



**THAI CONSUMER BEHAVIOR OF ONLINE MUSIC
STREAMING SERVICES**

BY

MR. RATTAPON JANGWAN

**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL
FULFILLMENT OF**

**THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE PROGRAM IN MARKETING
(INTERNATIONAL PROGRAM)**

**FACULTY OF COMMERCE AND ACCOUNTANCY
THAMMASAT UNIVERSITY**


ACADEMIC YEAR 2016

COPYRIGHT OF THAMMASAT UNIVERSITY

**THAI CONSUMER BEHAVIOR OF ONLINE MUSIC
STREAMING SERVICES**

BY

MR. RATTAPON JANGWAN



**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF SCIENCE PROGRAM IN MARKETING
(INTERNATIONAL PROGRAM)
FACULTY OF COMMERCE AND ACCOUNTANCY
THAMMASAT UNIVERSITY
ACADEMIC YEAR 2016
COPYRIGHT OF THAMMASAT UNIVERSITY**

THAMMASAT UNIVERSITY
FACULTY OF COMMERCE AND ACCOUNTANCY

INDEPENDENT STUDY

BY

MR. RATTAPON JANGWAN

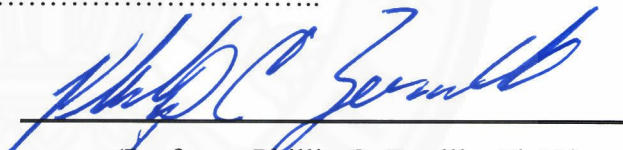
ENTITLED

THAI CONSUMER BEHAVIOR OF ONLINE MUSIC STREAMING SERVICES


was approved as partial fulfillment of the requirements for
the degree of Master of Science Program in Marketing (International Program)

on..... 8 MAY 2017


Chairman


(Professor Phillip C. Zerrillo, Ph.D.)

Member and Advisor


(Associate Professor James E. Nelson, Ph.D.)

Dean


(Associate Professor Pipop Udom, Ph.D.)

Independent Study Title	THAI CONSUMER BEHAVIOR OF ONLINE MUSIC STREAMING SERVICES
Author	Mr. Rattapon Jangwan
Degree	Master of Science Program in Marketing (International Program)
Major Field/Faculty/University	Faculty of Commerce and Accountancy Thammasat University
Independent Study Advisor	Associate Professor James E. Nelson, Ph.D.
Academic Year	2016

ABSTRACT

The study of “Thai consumer behavior of online music streaming services” has been chosen to be an independent study topic that focuses on the issue of technology. This study is a contemporary topic in applied marketing. Objectives are to understand consumer behavior towards marketing mix of the services, to identify consumption behavior and characteristics of each type of music streaming users, to discover the barrier of entry to the paid subscription and to understand attitude of music streaming users towards marketing mix of the services.

Secondary research was gathered through various sources such as business articles, online blogs, online news site and other internet sources. Furthermore, qualitative analysis was attained by conducting in-depth interviews with seven interviewees who are current users of music streaming services. The in-depth interviews were proceeded to discover attitude, music consumption behavior, and to receive knowledge of users towards the streaming services. Quantitative analysis was accomplished by surveying 203 respondents through online questionnaires. Finally, statistical procedures by SPSS were used to summarize the outcomes from quantitative survey.

Key findings from this study can be used for music streaming providers in Thailand to improve the services, create new innovative offerings to match consumers’ preferences and, eventually, expand alternative channels of revenues for

the providers. Moreover, interested companies who want to create, for example, promotional campaigns or advertisements through music streaming services can apply the insights from this study.

Keywords: Music streaming services, consumption behavior of music streaming users, attitude toward music streaming services



ACKNOWLEDGEMENTS

First of all, I would like to express my sincere appreciation and gratitude to Assoc. Prof. Dr. James E. Nelson, my dearest advisor, for his kind supervision and valuable recommendations throughout the course. Without him, this study will not be able to complete.

In addition, I would like to express my sincere thanks to all respondents for giving their valuable time to help complete the survey, and also those who spend time for the in-depth interview.

Lastly, I would like to express my appreciation to all the supports including MIM Office and staffs for the helpful information and updated provided. Without their great care, I could never have accomplished this study.

Mr. Rattapon Jangwan

TABLE OF CONTENTS

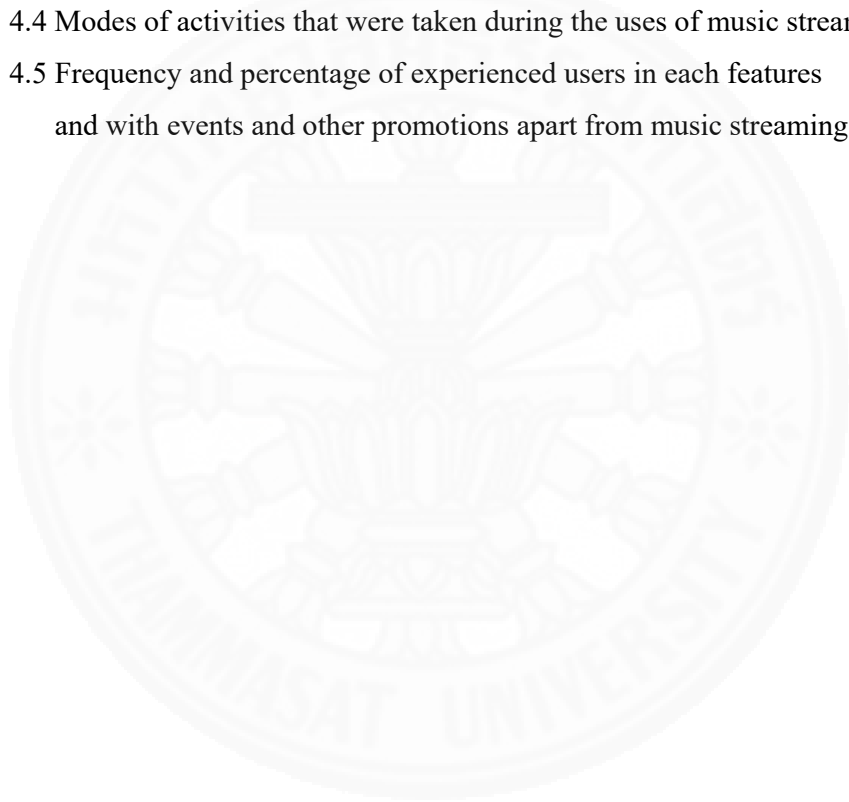
	Page
ABSTRACT	(1)
ACKNOWLEDGEMENTS	(3)
LIST OF TABLES	(7)
LIST OF FIGURES	(8)
CHAPTER 1 INTRODUCTION	1
1.1 Introduction to the study	1
1.2 Objectives	2
1.3 Project scope	3
CHAPTER 2 REVIEW OF LITERATURE	4
Literature review	4
CHAPTER 3 RESEARCH METHODOLOGY	8
3.1 Research design	8
3.1.1 Secondary data	8
3.1.2 In-depth interviews	8
3.2 Descriptive research methodology	9
3.3 Identification of key research variables	9

