PURCHASE INTENTIONS OF FREEMIUM NON-SUBSCRIBERS TO MUSIC STREAMING SERVICES BASED ON ATTITUDES TOWARD ADVERTISING

By

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To my mother
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PURCHASE INTENTIONS OF FREEMIUM NON-SUBSCRIBERS TO MUSIC STREAMING SERVICES BASED ON ATTITUDES TOWARD ADVERTISING

By

Shardul Madan

May 2017

Chair: Tom Kelleher
Major: Advertising

Over the past few years there has been a revolutionary change in the way people listen to music. Streaming music over the internet is one of the most popular means of listening to music. A majority of such music streaming services offer a free version with limited features of the premium version that are interspersed with advertising and offer a limited experience of the premium version. Such a concept offering the premium experience for free with advertising is referred to as freemium services, and similar services are termed as music-as-a-service (MaaS). Recently, a number of such music streaming services such as Pandora, YouTube music and Spotify are garnering increased attention. Previous literature has attempted to identify attitudes toward advertisements and brands as well as intention to purchase subscriptions to such MaaS. This study aims to understand the effect of ad intrusiveness on purchase intention toward the MaaS. Furthermore, this study also aims to undertake an exploratory analysis to understand the relationship between attitude toward the premium version of MaaS and the intention to purchase the premium version based on the experience of using the freemium version.

Although there was no support found for ad intrusiveness having any direct effect on attitudes toward premium services, ad intrusiveness was found to negatively correlate with
intentions to purchase premium services. Additionally, support also was found for positive attitudes toward the premium service leading to a positive intention to purchase.
CHAPTER 1
INTRODUCTION

Distribution of music started with songs being played on the radio and physical copies of albums, cassettes and CDs being made. Later around the 1990s, songs were stored in a digital format and were transferrable between devices or over the internet. The pioneering Apple iPod enabled users to seamlessly access songs stored on their devices for personal use, the only limitation being the storage space available on the device (Bockstedt, Kauffman and Riggins, 2006). Over the course of the last decade, with the upsurge of the internet, more music was distributed digitally. With faster internet speeds, virtual storage, and access to an unlimited library of artists and genres of music, streaming music online has become a popular option. Since a fair number of music streaming services have gained increased attention as popular means of streaming music in this decade, research is needed to better understand the role of advertising on such services.

According to a report by Webster in 2015, Pandora and Spotify were the two most popular online music services in the United States. YouTube music, a newer service by Google, which also includes YouTube Red and Google Play music in its premium bundle, also received recognition for its revolutionary music streaming, provided through the YouTube music app (Popper, 2015). The primary business model of such music streaming services is that consumers pay subscription fees in exchange for access to a huge library of songs, artists and albums. These subscription fees typically involve paying a monthly amount for unlimited access to the songs and in some cases the ability to store the music on any device. Music streaming websites such as Spotify mainly function both through websites and apps. Spotify, for example, provides mobile applications on Google’s Android market and via Apple’s App Store (Spotify Ltd., 2016a, 2016b).
Of course, these online music services also offer free versions of their service for those consumers who have not opted to subscribe. Wilson (2006) termed the free versions of these services as “freemium” in his blog. Such “freemium” services include some form of sponsored content and advertising. The different freemium services follow different advertising models. Hence, premium users are considered as subscribers to the service and freemium users are considered as non-subscribers to the service. Henceforth, users of the freemium service are referred to as non-subscribers and users of the premium services are termed as subscribers. With music streaming becoming so popular, it is important to understand the behavior that drives people to use and purchase these services. This paper seeks to analyze such internet-based music-streaming services and identify the variables that affect the non-subscribed consumers’ intentions to purchase subscriptions.

Music as a service (MaaS) is generally offered as one of two types: premium or freemium. Premium versions allow users to access all the music in the service’s database for a certain monthly subscription amount. For example, Spotify (n.d.), one of the popular music streaming services, offered access to its library for a total of $9.99 per month and promised playability on any device over the internet. It also offered storing the songs on personal devices for offline access. This version of the service is called Spotify Premium. Freemium versions, on the other hand, offer access to the entire library of music on offer, but music is interspersed with advertisements.

