monitored. We believe the best option is to conduct both methods, which would allow us to cover the weaknesses of both while maintaining their strengths. It would be more costly and take more time but would also likely lead to the best result.

We believe that our research would allow Spotify to grow as a service, provide a better experience for all users, and influence other audio streaming services to use this research to improve their own products.

References

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Dean, Brian. (2021). *Spotify User Stats (Updated Oct 2021)*. Backlinko. <https://backlinko.com/spotify-users>

Lidsky, D. (2018, August 6). *The definitive timeline of Spotify's critic-defying journey to rule music*. Fast Company; Fast Company. <https://www.fastcompany.com/90205527/the-definitive-timeline-of-spotifys-critic-defying-journey-to-rule-music>

Appendix

Digital Survey: Current User Informed Consent Language

This survey is for research purposes only. Your participation in the survey is completely voluntary. The goal of this survey is to learn why current users prefer Spotify as an audio streaming service and which features are most popular. The survey should take less than 20 minutes.

Foreseeable risk includes:

- Identifiable data provided through the survey being linked back to participant/compromised

Expected benefits include:

- Direct feedback to Spotify for potential enhancements

Digital Survey: Previous User Informed Consent Language

This survey is for research purposes only. Your participation in the survey is completely voluntary. The goal of this survey is to learn why previous users of Spotify stopped using the service. The survey should take less than 20 minutes.

Foreseeable risk includes:

- Identifiable data provided through the survey being linked back to participant/compromised

Expected benefits include:

- Direct feedback to Spotify for potential enhancements

Digital Survey: Current User Survey Questions

1. Which music/audio streaming services are you aware of, outside of Spotify? (Multiple choice, select all that apply)
 - a. Apple Music
 - b. Tidal
 - c. Amazon Music HD/Unlimited
 - d. Deezer
 - e. Qobuz
 - f. YouTube Music
 - g. Pandora
 - h. Sirius XM
 - i. None of the above
 - j. Other (specify): _____
2. How did you discover Spotify? (Multiple choice, select all that apply)
 - a. Digital Advertisements
 - b. Physical Advertisements
 - c. Social Media
 - d. Friends/Family
 - e. Internet Research
 - f. Free trial plan through other service
 - g. Other (specify): _____
3. What's your current subscription with Spotify? (Multiple choice, select one)
 - a. Spotify free
 - b. Spotify premium individual
 - c. Spotify premium student
 - d. Spotify premium duo
 - e. Spotify premium family
4. *Skip logic. If selected 3a:* Why is that your current subscription with Spotify? (Multiple choice, select all that apply)
 - a. Monthly cost
 - b. Usage
 - c. Ability to download podcasts
 - d. Not interested in ability to travel abroad with music/audio
 - e. Not interested in ability to pick and play any track on mobile
 - f. Not interested in ability to download music
 - g. Not interested in higher music quality
 - h. Not interested in unlimited skips
 - i. Other (specify): _____
5. *Skip logic. If selected 3b/c/d/e:* Why is that your current subscription with Spotify? (Multiple choice, select all that apply)
 - a. Monthly cost
 - b. Usage
 - c. Ability to travel abroad with music/audio
 - d. Ability to pick and play any track on mobile

- e. Ad-free music
 - f. Ability to download music
 - g. Ability to download podcasts
 - h. Ability to block explicit music (premium family only)
 - i. Spotify Kids app (premium family only)
 - j. Highest music quality
 - k. Unlimited skips
 - l. Added Hulu plan perk (premium student only)
 - m. Added SHOWTIME plan perk (premium student only)
 - n. Other (specify): _____
6. Quantify your loyalty to Spotify (5-point scale, 1 being you would easily switch to another streaming service and 5 being nearly impossible to get you to switch to another streaming service)
7. From most to least favorite, please rank the following Spotify features. (Rank)
- a. Download Music/Podcasts
 - b. Works on many platforms
 - c. Discover Music/Podcasts
 - d. Spotify Connect
 - e. Friend Activity
 - f. Behind the Lyrics
 - g. Sharing Music/Podcasts
 - h. Daily Mixes
 - i. Create Collaborative Playlists
 - j. Private Session
8. *Skip logic on top 2 favorite features:* Why do you like these features? (Open-ended)
9. *Skip logic on bottom 2 favorite features:* Why do you not like these features? (Open-ended)
10. What devices do you use Spotify on? (Multiple choice, select all that apply)
- a. Smartphone
 - b. Computer/PC
 - c. Tablet
 - d. Speakers
 - e. TV
 - f. Cars
11. How often do you use Spotify? (Multiple choice, select one)
- a. Daily, more than 2 hours
 - b. Daily, less than 2 hours
 - c. Daily, in multiple bursts
 - d. At least once every two days
 - e. At least once or twice a week
12. What are major issues, if any, in using Spotify that you come across? (Open-ended)
13. What would cause you to switch music/audio subscription providers? (Open-ended)
14. How do you identify?