3.4 Sampling procedure	9
3.4.1 Geographical factors	10
3.4.2 Demographical factors	10
3.4.3 Psychological or lifestyle factors	10
3.5 Data collection	10
3.5.1 In-depth interview	10
3.5.2 Online questionnaire survey	10
3.6 Data analysis	11
 CHAPTER 4 RESULTS AND DISCUSSION	 12
4.1 Data analysis	12
4.2 Results from exploratory research	12
4.2.1 Secondary research result – Overview of music streaming services	12
4.2.2 In-depth interview result	12
4.3 Results from descriptive research: online questionnaire survey	14
4.3.1 Summary of respondent profile	14
4.2.2 Music streaming consumption behavior of respondents	16
4.2.2 Attitude evaluation	19
 CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS	 20
5.1 Conclusion	20
5.1.1 Total respondent profile	20
5.1.2 Consumption behavior of respondents	20
5.1.3 Attitude towards the service	20
5.2 Recommendations	21
5.2.1 Conversion rate is important	21
5.2.2 Advertising use in the online music streaming service	21
5.2.3 Creative service pack with affordable price	21
5.3 Limitations of the study	21

REFERENCES	23
APPENDICES	24
APPENDIX A: In-depth interview questionnaire guide	25
APPENDIX B: Online questionnaire survey	26
APPENDIX C: Respondents' top three interests, favorite music genres, and music fandom	27
APPENDIX D: Each brand conversion rates from aware to trial and trial to use	29
APPENDIX E: The differences of beliefs about music streaming services in different group of users based on intensity of usage	31
APPENDIX F: Willingness to pay from respondents	33
BIOGRAPHY	34

LIST OF TABLES

Tables	Pages
2.1 Comparison between different music streaming service providers in Thailand	5
4.1 Summary of Respondents' demographic (n = 203)	15
4.2 Modes of sources of knowledge about music streaming services from respondents	16
4.3 Modes of platforms for music streaming users from respondents	17
4.4 Modes of activities that were taken during the uses of music streaming	18
4.5 Frequency and percentage of experienced users in each features and with events and other promotions apart from music streaming services	18



LIST OF FIGURES

Figures	Page
4.1 Peak/ low time of usage of music streaming services from respondents	17



CHAPTER 1

INTRODUCTION

1.1 Introduction to the study

From the past, music has since developed from physical form of records starting from vinyl, cassette and CD. Then, in the early of 1990's, starting of the digital era, MP3, digital form of music, emerged in the market. Later in 1999, Napster was founded. It was the first platform that allows people to share, upload and download digital music files online. The service grew rapidly in a short period of time because it was the first solution to discover consumers' hidden demand for high accessibility of music. However, along with its growing trends, there were also widespread of piracy. Unlicensed digital music had found in countless of easily accessible forms such as free online download sites, file transfer with USB devices, and MP3 file conversion from YouTube videos. The company was shut down later due to the copyright infractions.

In 2001, Apple launched iPod as a device to store MP3 file of music. Then, there were many brands of MP3 players emerging in the market. The MP3 device had quickly replaced the traditional bulky CD player because of its convenience, style, and inexpensive price that were relatively beyond. Along with the launch of iPod, the legal digital music download service called iTunes also was introduced. Therefore, with decreasing trend of the usage of physical forms of recording music, consumption of digital music in a form of MP3 file became more popular. Digital download of music has become a mainstream way of listening to music. Within only two years of digital music download services, Apple had sold over 500 million tracks through the iTunes music store. By 2012, Apple's iTunes music store accounted for 60 percent of worldwide digital music sales for the industry (Takebayashi, 2005).

From 2007, with the growing usage of internet and smartphones, a number of online music streaming services have emerged. The services allow users legal access to huge music library that contain millions of music tracks from any platforms that are connected online. With the development of cloud storage technology, online music streaming services have become more popular. The services have substituted the

traditional way of storing music files on hard drives with the cloud music storage that are instead stored on a third-party site. This allows files to be more accessible towards various kinds of devices and to be more convenient for users that can get access to the storage anywhere that internet connection is available.

The nature of the service has come into two main types; subscription services and Freemium services. Subscription services provide full service while Freemium services only provide the same for consumers who have paid accounts. For the other group of consumers in Freemium service which is free account, they only get limited access and features from the providers.

In 2015, Thailand's digital music market is worth about 25 Million USD (McKinsey, 2016) with its growing trends. There are five key players of online music streaming service providers in Thailand, which are Apple music, JOOX music, KKBox, Line Music and Deezer music. One of many challenges that these service providers encounter is the way to increase their revenue by increase the number of users who use paid subscriptions.

Therefore, this research aims to study consumer behavior of current Freemium users in both from paid accounts and free accounts to gain insights and develop recommendations for the service providers.

1.2 Objectives

The study represents a contemporary topic in the area of applied marketing, which focuses on the study of consumer behaviors between two groups of online music streaming users. The main objective of this study is to understand consumer behavior in each different group of online music streaming services consumers both who subscribe for free accounts and those who have paid monthly flat rate for the services.

Detailed objectives of this research are listed as below:

1. To understand behavior of consumers towards the marketing mix of the service in terms of music consumption in general, use of the music streaming service, frequency and intensity of using the music, substitutes and complements of the services, brand awareness, consideration set.
2. To identify characteristics of each type of music streaming service users
3. To discover barriers of free account users towards the paid subscription

4. To understand attitudes towards marketing mix of the service, suggestions to improve the services and satisfaction over the current service they receive will be studied.

These four broad objectives above would help the researcher gain more insight in understanding the questions on “What are the reasons behind their online music streaming services using behavior?” and “What do consumers concern or not concern about the paid accounts?” This study will specifically concentrate on current users of both types of services which has different mix of demographics. Details will be explained later in the Research methodology chapter.

1.3 Project Scope

Sources of data were secondary and primary data that gathered from in-depth interviews and quantitative through an online questionnaire survey. Target respondents were music streaming service users in Thailand at any ages.

