Introduction

This is an experiment on three different music on three digital media software, used for playing, managing and organizing music media. These music libraries can are used on computers, tablets and phones but for this study we will be experimenting on computers only. There will be three music software and they will be ITunes, Spotify and Google Music. To gain data for this experiment we will have eight people, used as our test subjects, with completely random backgrounds on these three software, and computer software in general, go through three different tasks in each of the music libraries. All the tasks are able to be done in all three of the music libraries in order to make comparisons easier and better. Through these tasks they will be times, recorded and asked questions to get the best data possible. With this we are trying to find the best music libraries according to the data as well as what these people say. To measure which is the best, we will be using the five metrics of learnability, memorability, efficiency, errors and satisfaction.

We will go through what each task is as well as go through each test subject in detail to find reason behind the data collected. We will then go over the total data collected after each task

Task One

The first task for the test subjects will be focused around creating three different playlist on each music library. Each subject will be asked to start off with one music library first and create all three playlists on that software before going onto the next one. The parameters to this first task for each subject are:
1) Create a playlist
    a. The playlist will contain two different artists
2) Name the playlist with the names of the two artists
3) Add 5 songs from each artist to the playlist
    a. The playlist will contain a total of 10 songs
4) Repeat for two more playlists
    a. There will be 30 songs in total with all three playlists
Subjects will be timed from the moment they start creating the playlist to when the playlist is completely finished. At the same time the subject will be timed to see how it takes to create all three playlists. While the subjects are creating the playlists, errors that they make will be recorded to give reason behind any differences of times.

1st Participant
Background: This participant has used ITunes before.

ITunes
This participant was told to create the three playlists using ITunes first. The participant took 2 minutes to create the first playlist completely. This participant did have an error in making a duplicate song in the playlist as he used a drag and drop technique to add songs to the playlist. The participant then took about 1 minute and 30 seconds to make the second playlist and the same to make the third. The reason behind this was his switch from the drag and drop technique to a command + click (Mac) technique where the participant was able to select all five of the

songs at once and add them all at once into the playlist. Here is an overview of the metrics for this first task for the first participant:

- **Learnability**: Although this person has used ITunes before, learnability is shown through this user going from the drag and drop technique to the drag and drop making it faster
- **Memorability**: This participant has used ITunes before so he knows how the program works and knows shortcuts
- **Efficiency**: With the Keyboard shortcut, this user was able to complete this task in 5 minutes
- **Errors**: Had the Error of adding a duplicate song to the first playlist
- **Satisfaction**: 8 out of 10

Spotify
The participant was then told to use Spotify. It took this participant 50 seconds to complete the first playlist. This difference could have come from him going straight to the technique where multiple songs can be added to the playlist. Because of this it also took 50 seconds each to complete the second and third playlist. The search bar had a lot to do with the speed of the playlists being created.

- **Learnability**: The similarities in programs between ITunes and Spotify helped the fact that this user has never used Spotify before yet was able to complete the playlists faster than on ITunes
- **Memorability**: This participant has used the shortcut from ITunes to help him create the playlists in this software
- **Efficiency**: Done very fast due to the keyboard shortcut
- **Errors**: None
- **Satisfaction**: 10 out of 10

Google Music
The participant then was told to use Google Music. It took the participant 5 minutes to create and it probably took the participant a little longer for the participant to create the playlists as they have never worked with an online music library like Google Music.

- **Learnability**: Google Music has the same idea as ITunes and as Spotify but it is still a little different as it an online or cloud type music library
- **Memorability**: Google Music still has the same concept as ITunes and as Spotify therefore techniques were used from them
- **Efficiency**: Might have been done a little slower considering it was the last one to be used
- **Errors**: Added Songs to wrong playlist
- **Satisfaction**: 6 out of 10

2ⁿᵈ Participant
Background: This participant was not familiar with the three programs. This participant was introduced to the three programs to at least have some sort of idea.

ITunes
This participant started with ITunes and because of not having much knowledge of any of the programs, the participant had a tougher time with them. This also caused there to be many errors

as the participant explored the program and click into many of the options the program has. As the participant got accustomed to the program, the participant was able to get the playlists together. The playlists were put together in 8 minutes total.