Wagner, Benlian, and Hess (2013) discussed freemium music services and how advertising affects the purchase intentions of consumers to pay for premium services. Wagner et al. (2013) applied the Dual Mediation Hypothesis (DMH) model to understand consumer cognitions about and attitudes toward advertisements on freemium services and how they affect
attitudes and cognitions toward the brand of MaaS, the premium versions of these services, and finally how these variables affect intentions of customers to buy premium MaaS subscriptions. This paper will expand on a line of research initiated by Wagner et al. (2013, 2014) to build understanding of the non-subscribed consumers’ attitudes toward advertising as a feature of the MaaS freemium offerings and the effect brand attitudes have when it comes to purchasing premium services.

According to research by Webster (2015), 54% of respondents considered the internet a much more important medium compared to newspapers (4%), radio (9%), and television (30%). Furthermore, the same survey by Webster (2015) also suggested that internet (44%) was the preferred medium over radio (32%) when it came to discovering new music. The Webster (2015) study also showed that an estimated 143 million people had listened to online radio on a monthly basis from ages 12 and up, and roughly 77% of them were between the ages of 12 and 24. This indicated a rising trend of accessing music online by the younger generations, specifically for the age group referred to as millennials.

Additionally, Friedlander (2015) indicated that there was an increase in revenue from streaming music services from $834 million in 2014 to $1.03 billion, a staggering 23% increase. Also, the study by Friedlander (2015) showed that streaming music contributed 32% of the total revenue in music sales as compared to permanent downloads (40%) and physical copies (24%). There is an evident increase in the popularity of the various internet-based music streaming providers as a medium to access music. With the evident growth and the demographics that are accessing this medium, it is vital to understand how advertising plays a part on this medium and how it affects consumers’ intentions to subscribe or not subscribe to MaaS. This study will help
to understand the role advertising plays leading to the purchase or subscription of premium music services.

**Research Objectives:** This study explores the role of advertising as a feature of freemium MaaS and how it affects intention of non-subscribers to subscribe to premium MaaS services. The study was mainly guided by the following research objectives:

1. Examine the role of advertising with respect to the freemium users and identify its perceived intrusiveness to understand its effect on attitude toward the premium service.
2. Explore attitudes toward advertising on a freemium version of MaaS and how they affect the intention to purchase the premium service.
3. Understand how much the perceived intrusiveness of advertising along with attitude toward the premium service, affects consumer decisions to subscribe to premium services for non-subscribers (users of freemium services).
CHAPTER 2
LITERATURE REVIEW

Since the concept of MaaS is relatively new, research and theory on the role of advertising on MaaS is still in early stages of development. However, MaaS has been garnering a fair amount of increase in academic attention over the past decade. Doerr, Benlian, Vetter and Hess (2010) have established a framework for pricing strategies and willingness to pay for premium services in terms of MaaS. Wagner et al. (2013) have further expanded on this research to determine the effects of advertising in freemium versions of MaaS leading to listener intentions to purchase subscriptions to various MaaS providers. This chapter looks at past literature related to online music and seeks to understand how advertising affects the intention to subscribe to MaaS.

Music as a Service (MaaS)

Doerr et al. (2010) explained how streaming music on a digital platform is a service in itself and proposed that MaaS would become the future of music distribution. Doerr et al. (2010) differentiated the MaaS model of song distribution to that of Download-to-Own (DtO). In the DtO model, there is a payment involved in each of the downloads and also ownership of the song without Digital Rights Management (DRM). MaaS functions with both advertising-based free versions (i.e., freemium) and subscription-based (i.e., premium) models, where there is no ownership of songs but access to stream the library of the service provider at any time on any device. Offline use, which is also found in the DtO model, is a feature that is available exclusively to premium subscriptions of MaaS. High sound quality is also one of the features promised in premium subscriptions to paid services.

Doerr et al. (2010) listed pricing, contract duration, music quality, distribution channel, mobile application, offline access, community features and personalization as factors that may
play an important role in customers’ estimation of total utility of MaaS’ premium offers. Their results indicated that price (20%) was the most important attribute followed by subscription period (16%), music quality (14%), and offline access (12%). Furthermore, Doerr et al. (2010) acknowledged that the research was limited to the German MaaS market. This paper will seek to analyze MaaS marketing with consumers in the USA with a focus on the role of advertising in freemium MaaS as it influences brand attitudes and intention to purchase advertising-free premium services. Specifically, this study will analyze college-aged (18-24 years old) freemium users of Spotify in USA.