Important questions that this study aims to answer were: What is consumers' attitude toward online music streaming service, how Thai consumers consume service from online music streaming service, what are opportunities for online music streaming service providers to create more channel for revenues?

Key variables of the study were 1) consumers' character such as age, gender, behavior 2) type of music streaming account, paid-account users or free-account users 3) intensity of usage of music streaming services

CHAPTER 2

REVIEW OF LITERATURE

A number of Thai people misunderstand that online music streaming service strictly require an internet connection on the users' devices in order to use the service (9TANA, 2015). However, the statement is only partially true. Music streaming service is very similar to the old way of purchasing music online through digital downloading. However, the transaction is changed from 'buying' to 'renting.' Users are able to listen to any music offline by downloading the music through the application or the program. With the membership or subscription, they can listen to any music that they have downloaded to the application or the program. Both online and offline services will be discontinued when the membership is terminated. Therefore, the misunderstanding that music streaming consume too much internet data of mobile devices is laid to rest. Moreover, providers set the Wi-fi connection as the default setting for downloading music.

Nowadays, Thai people who use online music streaming services are classified into six segments based on technology adopting behavior (Visamitanan, Assarut & Pongnatpanich, 2016) i.e. Low users, Non-IT, General users, Innovators, Early adopters and Potential customers. Regarding the survey, there are six different groups of customers who have different levels of demands when using online music streaming services. Therefore, understanding Thai customers' different levels of demands is the key to the online music streaming service providers' success. They are able to use the information to create more suitable services or services more directed to their target markets. This will not only provide more competitiveness for the providers, but also build up a strong base for sustainable business in the future.

Apart from online music streaming services, currently, there are five other alternatives to access to music which are Youtube, iTunes/ Paid Download Services, Free/ File sharing, CD/ Vinyl and Terrestrial Radio (Swanson, 2013). According to the survey (conducted in January, 2013), more than half of the respondents between the ages of 18 – 24 are using music streaming service regularly on a daily or weekly basis. They prefer the service over those alternatives because of convenience and

quality. Moreover, some of the respondents mention that they have gained some saving in their music budget from using online music streaming services over the alternatives.

In spite of increasing popularity of the services among consumers, the direction of profitability of the service providers is not moving on the same scale. There are five challenges (McKinsey, 2016) for online music streaming services in Thailand to encounter which are explained as following.

1. About 60% of Thai population has disposable household income less than 10,000 USD per year. This means the majority of Thai households have earned quite low income relatively to other countries in Asia. This will be one of the challenges of the service providers.

2. Thailand has relatively low willingness to pay for subscription of the services due to two main reasons. First, there are still widespread of piracy in the country. Second, cost of mobile data needed to use for the services is relatively high comparing to their income level. Therefore, consumers tend to use less on-the-go, and more using in the place where there are accessible to Wi-fi connection.

3. Currently, smartphones users are divided into high-end and lower-end users. The mass market of the users is in the second group which uses lower-end smartphones. However, current cost of using paid account for online music streaming services are averagely only suitable for income level of high-end smartphone users. If the providers could create paid account services that are suitable with lower-end smartphone users, they will be able to capture the mass market of smartphone users.

4. Many advertisers in Asia still have not seen or taken an advantage of digital music marketing. Therefore, advertising on music streaming are still relatively low comparing to other market in US, where the ad-supported streaming services are growing steadily (Friedlander, 2016).

5. There is significant minimum guarantee for content costs that music streaming services have to pay for music rights holders at the beginning of each licensing period. This is quite a huge fixed expense for the service providers.

According to McKinsey (2016), “A theoretical service provider with a 15 to 20 percent market share of music streaming users would require either about 60 percent of its users to pay for premium subscriptions” (p. 14) The figure was double

Spotify's current global subscription rate which is about 30%. And it has about 25% conversion rate from free account to paid account (Titlow, 2013). Another way, using the same theoretical service provider as mentioned earlier, is to attract 30 percent more advertising revenue than in 2015. Therefore, there should be some strategic moves towards the challenges in order for the service providers to survive in the market.

JOOX is a Freemium online music streaming service provider that was just introduced into Thailand market in early of 2016. Outstandingly, they have already become number one in the market within two months (Jerminalz, 2015), capturing total of 56% market share in 2016 (McKinsey, 2016). They expect to grow more since the two key players are planning to shut down the services in very soon. They provide two types of subscriptions; free account and VIP (paid) account. Interestingly, free account users are able to experience VIP feature for one day only if they share the VIP content on any social media. "Free account is the only model that is suitable for Thai consumers. It would take at least three years to change consumer behavior to adopt paid services. Therefore, we don't expect our mainstream of revenue to be from VIP users" said Mr. Kritnatee Manoleehagul, Sanook online limited, board of director.

Currently, there are four key providers in Thailand (McKinsey, 2016). Each provider has a different mixture of service and rate of payment (Table 2.1).

Table 2.1 Comparison between different music streaming service providers in Thailand

Compared points	Apple music	JOOX	Deezer	Line music
Price	70 THB/ month	159 THB/ month	179 THB/ month	60 THB/ month
Free trial period	3 months	Daily sharing on social media	1 month	1 month
Thai songs	Yes	Yes	Yes	Yes

Compared points	Apple music	JOOX	Deezer	Line music
International songs	Yes	Yes	ENG only	Few
Devices	iOS, Android, Windows, Mac, iTunes	iOS, Android	iOS, Android, Windows, Mac, Web	iOS, Android

According to McKinsey (2016), JOOX has the highest market share in Thailand. It can be assumed that JOOX has provided most attractive deals towards Thai consumers. The most interesting feature would be unlimited opportunities of free users to experience VIP features. However, the fact that their music library has contained less number of songs than in Apple Music's seems to be less concerned for the majority of Thai consumers.

Nowadays, online music streaming service has become a very popular way to listen to music for consumers; however, there are many people who still insist to consume the music without paying. The proposed research will allow readers to understand the behavior of Thai consumers of online music streaming services. There are the differences of behavior, especially between paid customers and free-user customers. The study will be useful for the music providers and other related parties in music industry to apply with their business and marketing strategies.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research design

In order to achieve the four research objectives that were previously stated, marketing research is the most effective way to collect data to analyze. Primary data were collected by in-depth interviews. Secondary data were collected through readings of articles, blogs, managerial articles, reviews, and forums.