- **Learnability**: This person had to learn most of the software and considering only 8 minutes in total, not a long time but learned quickly as it took 5 minutes to create the first playlist and 3 minutes total to create the other two
- **Memorability**: There wasn't really memorability for this as this participant had no prior experience to these software
- **Efficiency**: 8 minutes with having to learn the software from scratch
- **Errors**: Many Errors including clicking on wrong buttons, searching through wrong things and just trying to learn things
- **Satisfaction**: 7 out of 10

Spotify
The participant faired a little better with Spotify as there was a bit of experience gained from the previous ITunes task. The participant went through this this program more smoothly and used the drag and drop technique with no errors. It took the participant about 5 minutes to get all three playlists complete.

- **Learnability**: The learnability on this might have been a little faster as it took less time to make the playlists but it could also have to do with the participant going through ITunes in the task before
- **Memorability**: No Memorability
- **Efficiency**: Done faster than first
- **Errors**: None
- **Satisfaction**: 9 out of 10

Google Music
Google Music was also a bit of a problem for this participant. The participant went through it trying to look for how to create a new playlist and went through some errors while looking. Once it was found the playlists were made but there was an error when adding songs also. It took the participant 10 minutes to get the playlists complete.

- **Learnability**: The learnability seemed a little tougher than ITunes as it took a while to get the first playlist going at 6 minutes and the other two at 2 minutes each
- **Memorability**: No Memorability
- **Efficiency**: Seemed a little less efficient for this user
- **Errors**: Errors while trying to look for the playlist, adding album instead of individual song
- **Satisfaction**: 4 out of 10

3rd Participant
Background: This participant is not familiar with any of these software. The Participant was introduced to each software.

Google Music
This participant started off with Google Music. This person, just as the second participant, had to search through the site to find how to create the new playlists. As this was done, errors were

committed as well as once the playlist were being made. The first playlist took 4 minutes to complete but the errors brought the three playlists to take 15 minutes to complete.

- **Learnability**: Here it was a lot slower as the participant took 15 minutes
- **Memorability**: No Memorability
- **Efficiency**: 15 minutes starting from scratch
- **Errors**: Many Errors including clicking on wrong buttons, searching through wrong things, adding wrong songs to wrong playlists
- **Satisfaction**: 4 out of 10

Spotify

Spotify was the second program. The participant took 11 minutes to create all the playlists completely. Even though he read through the program pretty quickly, the participant didn't use the same drag and drop technique. Instead this participant went one by one.

- **Learnability**: Learnability seems a little better on this one but still took a while compared to others
- **Memorability**: No Memorability
- **Efficiency**: Done in 11 minutes
- **Errors**: None
- **Satisfaction**: 7 out of 10

ITunes

This participant didn't do any better with ITunes. It took about 13 minutes for the participant to get all three playlists done completely. It took this user a while to read through the options and to actually find the right place to create a new playlist. This user used the right click method to add the songs.

- **Learnability**: It took the user about 3 minutes to get through the program, not too bad
- **Memorability**: No Memorability
- **Efficiency**: Seemed a little less efficient for this user
- **Errors**: Clicking through wrong things
- **Satisfaction**: 8 out of 10

4th Participant

Background: This participant is familiar with computers in general and has had experience with using ITunes and Spotify.

Google Music

This participant started off with Google Music. It took this user 3 minutes to complete the three playlists. This user highlighted all the songs and added them at the same time to create the playlists faster.

- **Learnability**: Here it was very fast as the playlists were created very quickly as well as there being no errors
- **Memorability:** Used techniques known from other software
- **Efficiency**: 3 minutes
- **Errors**: None
- **Satisfaction**: 7 out of 10 (Didn't like online)

Spotify
Spotify was the second program. This was also finished within 3 minutes and without any errors
- **Learnability**: Had experience with Spotify
- **Memorability**: Had experience with Spotify
- **Efficiency**: 3 minutes
- **Errors**: None
- **Satisfaction**: 9 out of 10

ITunes
This participant did just as well in ITunes. The Playlists were also created in 3 minutes, without errors.
- **Learnability**: This person has experience with ITunes
- **Memorability**: Experience with ITunes
- **Efficiency**: 3 minutes
- **Errors**: None
- **Satisfaction**: 10 out of 10

5th Participant
Background: Used ITunes Before

Spotify
Spotify was the first program this user went through. The user errors in looking through the store and making wrong clicks but it took 5 minutes to get the task completed with all three playlists.
- **Learnability**: Pretty fast learnability
- **Memorability**: Experience with ITunes
- **Efficiency**: 3 minutes
- **Errors**: 2 errors
- **Satisfaction**: 7 out of 10

