

IE411: Social Network Behavior Analysis

Reaction Paper

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1 Introduction

Internet radio is an audio service transmitted through internet. However, as the time passed, internet radio had been evaluated not only listen songs through internet, but also with some interesting features in it. Through the deep integration with social media, internet radio also becomes one of the social networking media that we will not like to miss it in our life.

The usability gap occurs in making this industry effectively serve customers is people do not really understand how internet radio works. More often than not, they think that they cannot get the copy of the song after they pay the money for internet radio which does not allow them to transfer song from one device to another device. Hence, they willing to pay money to get solid copy of songs rather than pay money to get a service only.

The broad goal of this reaction paper is to enhance users' experience of using internet radio. Nowadays, internet radio plays an important role in most of the people's life. Hence, it is always better to integrate internet radio to another level, so that users can enjoy more while they listen to internet radio. In this reaction paper, I will use Spotify as an example since it is best known as fantastic online service listening to all online music.

Basically, Spotify allows users to access to a million-song strong catalogue of music for immediate streaming. This service is available on computers, mobiles phones, tablet, and even home entertaining system. Hence, with this availability, we can almost listen to Spotify everywhere and everytime.

There are three versions account type for Spotify: free version, unlimited version, and premium version. The free version is used by majority of Spotify's users. We can still listen to unlimited music like the other two types of account, but after every few songs, we have to sit through a broadcast advertisement. We will enjoy music only without the disturbance of advertisement if we go for unlimited version of Spotify. However, this version requires users to pay US\$4.99 monthly. The premium version will allow users to download for offline listening, enjoy some premium features, and also enjoy music without advertisement. Nevertheless, users need to pay US\$9.99 monthly in order to enjoy Premium service.

As the integration with Facebook and Twitter, Spotify is able to connect Facebook and Twitter to the music we are listening. We are also able to share or post music to Facebook and Twitter. With the "following" feature in Spotify, we are allow to follow other people not only Facebook friends, but also people who also using Spotify. By following other people, we are able to update

to the songs they listen. Hence, all this special features make Spotify sociable which not only just listen music.

Hence, the first research will be discussed about effectiveness of sharing playlist between social media users, the second research paper will talk about Spotify's strategies in this competitive market, and third paper discussed about the users' behavior while using Spotify.

2 Spotify Usability Report^[1]

2.1 Overview

This report is motivated by the goal of examining the effectiveness of sharing playlist between social media users. Their main objectives for this report were to test the ease and efficiency of organizing content into a playlist to share with Facebook friends and conduct the successfulness Spotify's social networking sharing function.

The usability study was comprised of three parts, a pre-test questionnaire, a task list, and a post-test questionnaire. The pre-test survey conducted participant's music listening activity online and social media preferences. The examples of questions that fulfill this objective such as "What tools do you use to listen to music on your computer?" and "Which social networking services do you use?".

For the second part of usability study, eleven participants were conducted for this report. Participants were given instruction and they needed to perform four tasks: log into Spotify using their Facebook account, create and name a playlist, add five different songs from different artists to the playlist, and share the playlist to a Facebook friend. These tasks were chose to test the ease and efficiency of organizing content into a playlist and sharing a playlist with Facebook friends.

Lastly, a post-test survey was conducted for each participant after they completed the tasks. The post-test survey evaluated the participants' overall opinion and attitudes towards the Spotify application. Every question provides rate scale from strong disagree to strongly agree and participants required to choose the answer their fit their opinions. The examples of questions that fulfill this objective such as question 5 in the questionnaire: "I found it easy to share the playlist to a Facebook friend".

2.2 Result and Summary

The majority of the test participants (9 out of 11) were able to complete all four tasks correctly. One person quit the study after completing the first task. This participant was not able to adjust to the interface and name the playlist recently created. Another participant added five songs to the playlist, but each song was not from a different artist.

For the post-test questionnaire, the questionnaire answer was based on 5-point scale. The satisfaction result showed that most of the participants found that Spotify is useful to share the

music. The average rating for Spotify's usefulness was 3.82. The average rating for overall experience using Spotify was 3.82. It also showed that average rating of 2.73 when participants answer how likely they will use Spotify after the study.

Through this study, the features of Spotify were attracting people to use this software. People willing to become Spotify's users which allow them to listen music and share their favorite song to social media, such as Facebook and Tweeter. Some people even willing to pay money in order to enjoy better features of Spotify. In other words, the social networking of Spotify is expanding now and we cannot predict its limit in future. Hence, if internet radio is able to enhance users' listen music experience, they not able only can keep their original users, but also attract new users to use it instead of buying the song. With reasonable price, users even willing to pay to use internet radio.