This research was conducted into two parts. Firstly, researcher has conducted a comprehensive reading and analysis of studies from various sources around the world. This has given a better understanding of what online music streaming is, what goes on in the current Thailand market in this industry and much more of information. Secondly, researcher validated the information using qualitative marketing research which is conducting in-depth interviews with consumers of both types of users.

After finishing the first part, researcher conducted a descriptive research using questionnaires through online sources to obtain a total completed of 203 respondents. The obtaining data were analyzed and interpreted. The results were used to summarize consumer behavior of both types of consumers and also explore the barriers to entry for paid accounts.

3.1.1 Secondary data

Trusted information could be obtained from various sources such as articles from Google Scholar, academic publications from Chulalongkorn business reviews, blog and forums in Thai well-known tech website; for example, Beartai.com, Digitalagemag.com. These sources have provided fundamental information about the current situation of the services and the industry. Also, they have provided general information about Thai consumers such as brand perceptions, attitudes toward the services before collecting the primary data.

3.1.2 In-depth interviews

In-depth interviews (one-on-one discussions) contained many open-ended questions. Researcher used the Probing and Prompting techniques with the in-depth interviews. The Probing technique helped encourage the respondents to elaborate

more on their point of views, which helped researcher to get to the core of the respondents' thoughts. The Prompting technique helped uncover specific details and was used when the respondents failed to mention some specific or in-depth information with regards to the question. (Sample of in-depth interview questions can be found in Appendix A). Sample of results from the interviews are as following.

- Suggestions to improve on current services
- Acceptable price range
- Expected level of services
- Willingness to pay for the services
- The reason which respondents do not use the services
- Frequency of music consumption per day/ week

3.2 Descriptive research methodology

After researcher gained insight information from in-depth interview, the information was used to draft and adjusted into questionnaire. The questionnaire was designed to have three parts which are behavior, beliefs, and demographic and lifestyles. Before launching online, the questionnaires were pilot and distributed to gather the information to help ensure the result from qualitative part. Result from questionnaire, was used to quantify results that researcher gained from the in-depth interview into percentages and figures.

3.3 Identification of key research variables

Independent variables: demographic factors, social factors, personal factors and psychological factors. The four factors above will be investigated during the research

Dependent variables: willingness to buy (to use paid account), satisfaction towards the service, emotions received when using the service.

3.4 Sampling procedure

Both qualitative and quantitative were designed to use convenience samples in order to obtain information in limited time frame. All respondents are Thai men and women who were in following qualifications.

3.4.1 Geographical factors

Researcher chose respondents who live in Bangkok and vicinity for in-depth interviews through online and face-to-face. However, online questionnaire were distributed through social media and e-mail regardless of geographical locations of respondents.

3.4.2 Demographical factors

Respondents who have any age levels, any income level and any education level.

3.4.3 Psychological or lifestyle factors

Respondents who currently are users of online music streaming services and who have average frequency of usage of the services for at least once a week.

Sample size for an in-depth interview was seven respondents aged between of 25 and 35 years old. The data collection period was on February and March 2017.

Sample size for online questionnaire survey was 203 respondents which were current users of online music streaming services. The data collection period was in March 2017.

3.5 Data collection

3.5.1 Secondary data

In-depth interview were conducted with the total of seven interviewees (face-to-face in-depth interview with four interviewees and video conference in-depth interview with three interviewees) during 8th to 12th of Feb. And, small focus group was conducted on 14th of Feb with five Freemium users (the same respondents from in-depth interview group) in one hour. Interviewees were recruited through online connections which are the members of 'Diva Lyrics' Facebook page, a Thai online community of international music lovers. Also, personal connections were utilized using interviewees who have various tastes of songs (mix of Thai and international songs).

3.5.2 Online questionnaire survey

The questionnaire was distributed by using the convenience methods through the online channels such as Facebook, email and through chat messaging application such as LINE (See Appendix B: Online questionnaire survey). The total respondents were

272 people. However, only 203 respondents were current users. Therefore, 203 respondents were considered for data analysis. The length of time used to finish questionnaire of each target respondent is about 10 minutes. Questionnaire was divided into three parts as the following:

Part 1: Behavior question

Part 2: Beliefs towards online music streaming services

Part 3: Demographic and lifestyle questions

3.6 Data analysis

The In-depth interview was conducted to find consumer insight to match objectives of research and be able to identify key factors to study consumption behavior and beliefs towards music streaming services.

The questionnaire was conducted to ensure result that received from in-depth interviews. Before analyzing the data, the questionnaire result was screened, cleaned and coded into SPSS format in order to enter into SPSS program for further analysis. Data was interpret by using SPSS and focused on frequencies, means, descriptive and other appropriate statistical analysis.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Data analysis

Research conducted both in-depth interviews and online questionnaire survey. Findings from in-depth interviews were used to identify key factors and questions in online questionnaire survey. The survey was distributed through online channel like social media, such as, Facebook and via chat application, like, LINE. Total respondents from the survey were 272 people. All of their results were screened, cleaned and coded to enter into SPSS program. The main functions in SPSS that used to analyze data were one way ANOVA, descriptive and mean statistic tools.

4.2 Results from exploratory research

4.2.1 Secondary research result – Overview of music streaming services

Music streaming providers are divided into two types, subscription service and Freemium service (McKinsey, 2016). Paid-account is an available alternative in both types of the service. Paid –account users are offered with a full range of features, content and value-added services, however, free-account users from Freemium services are limited to some of the features and content. Voice commercials and advertising are freely exposed by the music streaming providers in the usage of music streaming of free-account users. Therefore, voice commercials and advertising play the key roles in sourcing revenue for Freemium service providers (Friedlander, 2016).

4.2.2 In-depth interview result

The study was started from qualitative part, in order to find the insight and to develop questionnaire for quantitative part. In-depth interview of seven respondents were collected and were reported as qualitative findings as below:

In terms of respondent profile, three respondents were male and the other four respondents were female. Their ages were between 25-35 years old which were considered as Generation Y. Six of them were office employees and another one was a graduate student. All of the respondents had medium level of monthly income which

is more than 15,000 THB per month. They all also had interest in music and had various kinds of music in their preferences.