- a. Male
 - b. Female
 - c. Non-binary
 - d. Prefer not to say
 - e. Self-describe: _____
15. What is your race?
- a. American Indian or Alaska Native
 - b. Asian
 - c. Black or African American
 - d. Hispanic, Latino, or Spanish Origin
 - e. Middle Eastern or Northern African
 - f. Native Hawaiian or Other Pacific Islander
 - g. White
 - h. Prefer not to say
 - i. Other (specify): _____
16. What is your annual income?
- a. Less than \$20,000
 - b. \$20,000 to \$34,999
 - c. \$35,000 to \$49,999
 - d. \$50,000 to \$74,999
 - e. \$75,000 to \$99,999
 - f. Over \$100,000
 - g. Prefer not to say
17. Could we contact you about your survey response(s) and or participation in future research on this topic? If yes, please provide the best email address to reach you below. (Open-ended)

Digital Survey: Previous User Survey Questions

1. Why did you stop using Spotify? (Multiple choice, select all that apply)
 - a. Monthly cost
 - b. I did not like the free version
 - c. I don't stream music/podcasts frequently
 - d. I switched to a different audio subscription service
 - e. The content available did not align with my interests
 - f. The website usability was poor
 - g. The app usability was poor
 - h. The features available weren't what I needed
 - i. Other (specify): _____
2. *Skip logic. If selected 1a:* Please elaborate on why/how the monthly cost was a driver in your decision to stop using Spotify. (Open-ended)
3. *Skip logic. If selected 1b:* What about the free version of Spotify did you not like? (Open-ended)
4. *Skip logic. If selected 1c:* If not through streaming, how do you typically listen to music/podcasts? (Multiple choice, select all that apply)

1. I don't typically listen to any music/podcast through any form
 2. Radio
 3. Purchased music/podcast
 4. TV music channel
 5. Other (Specify): _____
5. *Skip logic. If selected 1d:* Which audio subscription service(s) do you use? (Multiple choice, select all that apply)
1. Apple Music
 2. Tidal
 3. Amazon Music HD/Unlimited
 4. Deezer
 5. Qobuz
 6. YouTube Music
 7. Pandora
 8. Sirius XM
 9. Other (specify): _____
6. *Skip logic. If selected 1d:* Why do you prefer this service over that of Spotify? (Open-ended)
7. *Skip logic. If selected 1e:* What content was missing from Spotify that you are interested in? (Open-ended)
8. *Skip logic. If selected 1f:* What about Spotify's website usability was poor? (Open-ended)
9. *Skip logic. If selected 1g:* What about Spotify's app usability was poor? (Open-ended)
10. *Skip logic. If selected 1h:* What feature would you have liked Spotify to offer? (Open-ended)
11. *Skip logic. If selected 1i:* Please elaborate on how Spotify could improve on this. (Open-ended)
12. How do you identify?
1. Male
 2. Female
 3. Non-binary
 4. Prefer not to say
 5. Self-describe: _____
13. What is your race?
1. American Indian or Alaska Native
 2. Asian
 3. Black or African American
 4. Hispanic, Latino, or Spanish Origin
 5. Middle Eastern or Northern African
 6. Native Hawaiian or Other Pacific Islander
 7. White
 8. Prefer not to say
 9. Other (specify): _____

14. What is your annual income?

- a. Less than \$20,000
- b. \$20,000 to \$34,999
- c. \$35,000 to \$49,999
- d. \$50,000 to \$74,999
- e. \$75,000 to \$99,999
- f. Over \$100,000
- g. Prefer not to say

Diary Study: Informed Consent Language

This study is to gather and analyze how users interact with the Spotify app. The participant (you) will first be given and set of tasks to complete. After the tasks are completed, the diary will reflect on each day's usage of Spotify using a diary format where the participant will answer the same questions. As a benefit of this study, we will analyze the participants actions and usage and compare that data with self-reported. As with most studies we will anonymize any data collection to mitigate any chance of participants being identified.