ITunes
ITunes went a little better for the user. There were a few bad clicks here and there but overall the user took 4.5 minutes to get the 3 playlists completed.
- **Learnability**: This person has experience with ITunes
- **Memorability**: Experience with ITunes
- **Efficiency**: 4.5 minutes
- **Errors**:1 Error
- **Satisfaction**: 9 out of 10

Google Music
This participant then went with Google Music. It took this user 5 minutes to complete the three playlists.
- **Learnability**: Pretty Fast learnability
- **Memorability:** Used techniques known from other software

- **Efficiency**: 5 minutes
- **Errors**: 1 Error
- **Satisfaction**: 8 out of 10

6th Participant
Background: Knowledgeable of all software

Spotify
Spotify was the first program this user went through. The user clicked on too many songs but it took 2.5 minutes to get through the tasks.
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 2.5 minutes
- **Errors**: 1 errors
- **Satisfaction**: 7 out of 10

ITunes
ITunes was the second program. The user clicked on too many songs here also but got through the task in 2.5 minutes also.
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 2.5 minutes
- **Errors**:1 Error
- **Satisfaction**: 6 out of 10

Google Music
This participant then went with Google Music. It took this user 2 minutes to complete the task.
- **Learnability**: Experience
- **Memorability:** Experience
- **Efficiency**: 2 minutes
- **Errors**: None
- **Satisfaction**: 10 out of 10

7th Participant
Background: Used ITunes before

Spotify
Spotify was the first program this user went through. The user searched through the store and made some wrong clicks. It took 4.5 minutes to get the task completed.
- **Learnability**: Pretty Fast
- **Memorability**: Used other software
- **Efficiency**: 4.5 minutes
- **Errors**: 2 errors
- **Satisfaction**: 8 out of 10

ITunes
ITunes was the second program. The user had wrong clicks but it took 4 minutes to complete the task.
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 4 minutes
- **Errors**:1 Error
- **Satisfaction**: 9 out of 10

Google Music
This participant then went with Google Music. It took this user 5 minutes to complete the task.
- **Learnability**: Pretty fast
- **Memorability:** None
- **Efficiency**: 5 minutes
- **Errors**: 1 Error
- **Satisfaction**: 7 out of 10

8th Participant
Background: Has used ITunes before

Spotify
Spotify was the first program this user went through. The user searched through the store and made some wrong clicks. It took 5 minutes to get the task completed.
- **Learnability**: Pretty Fast
- **Memorability**: Used other software
- **Efficiency**: 5 minutes
- **Errors**: 2 errors
- **Satisfaction**: 7 out of 10

ITunes
ITunes was the second program. The user had wrong clicks but it took 4.5 minutes to complete the task.
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 4.5 minutes
- **Errors**:1 Error
- **Satisfaction**: 9 out of 10

Google Music
This participant then went with Google Music. It took this user 5 minutes to complete the task.
- **Learnability**: Pretty fast
- **Memorability:** None
- **Efficiency**: 5 minutes
- **Errors**: 1 Error

- **Satisfaction**: 7 out of 10

Task Two

The object of the second task is for the participants to search for 5 different songs on the online store off each program.

1st Participant
ITunes
This participant didn't take too long to understand the ITunes store. It took this user 55 seconds to find the first song and then 35 seconds to find each of the other four songs.
- **Learnability**: It was pretty fast as it took the user 3 minutes
- **Memorability**: Used ITunes before
- **Efficiency**: Took about 3 minutes
- **Errors**: No errors
- **Satisfaction**: 9 out of 10

Spotify
For the participant it took 20 seconds to find each song. It was much quicker than ITunes to an extent because the store search bar is already on the program.
- **Learnability**: Very quickly as the search bar is in plain site
- **Memorability**: No Memorability
- **Efficiency**: Quickly, Less than 2 minutes
- **Errors**: None
- **Satisfaction**: 10 out of 10

Google Music
Google Music was a little trickier for the participant. The main error was that this participant was searching in the wrong place instead of the store and took a while to figure that out. Once the actual search was figured out the songs took 30 seconds to find but it took 3 minutes to figure out the "Shop" in Google Music.
- **Learnability**: A little harder than the others, Shop isn't really in plain site
- **Memorability**: No Memorability
- **Efficiency**: Slower than others
- **Errors**: Search in Library
- **Satisfaction**: 7 out of 10