In terms of music streaming listening behavior, all respondents listen to music for different purposes, such as, relaxing, during workout, during commute, or when then spend their alone time. Five of respondents use music streaming every day, while the other two use about three to four times per week. 'It was very easy and useful. I can forget about downloading songs and storing them on my devices from now on.' was a quote said by one interviewee. Mobile phone was the platform that all respondent used for music streaming. Types of service that each respondent used can be divided into two groups, paid-account users and free-account users. There were two respondents considered as paid-account users. They both used Apple music. One of the paid-account user respondent use discount promotion from Apple music as he is a student. Therefore, he enjoyed paying less than regular customers, while receive the same scope of features and content from the service. The other paid-account user also enjoyed the service from Apple music. The rest five respondents used Freemium service from the same provider, JOOX music. They were all aware of the limitation of features and content from the provider using free account, however, they were satisfied with the current service pack they had. All of seven respondents were aware of features in the service, such as, live concerts, online videos and special playlists. All of free-account user respondents occasionally applied to receive full features and content for a limited period by sharing music on their social media. One of the free-account user respondent received an additional limited period of full service from the current promotion of the mobile network operator she used. None of the respondents had joined campaigns or events that are organized by music streaming providers.

In terms of attitude and belief towards the service, the two paid-account user respondents had shared the same reason which they did not prefer using free-account service. Both of them had tried free-account service from Freemium service provider before but they preferred more to pay monthly fees for Apple music. Voice commercial was considered an interruption during the enjoyment from using music streaming service and was the main factor that both respondents gave up using free account. Better quality of sound, broader selections of songs and easier user interface are the following factors considered by both respondents to decide using Apple music.

Apart from the two, all five free-account users were aware of voice commercial during the use of music streaming service and advertising that were appeared on the user interface. They recognized the names and the contents of jingle ads of voice commercials. However, there were minimal differences of overall satisfaction score as all respondents rated overall satisfaction from using their current music streaming from eight out of ten full score.

In summary, researcher found that there were not much variance in satisfaction of users from both type of the services. Expectation from service were different between two groups of users. Therefore, consumption behavior and attitude towards the service were focused in making of online questionnaire survey.

4.3 Results from descriptive research: online questionnaire survey

4.3.1 Secondary research result – Overview of music streaming services

Data that have been collected by online questionnaire survey method was analyzed by using Statistic Package for Social Sciences (SPSS). From 272 respondents, 203 respondents were current music streaming users at the period. Therefore, only current users of music streaming services were considered for data analysis. From current users of 203 respondents, there were 47.3% female, 52.7% were male, 21.2% aged below 18 years old, 21.2% aged between 18 and 22 years old, 23.2% aged between 23 and 27 years old, 20.2% aged between 28 and 32 years old, 9.4% aged between 33 and 37 years old, 4.4% aged between 38 and 42 years old and 0.5% aged above 42 years old. 49.8% of all respondents were holding bachelor's degree as the highest education level, 23.2% were holding higher level than bachelor's degree as the highest education level, while 15.3% were still in high school and 10.3% were in elementary school or below. Most of the respondents were working as employees at about 41.9%, 47.3% were students, 3% were business owner and 5.9% were government officers (See table 4.1). When looking at their top three interests, 55.7% of all respondents listed music as their one of the three selected choices. Pop was the most popular music genre among respondents which 84.2% of all respondents had voted. And to be more in specific perspective, 80.3% had their fandom of various music artists (See Appendix C: Respondents' top three interests, favorite music genres, and music fandom)

Table 4.1 Summary of Respondents' demographic (n = 203)

Respondents' demographic		n	%
Gender	Male	107	52.2
	Female	96	47.3
Age	Less than 18 years old	43	21.2
	18 - 22 years old	43	21.2
	23 - 27 years old	47	23.2
	28 - 32 years old	41	20.2
	33 - 37 years old	19	9.4
	38 - 42 years old	9	4.4
	Higher than 42 years old	1	0.5
Education level	Elementary school or below	21	10.3
	High school/ Vocational school	31	15.3
	Diploma	3	1.5
	Bachelor's degree or equivalent	101	49.8
	Higher than Bachelor's degree	47	23.2
Occupation	Business owner	6	3
	Employee	85	41.9
	Freelance	2	1
	Government officer	12	5.9
	Musician	1	0.5
	Students	96	47.3
	Unemployed	1	0.5
Monthly salary	Lower than 15,000 THB	88	43.3
	15,000 - 30,000 THB	50	24.6
	30,001 - 45,000 THB	34	16.7
	More than 45,000 THB	31	15.3
Intensity of usage	Every day (Heavy users)	97	47.8
	3 - 6 days a week (Moderate users)	74	36.5
	Less than 3 days in a week (Light users)	32	15.8

4.3.2 Music streaming consumption behavior of respondents

To separate users into groups, researcher asked respondents about their intensity of usage of the service per week. Three groups, light users, moderate users and heavy users, had been defined as the frequency of usage of lower than three days a week, three to six days a week and every day, consecutively (See table 4.1). Given multiple selections to respondents about sources of knowledge about music streaming service, social media had highest exposure towards all respondents at 81.3%, while 53.7% of respondents were also aware of the service from word of mouth which was the second strongest way of knowledge about the service (See table 4.2)

Table 4.2 Modes of sources of knowledge about music streaming services from respondents

Sources of knowledge	n (Mode)
Social media	165
TV commercials	50
Website	47
Online blog	29
Mobile network operators	24
Magazine. Publishing	9
Billboards	8

In terms of consumer behavior of each brand, respondents were asked in three separated questions about brand awareness, brand trial, and the current service they used. Then, regarding conversion rate from brand awareness to brand trial, and from brand trial to current use were calculated, JOOX music had the highest awareness and made the highest conversion rate to brand trial at 94.3%. Also, the service had the most successful in converting trial consumers to the current usage at 71% (See Appendix D: Each brand conversion rates from aware to trial and trial to use). While mobile phone was the most popular among the respondents as ...% of respondents used it as a platform to use music streaming service, some respondents at ...% also downloaded music streaming software to use on their Laptop or PCs (See table 4.3)

Table 4.3 Modes of platforms for music streaming users from respondents

Platform for music streaming	n (Mode)
Stream on smartphones	198
Streaming in software on PC	47
Streaming on website	39
Stream on tablets	39

Evening was the peak time of usage of the service, while early morning had the lowest usage of the service (See figure 4.1)

