빅데이터 분석을 통한 케이팝 성공요인 분석 -미국음반시장을 중심으로-

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A Study on the Success Factors of K-Pop by Big Data Analysis -Focusing on the U.S. Music Market-

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Abstract

The U.S. music market is a lucrative market for many foreign musicians due to its sheer size and it continues to play a leading role in the world music industry. However, it is a challenge to gain entry into that market and an even greater challenge to achieve success and fame within it. In fact, changes in the media paradigm have allowed for musicians to be able to independently produce their own songs and promote them globally. Some scholars address that the media paradigm shifting from traditional outlets to new outlets gives a chance to bypass traditional gatekeepers when entering the U.S. music market.

Based on this scenario, this article examined two songs from Korean singer, Psy: Gangnam Style and Gentleman as a single case study. Utilizing Google Trends as a source of information, this study examined how each song's recognition among American music fans was different based on radio spins on Top 40 commercial radio stations. This article sheds new light on radio, which has been neglected due to the media paradigm shift, and presents how radio programmers are part of a complicated gatekeeping process which ultimately decides which songs are to gain popularity.

I. Introduction

Why do most culturally distant foreign musicians seek to enter the U.S. music market even after they've achieved success and fame in their home countries? First of all, the size of U.S. music market is a lucrative proposition for foreign musicians. According to IFPI (International Federation of the Phonographic Industry) 2013 reports, in global rankings, the U.S. retains the top position with sales totaling \$4.48 billion. Additionally, it remains at the head of the top 20 markets table, and increased in value by 2.1 per cent in 2014. Christ Wright, founder of Chrysalis Records which is a leading force in the industry has stated that "to be a truly world-wide superstar is impossible without success in America." However, it is challenge to gain entry into that market and an even greater challenge to achieve success and fame within it. Power and Hallencreutz (2007) have pointed out that the conditions of access in the U.S. music market as well as gatekeepers to key activity areas were the reasons why foreign music occupies such a small place in the market.

Some scholars (Lee, 2013; Ferreira and Waldfogel, 2013) address that the media paradigm shift moving audiences from traditional outlets to new outlets gives a chance for musicians to bypass traditional gatekeepers when entering the U.S. music market. Furthermore, advances in communication technologies have made it easier for music producers worldwide to get access to the global music market. Therefore, when foreign musicians want to introduce their music to a global audience, using new media outlets such as YouTube or iTunes can be sufficient. Also, there are various global ad–supported music streaming services such as Spotify, Deezer, 8tracks, etc. These services allow emerging artists to upload their music and socially connect to new and existing fans. Thus, it can be argued that the traditional gatekeeper's role has been disempowered as advanced technologies make it unnecessary for foreign musicians to pass through these gatekeepers to enter the U.S. music industry.

If this is the case, what explains the considerable success of Psy in the American pop music industry? Certainly, emerging new media outlets allow foreign musicians to overcome the dominance of world pop culture by Anglo-American artists. In addition, the paradigm of the media environment has surely changed. However, I believe Psy's success has a different implication for the U.S. music market beyond representing just YouTube and social networks as a key to success.

No matter how many new advances in communication technology arise, the role of radio in promoting newly released songs cannot be neglected in the United States. According to Nielsen's 2013 report, the average American radio listener tunes in to radio over two hours per day. It is clear that American music fans still greatly enjoy radio even with the existence of various new media outlets. Rossman(2012) also believes that traditional FM radio airplay still remains the essential way for musicians to achieve commercial success despite the growth of digital media.

However, not every single that is released can be played on the radio. Radio plays a powerful role as a gatekeeper in the U.S. music market by choosing what music earns a slot on the air. Specifically, this article discuss programmers as a main gatekeeper in the radio industry because of their role in selecting songs for radio playlists.

Building on these assumptions, the research explores the following questions: 1)Based on Ahlkvist and Faukner's (2002) four types of programming repertoires in commercial radio, how did Psy pass through gatekeepers to be selected on radio playlists? 2)Using Google Trends as a source of data, how did Psy's recognition change once his song was on an airplay chart?

This article sheds light on how exposure in new media is not an ideal strategy for being recognized among American music fans. Additionally, it provides information for culturally distant foreign musicians to employ for their newly released singles or albums, specifically, how radio is still a pivotal medium in the U.S. music industry.

II. Theoretical Background

This article used gatekeeping theory. Cassidy (2006, p6) addressed that gatekeeping theory has been called one of the most easily accessible theories and is certainly one of the most enduring in mass communication research. As stated by Cassidy, gatekeeping theory can apply to various fields. In general, gatekeeping studies have focused on the role of the gatekeeper as

the primary determinant in who controls what messages ultimately reach the audience (Slack and Allor, 1983). The conceptualization of this theory has broadened as technology has advanced in mass communication fields.

Advanced technologies have caused change in the media environment. Thus, many scholars (Johnson, 2012; Robinson, 2011; Poor, 2006; Meikle, 2002; Levisnson, 1999) argue that the Internet disempowers traditional gatekeepers and makes gatekeeping unnecessary. However, Singer (1998) claims that its role has adapted by offering evidence that journalists see their gatekeeping roles as evolving rather than disappearing with the advent of the Internet.