**Pricing**

According to Doerr et al. (2010), MaaS providers generate revenue by ad-based financing on the freemium model. Doerr et al. (2010) talked about the concept of content distribution online called Content as a Service (CaaS). In CaaS, a provider charges a subscription fee to stream content digitally and at the same time does not equate to transfer of ownership of content. Essentially, the difference in the pricing strategies between DtO and MaaS forms an important factor when it comes to purchasing songs. Bamert, Meier-Bickel and Rüdt (2005) in their conjoint analysis of pricing for music downloads suggested that price is the most important attribute considered when it comes to making a decision for purchase by the consumers. Buxmann, Strube and Pohl (2007) argued for lower pricing to increase the revenues in a model in which there is a co-operation between all the actors involved. According to Buxmann et al. (2007), the actors are the recording labels, artists, service providers, and online shops. Buxmann et al. (2007) suggest that even though lowering of pricing is an optimal model, according to their survey it is not possible to implement it fairly and can only be possible if there is co-operation in the optimum sharing of costs and revenue amongst the actors. This suggests that the pricing
factor plays an important role in terms of subscribing to a MaaS provider and thus affecting the purchase intention for their service.

The pricing model plays a very important role in the success of MaaS. According to Palmer (2015), Spotify was not earning enough revenue through its advertising partners and therefore it was evident that advertising could not fully sustain the existence of the freemium service. According to Adegoke (2014, May 21), Spotify had around 40 million active users and 10 million paid users at the time. Thus, only one in four users was a paid subscriber to the service. Also 80% of all subscribers who signed up did through mobile phones (Adegoke, 2014, May 21). Therefore, in order for a company to make profits, the growth rate of paid subscribers has to increase.

Role of Advertising in Increasing Subscriptions to Premium

Wagner et al. (2013) approached the topic of MaaS marketing with an initial assumption that freemium services act as advertising for premium products. This approach raises an important conceptual issue: to what degree do freemium services, which are services that include spot advertisements for other products and services, themselves serve as advertisements for premium offerings? Wagner et al. (2013) designed research to examine how advertising on freemium services affects the purchase intentions of the buyers to subscribe to premium services. They started by applying the Dual Mediation Hypothesis (DMH) model.

Dual Mediation Hypothesis (DMH) Model

Ajzen and Fishbein (1975) theorized that attitude is formed based on beliefs held for certain attitude objects (p. 14). For example, consumers assign positive and negative valence to the attributes and characteristics of a product after exposure to an advertisement, and then form attitudes toward the brand based on those beliefs (Ajzen and Fishbein, 1975, p.14). Therefore, after exposure to an ad, an individual’s brand cognitions and beliefs determine his or her attitude
The DMH model, forwarded by MacKenzie, Lutz, and Belch (1986), postulates that attitude toward an ad ($A_{AD}$) influences attitude toward the brand ($A_{B}$) both directly and indirectly. Lutz (1985) described $A_{AD}$ as a predisposition to respond favorably or unfavorably when a consumer is exposed to an advertising stimulus during a particular time of exposure. MacKenzie et al. (1986) posited that $A_{AD}$ is a causal mediating variable in persuasive marketing processes in which advertising influences brand attitude and purchase intentions. MacKenzie et al. (1986) also considered cognitions about the advertisement ($C_{AD}$), cognitions about the brand ($C_{B}$) and attitude toward the brand ($A_{B}$) and the final buying intention ($I_{B}$). Therefore, the basic constructs for the DMH model as per MacKenzie et al. (1986) are $C_{AD}$, $C_{B}$, $A_{AD}$, $A_{B}$, and $I_{B}$. The authors state that attitude toward the ad ($A_{AD}$), which is influenced by cognitions about the ad ($C_{AD}$), in turn influences cognitive reactions to the brand ($C_{B}$) and formation of brand attitude ($A_{B}$), which finally leads to intention to buy ($I_{B}$). Research done by Brown and Stayman (1992) also gives a clear indication that $A_{B}$ has a direct influence on $I_{B}$.