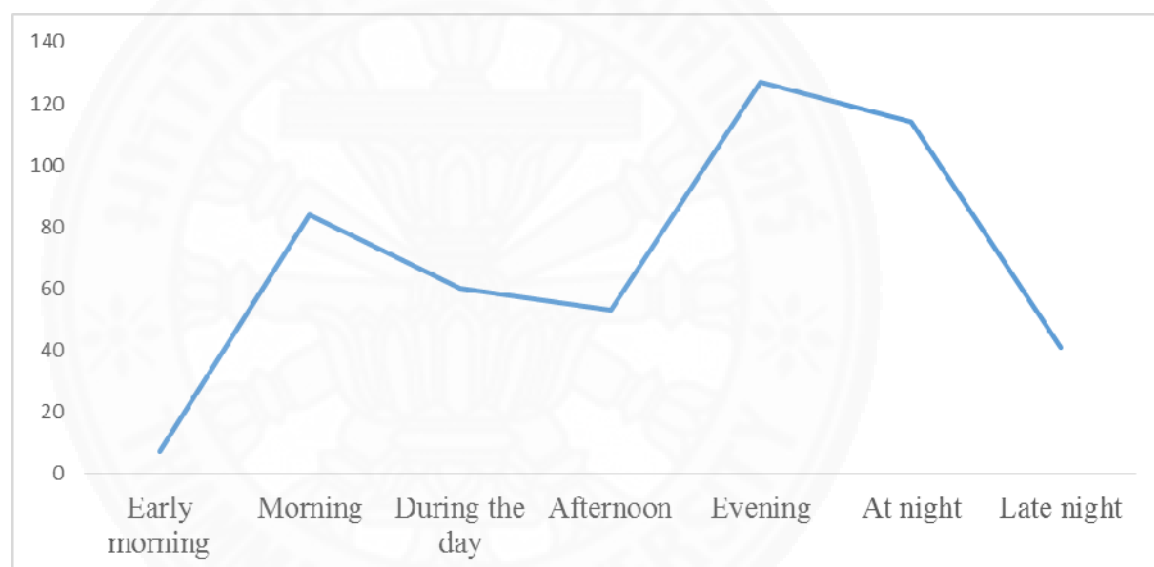


Figure 4.1 Peak/ low time of usage of music streaming services from respondents

Respondents were also asked about the activities during their use of music streaming service, in their alone time, during commute and for relaxing were top three most activities (See table 4.4). Heavy users were weighed in the highest percentage in every activities

Table 4.4 Modes of activities that were taken during the uses of music streaming

Activities	n (Modes)
Running/ Workout	100
Work	69
Relaxing	134
Commute	126
Partying	28
Spending some alone time	140
During the meal	22
During shower	5

Music videos and live concerts were listed by researcher as the special features from music streaming services. Respondents were asked about the usage of special features. Interestingly, up to 65% of respondents had watched music videos through music streaming services, however, only 34% had experienced live concerts from music streaming services. In terms of marketing promotions and events arranged by music streaming service providers, most respondents had never joined the events, also, most respondents had never applied any promotions from other sources to their use of music streaming services (see table 4.5).

Table 4.5 Frequency and percentage of experienced users in each features and with events and other promotions apart from music streaming services

Brands	Frequency	Music videos		Live concerts		Events		Other promotions	
		n	%	n	%	n	%	n	%
Deezer music	2	1	50	0	0	1	50	2	100
KKBox	1	1	100	0	0	0	0	1	100
Spotify	6	2	33	2	33	0	0	5	83
JOOX music	130	78	60	36	28	20	15	73	56
TIDAL	5	4	80	3	60	0	0	2	40
Apple music	46	35	76	23	50	10	22	24	52
Line music	3	3	100	3	100	0	0	3	100
Soundcloud	5	3	60	2	40	1	20	3	60
Atime	1	0	0	0	0	0	0	1	100
Youtube	4	4	100	0	0	0	0	0	0
Total	203	131	65	69	34	32	16	114	56

4.3.3 Attitude evaluation

12 beliefs about music streaming services were listed to rate their level of agreement based on five-point scale. The data were used study its significance towards each group of users based on intensity of usage. Among users groups of difference intensity level of usage, a one-way ANOVA showed that there were significant differences of scores between three groups on five particular beliefs. 'I always want to listen to new songs' at $p < .05$ levels for the conditions [$F = 4.40$, $p = .01$], 'I don't like to post or share any music on social media because my social media friends would feel that I'm annoying' at $p < .05$ levels for the conditions [$F = 6.30$, $p = .00$], 'Music streaming service is the only channel I use to listen to music nowadays' at $p < .05$ levels for the conditions [$F = 3.89$, $p = .02$], 'Music streaming service is difficult to use' at $p < .05$ levels for the conditions [$F = 8.07$, $p = .00$], and 'I probably would quit using the service if they charge for the service' at $p < .05$ levels for the conditions [$F = 7.25$, $p = .00$]. Together with post hoc comparisons using the Tukey HSD test indicated that the means score of light users group and moderate users group has no significant difference. However, four significant differences between light users and heavy users groups were 'I always want to listen to new songs', 'Music streaming service is the only channel I use to listen to music nowadays', 'Music streaming service is difficult to use' and 'I probably would quit using the service if they charge for the service'. Also, there were four significant differences between moderate users and heavy users which were 'I don't like to post or share any music on social media because my social media friends would feel that I'm annoying', 'Music streaming service is the only channel I use to listen to music nowadays', 'Music streaming service is difficult to use' and 'I probably would quit using the service if they charge for the service' (See Appendix E: The differences of beliefs about music streaming services in different group of users based on intensity of usage).

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

5.1.1 Total respondent profile

From total respondent of 272 people, researcher narrowed down to only 203 respondents that were current users of music streaming services for data analysis. The proportion between male and female respondents were almost the same. Respondents' ages almost equally distributed from range of below 18 years old to more than 32 years old, however, there were some respondents aged from 33 to above 42 years old also.

5.1.2 Consumption behavior of respondents

Researcher used the level of intensity of usage of the service to divide respondents into three groups, light, moderate and heavy users. People who use music streaming service every day called 'Heavy users', people with medium level of intensity of usage (from three to six days a week) were called 'Moderate users' and people with lower three days a week usage were called 'light users'. Using modes to check the consumption behaviors of music streaming service, most respondents knew the service from social media, they mostly use music streaming service on their smartphones, from 5.00PM to almost 10.00PM were the peak time of the usage, while relaxing, during commute and when respondents spend their alone time, they were likely to use music streaming services, most users had never experienced live concerts feature and had never attended any events hosted by music streaming service providers.

5.1.3 Attitude towards the service

Overall respondents agreed that music streaming services provided every song they wanted to listen. They felt upset when they heard voice commercials during their use of the service. They believed that they did not have to buy music any more since they used music streaming service. On the other hand, they did not think that streaming service could provide better quality of music than physical CDs.