2nd Participant
ITunes
With no experience before, this user went through all the options in the program and searched in the library before actually finding the store. To find the first song it took 3 minutes but then after that it took about 35 seconds to find each song.
- **Learnability**: It took 3 minutes for the user to figure out how to find the first song
- **Memorability**: No Memorability

- **Efficiency**: Took about 5 minutes
- **Errors**: Clicking through options, Searching Library
- **Satisfaction**: 6 out of 10

Spotify
The participant didn't have much difficulty with Spotify. The user took 4 minutes to find all the songs on the online store.
- **Learnability**: Was faster to do than ITunes
- **Memorability**: No Memorability
- **Efficiency**: 4 minutes
- **Errors**: None
- **Satisfaction**: 10 out of 10

Google Music
Google Music was a little trickier for the participant as well. The main error was that this participant was searching in the wrong place instead of the store and took a while to figure that out. Once the actual search was figured out the songs took 30 seconds to find but it took 3 minutes to figure out the "Shop" in Google Music.
- **Learnability**: A little harder than the others, Shop isn't really in plain site
- **Memorability**: No Memorability
- **Efficiency**: Slower
- **Errors**: Search in Library
- **Satisfaction**: 5 out of 10

3rd Participant
Google Music
It was a difficult time for this participant to search. It took 8 minutes to find the first, then 3 minutes for the second song, then 1 minute for the other 3 songs.
- **Learnability**: It seemed very difficult and slow as it took 8 minutes to find first song and 3 minutes to find second song
- **Memorability**: No Memorability
- **Efficiency**: Very Slow
- **Errors**: Clicking through every option, Searching Library
- **Satisfaction**: 3 out of 10

ITunes
This program went a bit easier than Google Music. The local library was searched through once again, but once the store was found, it took 5 minutes to find all songs.
- **Learnability**: Much faster than Google
- **Memorability**: No Memorability
- **Efficiency**: 5 minutes
- **Errors**: Search Library
- **Satisfaction**: 9 out of 10

Spotify

This was much easier for the participant. It only took the user 3 minutes to find all the songs on the online store.

- **Learnability**: The easiest for the user
- **Memorability**: No Memorability
- **Efficiency**: Fast, 3 minutes
- **Errors**: None
- **Satisfaction**: 10 out of 10

4th Participant

ITunes

This participant went through ITunes first and had no problem with it as the songs were found in about 15 seconds each.

- **Learnability**: Knowledge of ITunes
- **Memorability**: Knowledge of ITunes
- **Efficiency**: 2 minutes
- **Errors**: None
- **Satisfaction**: 10 out of 10

Spotify

Spotify was also easy to use for this participant as the songs were also found in a total of 2 minutes.

- **Learnability**: Knowledge of Spotify
- **Memorability**: Knowledge of Spotify
- **Efficiency**: 2 minutes
- **Errors**: None
- **Satisfaction**: 10 out of 10

Google Music

This was a little more difficult than the others just because it took a little more time to figure out as it took 4 minutes to find the songs.

- **Learnability**: A little harder to figure out than the others
- **Memorability**: No Memorability
- **Efficiency**: Slower
- **Errors**: None
- **Satisfaction**: 8 out of 10

5th Participant

Spotify

The user went through Spotify really quickly taking 1 minute to complete the task of finding the five songs.

- **Learnability**: Fast
- **Memorability**: Experience with ITunes
- **Efficiency**: 1 minutes
- **Errors**: None
- **Satisfaction**: 7 out of 10

ITunes
The user went through ITunes really quickly taking 1 minute to complete the task of finding the five songs.
- **Learnability**: This person has experience with ITunes
- **Memorability**: Experience with ITunes
- **Efficiency**: 1 minutes
- **Errors**:1 Error
- **Satisfaction**: 9 out of 10

Google Music
The user went through Google Music the fastest as it only took him 45 seconds to get through finding the songs.
- **Learnability**: Fast
- **Memorability:** Used techniques known from other software
- **Efficiency**: 45 seconds
- **Errors**: None
- **Satisfaction**: 8 out of 10

6th Participant
Spotify
Spotify was the first program this user went through. The user took a minute to get through the task.
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 1 minutes
- **Errors**: None
- **Satisfaction**: 7 out of 10

ITunes
ITunes was the second program. The user took 45 seconds to get through the task.
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 45 seconds
- **Errors**: None
- **Satisfaction**: 6 out of 10