Basically, gatekeeping theory divides into the individual set (Kurt Lewin, 1947; White, 1950; McNelly, 1959;; Whitney & Becker, 1982; Frith, 2001) and the organizational set (Hirsh, 1972; Foucault, 1972; Dowd, 2004; Lopez, 1992). There are various gatekeepers involved in the music industry such as institutions, companies and personnel. Frith (2001) contends that once a record is released, it means that song already passed through the gates of the organizational set. Thus, to be successful the role of individual set such as radio programmers, music paper writers, television producers, club deejays, etc. is more important than the organization itself. This article focuses on the individual set, specifically, radio programmer and brings a research model from Ahlkvist and Faulkner's study (2000): the four types of programming repertories.

III. Analysis

1) Method of Analysis

This article uses qualitative research, specifically case studies, and is itself designed as a single case study to examine these two questions. As Yin (2014) notes, a single case study may not be substantial. While Psy's case is only one representing culturally distant foreign musician who had success in the U.S. music industry, it represents an extreme or unusual case based on the conditions of the single case design. Thus, even though Pys's case is considered to be an extreme or unusual case, it can be connected and applied to other foreign musicians.

To understand the procedure of how music is selected by gatekeepers to be on a radio playlists in the U.S., this study first examined the model of four types of programming repertories studied by Ahlkvist and Faulkner (2000). Second, this study applied the model to foreign pop music by providing the sample case of Psy's two songs, to examine how such a case passes through each gate to be on radio playlists. Third, this study examined how each song's recognition in the U.S. music market is different from passing through the gates or not receiving exposure on the radio. To measure the recognition of each song, specifically in the United States, this study used "Google Trends" to observe changes in recognition. While it is true that there are many factors which influence changes on Google Trends, I presume that radio exposure also influences the recognition changes among American music fans.

2) Data

In researching the U.S. music industry, this study has been particularly interested in how and why radio programmers selected Gangnam Style, a single released on July 15, 2012, and Gentleman, a follow-up song released on April 12, 2013. The reason I chose these two songs is not because I considered them to be representative of K-Pop as a whole, but because both songs got exposure through radio airplay, in contrast to other K-Pop songs, which tried to penetrate into the U.S. music industry in a different manner. Most professionals in the industry focused on YouTube views or other technical advanced media outlets as measurements of success. However, it would be informative to see different perspectives from other researchers about Psy's success in the U.S. music industry.

In order to test for changes in recognition among American music fans after passing through gatekeepers, I compiled data from the US Airplay Top 100 via aCharts.us and radio spins via Mediabases from July 2012 to December, 2013. First, I extracted the total numbers of spins/plays at U.S. radio stations for each song. Second, to illustrate recognition among American music fans, I chose the key words "Psy song Gangnam Style" and "Psy song Gentleman" to search in Google Trends, while limiting the region to "the United States." Finally, I examined the correlation between radio exposure and recognition change among American music fans. In addition, I quoted from various media reports such as the New York Times, RadioInfo, Forbes, YouTube Trend, The Independent, etc. because there are no academic literature reviews for this topic.

In order to compile objective data for the songs, Gangnam Style and Gentleman, I focused on YouTube views before each song was given any airplay but after they were released. Sherwin (2012) reports in the Independent that "the global web demand for Gangnam Style short-circuited the traditional reluctance of radio stations to play a foreign-language hit." As made clear by Sherwin's statement, YouTube views would be one of the barometers by which to measure popularity in the music industry.

As aforementioned, this article does not deny that advanced technologies allow artists to have a chance for global success with lower-cost and without passing through traditional gatekeepers. However, I question whether exposure only on the Web is enough for a record to be recognized by American music fans; indeed, it is not easy to watch YouTube while driving. Furthermore, music

fans require primary information in order to find records online, unlike radio, where listeners experience music inadvertently and for free. Nonetheless, it is noteworthy to review how a record gets attention on the Web once it is released.

This study will be more focused on how viral success influences passing through gatekeepers, mainly radio programmers, to increase the musicians' recognition among the U.S. music fans via radio exposure. As aforementioned, I presume that increasing the recognition of unknown genres of music or unknown foreign musicians among American music fans must be accomplished before discussing other issues such as album sales. Thus, based on the data collected from various passages, I proceed to prove the correlation between radio exposure and recognition among American music fans.

3) Results

It is commonly stated that Psy's Gangnam Style ranked at number 2 on the Billboard chart, but due to the scarce number of radio spins, his song could not be ranked at number 1. This implies two meanings. First, Gangnam Style is the first Korean song to appear on radio playlists with high spin numbers, staying on the U.S. Airplay Top 100 for 20 weeks. Second, it passed through the complicated gatekeeping process and was selected by radio programmers garnering more than just online success.