3 An Analysis of Spotify's Market Strategies^[2]

3.1 Overview

According to this research, the digital music industry can be divided into two submarkets: the streaming market with numerous competitors and the digital download market dominated by iTunes and Amazon. There is very strong competition within the streaming industry since many companies operate in this market with similar business models. Packaging, licensed music libraries, regions of operation, and features differentiate companies from one another. One thing every company has in common is their segmented region support and fragmented music licenses which is the thing that Spotify is trying to overcome with their recent launch in United States and continued support in many European countries.

In order to make revenue, Spotify has a two-sided market to deal with, which are consumers and music providers. Spotify aimed to earn revenue from the consumers by charging them with a subscription fee for listening to music on Spotify. Before users subscribed to the new streaming platform, Spotify had to let users to experience Spotify and get attracted to the service. There is also a limited free version of the service was provided along with the unlimited subscription based version.

By providing features similar to those found in its competitors, Spotify has made it easier and more attractive for users to switch to Spotify. Spotify also develop robust its applications for different kinds of platform, such as iOS, Android, and Windows. These attempts at reducing switching costs have made it easier for Spotify to make inroads into its competitors' market share and increase its profits.

3.2 Summary

It is undeniable that digital streaming is a rapidly growing industry. This is because it is very convenient and useful for users to use digital streaming rather than buy or illegal download the music from internet. Hence, this makes the industry has many players and competition is fierce. In order to fore in this competition, factors such as network effects and two-sided markets are very important issue need to be concern.

By developing robust applications for most operating system, I believe that Spotify has greatly reduced the cost of switching for potential users. By doing so, it also make it more attractive to users. It is important that Spotify capitalized on the network which has built with Facebook. This is also important feature for other internet radio to integrate with other social media. Internet radio should not be just a simple radio, which will be easily eliminated in this competitive market.

4 Understand User Behavior in Spotify^[3]

4.1 Overview

It is obvious that a strong daily pattern and significant variation of hourly arrival rates in this research. According to this report, the session arrival rate is lowest around 2am and increases sharply until 9-10 am, which we define as the morning peak. After the morning peak, the arrival rate drops slightly during the lunch break in weekdays, but not weekends. After lunch break, the session arrival rate drops sharply to its lowest point in a day. An interesting observation is that the morning peak of mobile sessions in weekdays is often one hour ahead of desktop sessions. This may be due to Spotify mobile app is often used while commuting.

Many users have Spotify client installed on multiple devices, such as mobile phone, tablet, laptop, and computer. However, it is not clear how they switch between those devices when using Spotify. In this research paper, they study the device switch behavior by measuring the probability of users switching between different devices in successive sessions. Through the experiment, they conclude that the lesser a desktop is used, the higher the probability of switching to the most used mobile for the successive session.

Furthermore, in order to study the correlation between session length and successive downtime, they change the method for computing the correlation between session lengths. Instead of pairs of the length of the successive sessions, they analyze pairs of the length of the first session and the successive downtime. Through these result that they had conducted, these finding confirm the intuition that mobile users can generate much higher churn rates than desktop users.

4.2 Summary

Spotify has gained worldwide popularity in the past few years. Spotify not only session arrivals, but also session length and playback arrivals exhibits daily patterns. By understanding users'

behavior, it is not a difficult job for internet radio to enhance users' experience. Moreover, it will work more efficient and more effective to find a way to enhance music experience for users.

5 Brainstorming

5.1 Timed Comments

A social music outlet should allow users to gather around and listen together, which not really did by Spotify. Hence, I come out with few ideas that will let music lovers really have a good place to talk freely about music. I will like to propose "time comment", which is common in YouTube. It allows users to leave comments within the video, at a certain point in time. The comment also will only pops out at that certain point in time. Furthermore, if other users who have the same feeling and want to comment on the comment, they can click the comment and enter a chat room. They can have further conversation on each other's comment.

For example, when the song reaches 1:10 minute, I can leave a comment about my feeling regarding my feeling on lyrics or rhythm of the song. When other users listen that song until 1:10 minute, my comment will pops out and they able to see my comment. Hence, if someone has the same feeling and interest with my comment, he can click my comment and it will link he to the another chat room. He can comment based on my comment in the chat room. However, when there is more than one comment at the same particular time, only the top rank of comment will be appearing at the screen.