Google Music
This participant then went with Google Music. It took this user 50 seconds to get through the task.
- **Learnability**: Experience
- **Memorability:** Experience
- **Efficiency**: 50 seconds
- **Errors**: None

- **Satisfaction**: 10 out of 10

<u>7th Participant</u>

Spotify

Spotify was the first program this user went through. It took 1 minute to complete the task.
- **Learnability**: Pretty Fast
- **Memorability**: Used other software
- **Efficiency**: 1 minutes
- **Errors**: None
- **Satisfaction**: 8 out of 10

ITunes

ITunes was the second program. The user took 1 minute to complete the task.
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 1 minutes
- **Errors**: None
- **Satisfaction**: 9 out of 10

Google Music

This participant then went with Google Music. It took this user 40 minutes to complete the task.
- **Learnability**: Pretty fast
- **Memorability:** None
- **Efficiency**: 40 minutes
- **Errors**: 1 Error
- **Satisfaction**: 7 out of 10

<u>8th Participant</u>

Spotify

Spotify was the first program this user went through. It took 1 minutes to get the task completed.
- **Learnability**: Pretty Fast
- **Memorability**: Used other software
- **Efficiency**: 1 minutes
- **Errors**: None
- **Satisfaction**: 7 out of 10

ITunes

ITunes was the second program. The user took 1 minute to complete the task.
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 1 minute
- **Errors**: None
- **Satisfaction**: 9 out of 10

Google Music
This participant then went with Google Music. It took this user 50 seconds to complete the task.
- **Learnability**: Pretty fast
- **Memorability:** None
- **Efficiency**: 50 seconds
- **Errors**: None
- **Satisfaction**: 7 out of 10

Task Three

The third task consists of importing a folder with 10 different songs from an existing local folder to the programs themselves.

1st Participant
ITunes
This participant used ITunes first and easily found the "Add to Library" and was able to import the songs quickly.
- **Learnability**: Used ITunes before
- **Memorability**: Used ITunes before
- **Efficiency**: Took about 3 minutes
- **Errors**: No errors
- **Satisfaction**: 10 out of 10

Spotify
The participant used Spotify second and found it a bit more complicated. It was harder to find how to import the songs for this user. Once the user found out how it's done the task was completed in 7 minutes.
- **Learnability**: Was a little more complicated as it wasn't in plain sight how to import songs
- **Memorability**: No Memorability
- **Efficiency**: 7 minutes
- **Errors**: None
- **Satisfaction**: 6 out of 10

Google Music
Google Music was very complicated for this user. It is not clear at all how to add music to the program for this user. Errors were committed mostly to try and find how it is music is imported. Once it was figured out, the user took 20 minutes to do all the work.
- **Learnability**: Very Slow and Very Difficult
- **Memorability**: No Memorability
- **Efficiency**: Slower than others
- **Errors**: Multiple errors through finding out
- **Satisfaction**: 2 out of 10

<u>2nd Participant</u>
ITunes
This participant used ITunes first and also used the "add to library" and imported songs in about a minute.

- **Learnability**: Very fast to Learn
- **Memorability**: No Memorability
- **Efficiency**: Very fast
- **Errors**: No errors
- **Satisfaction**: 10 out of 10

Spotify
The participant used Spotify second. A little more complicated it took 8 minutes to import the songs as errors were made before finding out how to actually import the songs.

- **Learnability**: Was a little more complicated as it wasn't in plain sight how to import songs
- **Memorability**: No Memorability
- **Efficiency**: 8 minutes
- **Errors**: None
- **Satisfaction**: 6 out of 10

Google Music
Again, Google Music was very complicated for this user. It took the user 14 minutes to complete the task as there was many errors done through the process.

- **Learnability**: Very Slow and Very Difficult
- **Memorability**: No Memorability
- **Efficiency**: Slower than others
- **Errors**: Multiple errors through finding out
- **Satisfaction**: 3 out of 10

<u>3rd Participant</u>
ITunes
This participant used ITunes first and also went through this task very easily and very quickly as the songs were imported in 3 minutes.

- **Learnability**: Very fast to Learn
- **Memorability**: No Memorability
- **Efficiency**: 3 minute
- **Errors**: None
- **Satisfaction**: 10 out of 10

Spotify
The participant used Spotify second. A little more complicated as errors were committed during the process of the task. Once the drag and drop was discovered it took 8 minutes to complete the task.