5.2 Recommendations

Based on research objectives that want to study consumer behavior of online music streaming services, attitude towards the service and barrier to entry the paid-account subscription, recommendations can be made as following:

5.2.1 Conversion rate is important

Each brand has different stage to acquire customers to use their service. Therefore, knowing the conversion rate at each stage can help focus and shape up effective marketing activities for the companies. According to the data from Appendix D (Each brand conversion rates from aware to trial and trial to use), Apple music was in the struggling place as the conversion rates both from awareness to trial and from trial to use were just about 50 percent. Therefore, the company could use the data to tailor their marketing activities into two stages of customer acquisition.

5.2.2 Advertising use in the online music streaming service

Not only music streaming providers could benefit from the data, however, interested companies who want to do marketing activities with music streaming services can use the data to study. For example, the data shown that smartphones is the most popular platform to use for music streaming, peak time of usage is in the evening and workout is one of the most popular activity during the use of music streaming service, the interested companies could create advertising content to capture those specific group of consumers who use smartphones, during their workout in the evening.

5.2.3 Creative service pack with affordable price

According to the study of willingness to pay of Thai consumer behavior of music streaming service (See Appendix F: Willingness to pay from respondents), heavy users were mostly willing to pay at 150 THB per month while light users and moderate users were mostly willing to pay only 50 THB per month. Music streaming service providers could create creative service pack to attract more customers and charging them at the level of their willingness to pay.

5.3 Limitations of the study

Even though this study will provide an insightful understanding and useful information of consumer behavior towards online music streaming services, the result

from the analysis may need to be used and interpreted with caution since there are a few limitations. First, the research is limited by a time constraint on data collection; the sample size represented in the research might not be able to represent the entire population. Also, some analysis might be able to be interpreted in other way from researcher's analyses. Therefore, further applications of this study should be considered carefully.



REFERENCES

- 9TANA (2015, June 28), "Misunderstanding About Music Streaming Services," Web. Retrieved from <http://blog.9tana.com/2015/06/music-streaming/>
- Friedlander, J. P. (2016), "News and Notes on 2016 Mid-Year RIAA Music Shipment and Revenue Statistics" RIAA. November 2016.
- Jerminalz. (2015, July 2), "Comparing Online Music Streaming Services in Thailand: Who Has Given The Most Value For Money," Web. Retrieved from <https://specphone.com/web/streaming-music-service-in-thailand-comparison-apple-music/140818>
- McKinsey. (2016), "The Beat of Progress: The Rise of Music Streaming in Asia," *Digital McKinsey*, November 2016.
- Swanson, K. (2013), "A Case Study on Spotify: Exploring Perceptions," accessed at October 26, 2016 at https://spea.indiana.edu/doc/undergraduate/theses/ugrd_thesis2013_bsam_swanson.pdf.
- Takebayashi, T. (2005, Aug 4), "Apple Launches iTunes Music Store in Japan," Web. Retrieved from <https://www.apple.com/pr/library/2005/08/04Apple-Launches-iTunes-Music-Store-in-Japan.html>
- Titlow, J. P. (2013, Mar 13) "6 Million People Pay For Spotify - Is That Good Enough?" Web. Retrieved from <http://readwrite.com/2013/03/13/spotify-six-million-paid-subscribers-growth-quick-enough/>
- Visamitanan, K., Assarut, N., Pongnatpanich, P. (2016), "Customer Clustering for Online Music Streaming Services in Thailand," *Chulalongkorn Business Review*, 147, 138-161.

The seal of Thammasat University is a circular emblem. It features a central five-tiered umbrella (parasol) with a lotus flower at its base. Radiating from the center are eight stylized arms or rays. The outer ring of the seal contains the university's name in Thai script at the top and "THAMMASAT UNIVERSITY" in English at the bottom, separated by small star-like symbols.

APPENDICES

APPENDIX A

IN-DEPTH INTERVIEW QUESTIONS GUIDE

Screening question

Do you currently use music streaming services?

The questions guide for in-depth interview

1. What service provider do you currently use from?
2. How often do you listen to music using music streaming service?
3. How do you know music streaming service?
4. Do you pay for using the service?
5. In which point do you think your current music streaming service could improve on?
6. What is the most important factor you use music streaming service?
7. What if the service charge for monthly fee, will you still use the service?

Demographic questions

1. Occupation
2. Age

APPENDIX B

Online questionnaire survey

Survey conducted using Google forms collecting data from 16th Feb 2017 – 3rd Mar 2017.



APPENDIX C

Respondents' top three interests, favorite music genres, and music fandom

Respondents' interest and music lifestyles		n (Mode)
Top three interests	Architecture	8
	TV shows	18
	Music	113
	Fashion	57
	Games	50
	Photography	40
	Travel	115
	Movies	87
	Business	8
	Technology	30
	Food	59
	Health	49
	Home décor	12
Music genres	Rock	58
	Jazz	40
	Pop	171
	Electronic (EDM)	67
	Indy music	58
	Alternative music	41
	Reggae	14
	Traditional music	16
	Movie soundtracks	76
	Pop-Rock	111
	Rap/ Hip-hop	71
	Soul/ R&B	126

	Broadway musical	19
	Metal	10
	Blues	1
Music artists fandom	Voted	163



APPENDIX D

Each brand conversion rates from aware to trial and trial to use

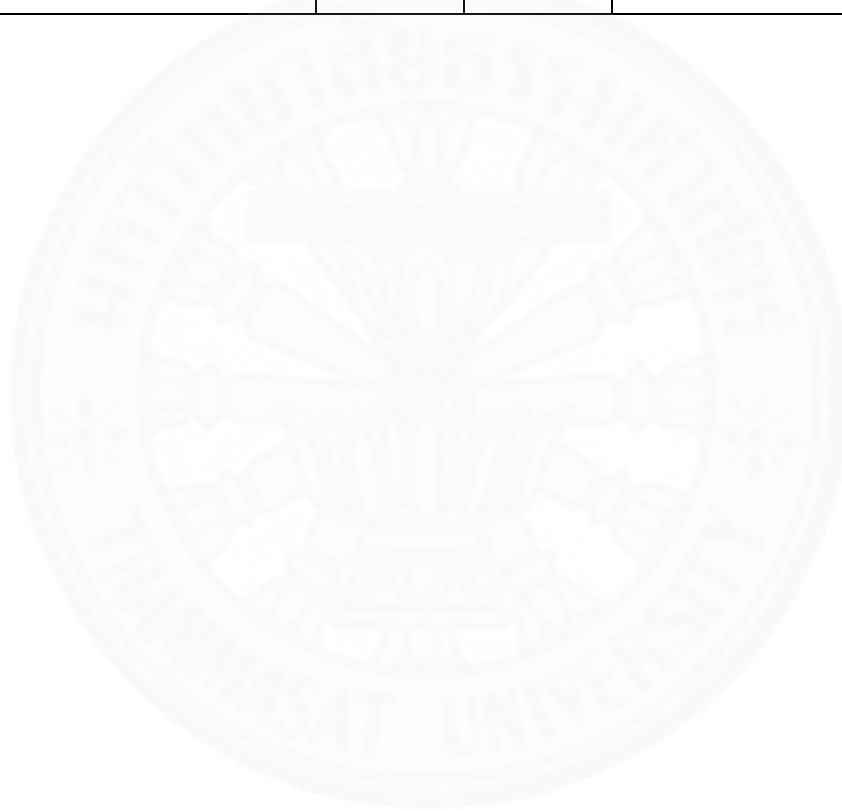
Conversion rate from brand awareness to brand trial