Users are also able to post their picture at a certain point in time. They can start to post the picture from the starting of song until the end of the song as long as they like. When the whole song is filled with pictures, it will just like a picture slideshow from beginning until end of the song. The picture will also appear with the pop out comments. Hence, when other users listen to music, they not only able can listen to music, but also can see other people share their feeling with the pictures.

The objective of this feature is able to let users to connect to the users who have the same perspective in music. For example, I like to listen to 70's rock songs. I discover a song "Sha La La" by Al Green and I want to share the sensation after I listened to this song. Facebook and Twitter will be only platform that I can share my feeling. However, it will be meaningless if none of my Facebook friends appreciate 70's rock songs. My friends will just ignore the song that I share on Facebook since they do not have the same interest music genre as me.

However, through this feature, I can know which users have the same music genre interest as me. I am able to read the comment while listen to song and able to comment on the comment which I have the same feeling. I can even further to have conversation with the user if I click into the comment. Hence, I will able to know users, who also appreciate 70's rock song, in the other side of the world.

In conclusion, this will be more effectively connecting all the users together who have the same favorite genre of song or same favorite of artist. Instead of sharing the music to Facebook or Twitter, we can share our opinion to the right person.

However, in the real life, does this feature will reduce the streaming speed since it needs to run many features at the same time? If it really reduces the streaming speed, is there any way to solve this problem? This is because users always do not like to wait a few minutes for a song to be ready to play.

5.2 Spotifier Act as Influence Node

We call a person who always updates his blog as blogger. Same concept applies to Spotify. I will like to call a person who always updates his Spotify playlist as spotifier. More often than not, with good content, professional blogger develop a good loyal base of readers. Once he has it, he has people who respect and follow him. Same concept applies to Spotify again. In Spotify, there is a “Follow” feature which able users to follow other users. After follow the users, followers able to keep updated whenever there is new song add by the user to his playlist. Hence, with good organization of songs, professional spotifier is also able to develop a good loyal base of followers. Same as blogger, once he has it, he has people who respect and follow him.

Once the spotifier has the certain amount of users follow them, this makes he has the virtual authority to judge the song by decide to add new song to his playlist or not. At that moment, that spotifier will act as the influence node which able to influence other users. By adding a new released song to his playlist, spotifier creates interest for the song to his follower. This makes the followers want to try listen to the new released song. Once the followers find the song was nice, they will add the same song into their playlist. After they add the new song to their playlist, the followers of these followers will notice that they add a new song to their playlist. After that, the followers of these followers will also try and listen to this new released. This process will go on and on. Hence, through this process, a new song is spread fast in Spotify’s network.

I suggest that recording company can target these spotifiers when they want to advertise a new song especially a new artist who does not have high fame. Through this method, recoding company does not really need to spend a lot of money on advertise the singer’s song to other social media, such YouTube or Pandora. More often than not, I think that advertise the music through YouTube is a bad idea. YouTube always shows part of the music video before we able to watch the video we want to watch. However, people do not really watch the advertisement. I believe that many people will just skip the YouTube advertisement once it passes 5 second.

Hence, recording company can target spotifiers and release the song to these spotifiers. Once spotifiers add the new song to their playlist, there will be a notification for the followers that there is a new song is added to their playlist. The followers will try and listen to the new song. By doing so, recording company can do not really spend on money to advertise the song. Recording company just need to share the song to the spotifier and through spotifier to promote the song. I believe that Spotifier will accept to add the song his playlist even recording company

does not pay them for it. This is because through this method, Spotify is also able to increase their visibility.

In conclusion, Spotify is a platform for users just listen and discover for good music. Users of Spotify are desired of good songs. Once there is a good and nice song released in market, I believe that it will spread faster in Spotify. Hence, recording company can target the top rank of Spotify and promote a new song through them. Since I mentioned that Spotify will influence users' opinion, what if Spotify spread the negative information about the artist or song? Will this really influence users' opinion towards that particular artist and songs?

6 Conclusion

More often than not, music has the power brings people together. Since Spotify integrated with social media, Spotify integrated from social to hyper social. Hence, I hope that the paper that I reviewed will help me on my brainstorming part since it already able let me have more understanding on Spotify users and Spotify market strategies. Although Spotify is standing in a very competitive position in the industry, I believe and I have the faith on Spotify that it will be successful in future.

References

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