- **Learnability**: Was a little more complicated as it wasn't in plain sight how to import songs
- **Memorability**: No Memorability
- **Efficiency**: 8 minutes
- **Errors**: Clicked on Menu bar, Clicked on Option Bar, Imported from ITunes instead
- **Satisfaction**: 6 out of 10

Google Music
Again, Google Music was very complicated for this user. Ever error possible was probably committed through this as the user took 28 minutes to import all of the songs to Google Music.
- **Learnability**: Very Slow and Very Difficult
- **Memorability**: No Memorability
- **Efficiency**: Slower than others
- **Errors**: Multiple errors through finding out
- **Satisfaction**: 1 out of 10

4th Participant
ITunes
This participant used ITunes first and also went through this task very easily and very quickly as the songs were imported in 3 minutes.
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 3 minute
- **Errors**: None
- **Satisfaction**: 10 out of 10

Spotify
The participant used Spotify second. This program was also very easy as it took 3.5 minutes to complete
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 3.5 minutes
- **Errors**: None
- **Satisfaction**: 10 out of 10

Google Music
It took 10 minutes to complete the task for this user on Google Music Still it seems to be the most complicated. Errors were made.
- **Learnability**: 8 Minutes and 2 minutes
- **Memorability**: No Memorability
- **Efficiency**: Slower than others
- **Errors**: Drag And Drop, Clicking on Sidebar
- **Satisfaction**: 6 out of 10

5th Participant

Spotify
These were done really fast on all programs and by all people
- **Learnability**: Fast
- **Memorability**: Experience with ITunes
- **Efficiency**: 6 sec
- **Errors**: None
- **Satisfaction**: 7 out of 10

ITunes
- **Learnability**: This person has experience with ITunes
- **Memorability**: Experience with ITunes
- **Efficiency**: 1 minutes
- **Errors**:1 Error
- **Satisfaction**: 9 out of 10

Google Music
This one was the slowest at 33 seconds.
- **Learnability**: Fast
- **Memorability:** Used techniques known from other software
- **Efficiency**: 33 seconds
- **Errors**: None
- **Satisfaction**: 8 out of 10

6th Participant
Spotify
These were all done very quickly
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 5 seconds
- **Errors**: None
- **Satisfaction**: 7 out of 10

ITunes
ITunes was the second program.
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 6 seconds
- **Errors**: None
- **Satisfaction**: 6 out of 10

Google Music
This participant then went with Google Music.
- **Learnability**: Experience
- **Memorability:** Experience
- **Efficiency**: 30 seconds

- **Errors**: None
- **Satisfaction**: 10 out of 10

7th Participant
Spotify
These were really fast for this user
- **Learnability**: Pretty Fast
- **Memorability**: Used other software
- **Efficiency**: 6 seconds
- **Errors**: None
- **Satisfaction**: 8 out of 10

ITunes
ITunes was the second program.
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 8 seconds
- **Errors**: None
- **Satisfaction**: 9 out of 10

Google Music
This participant then went with Google Music.
- **Learnability**: Pretty fast
- **Memorability:** None
- **Efficiency**: 33 seconds
- **Errors**: 1 Error
- **Satisfaction**: 7 out of 10

8th Participant
Spotify
Spotify was the first program this user went through. These were all really fast.
- **Learnability**: Pretty Fast
- **Memorability**: Used other software
- **Efficiency**: 9 seconds
- **Errors**: None
- **Satisfaction**: 7 out of 10

ITunes
ITunes was the second program.
- **Learnability**: Experience
- **Memorability**: Experience
- **Efficiency**: 10 seconds
- **Errors**: None
- **Satisfaction**: 9 out of 10

Google Music
This participant then went with Google Music.

- **Learnability**: Pretty fast
- **Memorability:** None
- **Efficiency**: 33 seconds
- **Errors**: None
- **Satisfaction**: 7 out of 10

Conclusion

According to what we see here we can see how each program was interacted with and which program seems to be better for what and the overall better program.

We see that a lot of users that weren't familiar with the programs went through a lot of the program to try and figure out what was where in order to get the tasks done. Through these interactions with the programs, some participants looked at the programs differently and got a different feel for it which might have caused there to be different satisfaction levels.

In the study we get to see that ITunes and Spotify were probably seen as the best options in between the test studies as well as the most satisfactory. ITunes maybe gets a bit over the lead here where there are more people that have used ITunes because it is a little more popular. Google Music isn't really seen as that great because of the fact that it is different. Google Music is a cloud program instead of an application program which made it difficult for people to understand it and therefore not like it as much as the others.