Brands	Aware	Try	Conversion rate (%)
JOOX music	193	182	94.3
Apple music	153	90	58.8
Line music	92	41	44.6
Spotify	79	23	29.1
KKBox	75	25	33.3
Deezer music	71	37	52.1
Soundcloud	71	39	54.9
TIDAL	54	17	31.5
Pandora	16	2	12.5
Youtube	2	2	100
Fungjai	1	0	200
Bandcamp	1	0	0
Accu radio	1	0	0
Grooves shark	1	1	100
Music D/L	1	1	100

Conversion rate from brand trial to actual use

Brands	Try	Use	Conversion rate (%)
JOOX music	182	130	71
Apple music	90	46	51
Line music	41	5	12
Soundcloud	39	5	13

Brands	Try	Use	Conversion rate (%)
Deezer music	37	2	5
KKBox	25	1	4
Spotify	23	6	26
TIDAL	17	5	29
Pandora	2	0	0
YouTube	2	2	100
Grooveshark	1	0	0
Music D/L	1	0	0



APPENDIX E

The differences of beliefs about music streaming services in different group of users based on intensity of usage

ANOVA

Beliefs	Light users		Moderate users		Heavy users		F	P-value
	Mean	SD	Mean	SD	Mean	SD		
I always want to listen to new songs	3.94	1.27	4.08	0.99	4.42	0.79	4.40	0.01
Music streaming services provide every song I want to listen	3.69	1.06	3.82	1.01	4.11	0.99	2.92	0.06
I feel upset when I hear voice commercials during my music listening from music streaming services	3.81	0.97	4.14	1.01	4.18	1.09	1.51	0.22
Streaming services provide better quality of sound than digital music files	2.47	0.80	2.24	0.90	2.45	0.94	1.32	0.27
I don't like to post or share any music on social media because my social media friends would feel that I'm annoying	3.56	1.22	3.86	1.23	3.14	1.42	6.30	0.00
I don't have to buy music any more since I use music streaming service	3.72	1.17	3.86	1.08	3.74	1.29	0.27	0.76
Music streaming service is the only channel I use to listen to music nowadays	2.28	1.02	2.55	1.27	2.94	1.35	3.89	0.02
Music streaming service is difficult to use	2.53	0.88	2.36	1.04	1.89	0.91	8.07	0.00
I waste too much internet data from listening to music from music streaming services	3.16	1.19	2.85	1.12	2.63	1.18	2.62	0.08
I probably would quit using the service if they charge for the service	3.81	1.12	3.36	1.22	2.86	1.46	7.25	0.00
I have never missed live shows from my favorite artist since I use music streaming services	2.38	1.18	2.65	1.21	2.79	1.26	1.42	0.24
Streaming services provide better quality of sound than CDs	3.22	1.16	3.35	1.01	3.46	1.00	0.74	0.48

Post hoc – multiple
comparisons

Dependent Variable			Mean Difference	Std. Error	Sig.	95% Confidence	
						Lower	Upper
1. I always want to listen to new songs	L	M	-.144	.201	.756	-.62	.33
		H	-.485*	.194	.035	-.94	-.03
	M	L	.144	.201	.756	-.33	.62
		H	-.342	.147	.055	-.69	.01
	H	L	.485*	.194	.035	.03	.94
		M	.342	.147	.055	-.01	.69
2. I don't like to post or share any music on social media because my social media friends would feel that I'm annoying	L	M	-.302	.280	.528	-.96	.36
		H	.418	.270	.270	-.22	1.06
	M	L	.302	.280	.528	-.36	.96
		H	.721*	.204	.002	.24	1.20
	H	L	-.418	.270	.270	-1.06	.22
		M	-.721*	.204	.002	-1.20	-.24
3. Music streaming service is the only channel I use to listen to music nowadays	L	M	-.273	.270	.572	-.91	.37
		H	-.657*	.260	.033	-1.27	-.04
	M	L	.273	.270	.572	-.37	.91
		H	-.384	.197	.128	-.85	.08
	H	L	.657*	.260	.033	.04	1.27
		M	.384	.197	.128	-.08	.85
4. Music streaming service is difficult to use	L	M	.166	.202	.690	-.31	.64
		H	.645*	.195	.003	.18	1.10
	M	L	-.166	.202	.690	-.64	.31
		H	.478*	.148	.004	.13	.83
	H	L	-.645*	.195	.003	-1.10	-.18
		M	-.478*	.148	.004	-.83	-.13
5. I probably would quit using the service if they charge for the service	L	M	.448	.281	.250	-.22	1.11
		H	.957*	.270	.001	.32	1.60
	M	L	-.448	.281	.250	-1.11	.22
		H	.509*	.205	.036	.03	.99
	H	L	-.957*	.270	.001	-1.60	-.32
		M	-.509*	.205	.036	-.99	-.03

L = Light users

M = Moderate users

H = Heavy users

APPENDIX F

Willingness to pay from respondents

Highest monthly fee respondents are willing to pay	L		M		H	
	n	%	n	%	n	%
50 THB	8	25	10	14	13	13
100 THB	2	6	8	11	9	9
150 THB	4	13	8	11	21	22
200 THB	1	3	5	7	7	7
250 THB	0	0	1	1	2	2
300 THB	0	0	2	3	6	6
More than 300 THB/ month	0	0	0	0	5	5
Not willing to pay	17	53	40	54	34	35
	32	100	74	100	97	100

BIOGRAPHY

Name	Mr. Rattapon Jangwan
Date of Birth	June 10 th , 1989
Educational Attainment	2011: Bachelor's degree in Economics, Thammasat University
Work Experiences	2012-present: Export-import executive DENSO Thailand Co., Ltd.