Ahlkvist and Faulkner (2002) examined the varied practices that programmer used in selecting music to add to the station's playlist. Firstly, some programmers take chances on new records based on their personal taste. Others follow trends and select songs whatever music is popular. In addition to these two practices, some describe themselves as a barometer for audience preferences and program records that they anticipate their listeners will like. Finally, other programmers focus on how well a record is supported by the label companies. Thus, it is labeled as the subjective repertoire, the objective repertoire, the populist repertoire, and the synergistic repertoire.

Psy's two songs, Gangnam Style and Gentleman, were screened by radio programmers once they were successful on YouTube and in the virtual world. Most people think that his songs were on radio playlists because of their dramatic success in the online market. However, his songs passed through the quite complicated gatekeeping process, as described by Ahlkvist and Faulkner's four types of programmer repertoires.

Overall, Gangnam Style passed through the subjective, objective, and populist repertoire. On the other hand, Gentleman passed through the synergistic repertoire. Whether or not each song passed through each repertoire affected their chance to be on the playlist. As a result, Gangnam Style has a reasonable number of spins while Gentleman has less. Through examination of the two songs based on Ahlkvist and Faulkner's model, it is interesting to find that passing through each repertoire is not a simple system; the repertoires are connected to one another and influence each other. Simply put, the relationship between repertoires is complex, dynamic, and filtered through various forces. Most scholars and professionals evaluated Psy's success in the U.S. music market as viral success, but it is important to note that radio also played a large role in his success.

Based on Mediabase and Google Trends, this article compared the number of spins and the recognition change of Psy's two songs. The recognition change is shown before the number of radio spins. In fact, radio spins are not counted if the spin number is less than 100, thus small numbers of spins are not shown and the scale is different in each variation. Therefore, the suggested figure in this study presents that the trending changes are relatively similar to each other.

Overall, radio spins influence recognition change, otherwise it would show in the very beginning, reflecting the YouTube views which started within a month of the song's release. Of course, it is debatable which variation influences recognition change, but by examining the graph change starting from radio exposure, it is clear that one of the factors is radio spins. At the same time, the period of the highest spin number and highest recognition change happened at relatively the same time. Thus this study presents that radio exposure is not neglected when increasing the recognition of a song.

IV. Conclusion

Power and Hallencreutz (2007) note that foreign musicians lack knowledge of the conditions of access in the U.S. music market as well as who the main gatekeepers are. This article examined Psy's success as not only originating in the new media, but also that radio played an important role.

Numerous studies have examined how new media outlets make it easy for musicians to produce, promote, and sell their music. However, there are many gates involved in a song reaching an audience in the U.S. music market. As is discussed through the whole article, radio plays a powerful role as a gatekeeper in the U.S. music industry by having the choice of what music earns a slot on the air; it continues to serve an important role despite the various new mediums that have emerged in this digital age. As Hendy (2000) notes, radio is a cheap and accessible means of communication and at the same time, a highly intimate medium capable of building large communities of listeners scattered across huge spaces.

The obvious difference between the two songs' popularity shows that exposure on the radio increases the public's recognition of a song. While Gentleman globally gained attention, it was not nearly as great as Gangnam Style; Gentleman was not recognized by the public at large in the United States. It is debatable whether or not airtime success influences the recognition of a song among American music fans, but I presume that a song's lack of popularity is most likely related to a scarcity of radio airtime. In fact, it is also debatable whether or not viral success leads to an increase in recognition. Thus, it is debatable which one more greatly influences recognition changes, but it is important to note that radio still plays a role as a gatekeeper and as an influential force on audiences.

Some scholars who have discoursed about Psy's music video, Gangnam Style, focus on the use of social media in spreading its popularity as well as it being the most watched video in YouTube history. However, the airtime success of Psy's single really catapulted him into the American music market, but it was overlooked. Furthermore, Gangnam Style, which passed through most gates, showed high recognition changes in Google Trends at the time when it had high radio spins. On the other hand, when the radio spins decreased, the recognition changes also decreased. This demonstrates a correlation between airtime exposure and recognition changes. Furthermore, for a song to be selected for a playlist and have airtime success, there is a complicated gatekeeping process.

This article disputed what main factors should be considered when culturally distant foreign musicians seek to enter the U.S. music market. In the past, radio was a way to promote and spread a song to mass audiences. It might seem cliché to discuss radio as a still important medium in promoting songs in the digital age, but it is still a powerful force and should be considered an important promotional tool in the U.S. music market.

In reviewing the music industry in the United States, it becomes clear that even with the development of new technology, gatekeepers still carry on their duty in controlling the channels. Additionally, various forces influence them and the selections of music which they believe will be able to gain mass appeal. Brooke Allison already succeeded in the virtual world, but once she was selected by a label and her song was on pop radio stations, it became more recognized among audiences. In addition, in the case of Rihanna's single, *Man Down*, extra money was spent to promote the song through radio.

Through demonstrating the case of Psy, this article discussed radio as a necessary tool to utilize along with digital media to enter the U.S. music market. The limitation of this study is only discussing a single case. Thus, in order to get more accurate and relevant results, cases of more culturally distant foreign musicians should be discussed. Further research can lead to new paths through which to explore the music streaming radio services as a form of advanced technology for culturally distant foreign musicians to utilize in order to attract American music fans as well as global music fans.