Karson and Fisher (2005a, 2005b) have identified the DMH model to be a highly relevant model in terms of observing advertising effects in an online context. The authors substituted attitude toward a website ($A_{site}$) for $A_{AD}$ and intention to return to the website ($I_{R}$) for $I_{B}$. The results of the study supported a direct link between $A_{site}$ and $I_{R}$.

However, the DMH does not appear to apply in all marketing contexts. For example, in one particular study, MacKenzie et al. (1986) found no linkage between brand cognitions and brand attitudes. In that study, in which participants were exposed to an ad for toothpaste, MacKenzie et al. found:
a significant correlation between cognitions toward the ad and attitude toward the ad,
- a “moderate positive influence” of attitude toward the ad on brand cognitions, but
- no influence of brand cognitions on attitude toward the brand (1986, p. 141).

In interpreting their findings, which runs counter to other research and theory on the link between brand cognitions and brand attitude, Mackenzie et al. reasoned that the weak link between cognitions toward the brand and attitude toward the brand may have been due to consumers experiencing the toothpaste ad and not the actual product. Mackenzie et al. cited Petty and Cacioppo’s (1981) elaboration likelihood model in suggesting that participants likely saw toothpaste as a low-involvement product and only peripherally processed the information in forming attitudes toward the brand. Attitude toward a brand is distinct from attitude toward an ad wherein consumers evaluate the overall brand based on various factors associated with the brand including the ad itself.

The next section describes how attitude toward the brand is adapted and measured to fit the music-as-a-service (MaaS) context.

**Attitude Toward Brand in a Music-as-a-Service (MaaS) Context**

In applying the DMH model in a MaaS context, Wagner et al. (2013, 2014) focused on attitudes and cognitions toward freemium and premium versions of a music streaming service. Initially, Wagner et al. (2013) treated freemium services as a form of advertising promoting the premium services—they considered the free version of the service as “an advertisement for the premium version of the service” (p. 2931). However, as they advanced their research, they found that freemium services couldn’t necessarily be conceptualized as advertisements for premium services. This shift in focus provides a framework for the current study.

Users of the freemium version of a music streaming service are allowed to use limited features of the premium service indefinitely without payment. Initially reasoning that the freemium version of an MaaS should offer users an opportunity to form perceptions toward the
full-featured premium version in the same way that consumers form perceptions based on advertising, Wagner et al. (2013, 2014) used the DMH model to design two studies to test the relationship between attitude and cognitions toward a freemium service and attitude and cognitions toward the premium service on an MaaS platform. However, they found little evidence of the connections between attitudes and cognitions toward freemium versions and attitudes and cognitions toward premium versions. Usage of freemium versions of MaaS is conceptually different than exposure to advertising for premium services because the two versions of the services provide substantively different experiences. Nonetheless, consumers still may use freemium services to develop attitudes about a premium service as a brand. Since freemium services, unlike traditional advertising, allow users to convert to premium services and remove certain limitations of usage (ads, lack of offline access etc.), they allow for the formation of brand perceptions based on experience in using limited versions of the service. Attitude toward the brand in this MaaS study will be defined as attitudes toward premium services.

**Purchase Intention**

As observed in previous literature, purchase intention of consumers is commonly found to be based on attitude toward the brand. It is important to understand the underlying significance of attitude toward brand and purchase intention as it facilitates gauging users’ perception of brands, tracking brand attitude and purchase intention trends over time and assisting in brand positioning (Spears and Singh, 2004, p. 54).

It is important to concisely define “purchase intention” to understand how consumers are influenced in their decision process to purchase. Spears and Singh (2004) have developed a measure for purchase intention in their study and have defined it as “an individual’s conscious plan to make an effort to purchase the brand.” (p. 56). Furthermore, there is a distinction between intentions and attitude wherein attitude outlines evaluation and intentions represent a person’s
motivation and a conscious plan to execute their behaviors (Spears and Singh, 2004; Eagly and Chaiken, 1993). Teng, Laroche and Zhu, (2007) have termed purchase intention as a judgment about how an individual intends to buy a specific brand (p. 29). In summation, intention to purchase is the actions of users that indicate their thought process framework to purchase or not purchase a brand or a service. It is important to note that purchase intention is significantly different than willingness to purchase, in that purchase intention denotes a consumer’s thoughts regarding purchasing a brand whereas willingness to buy indicates the ideal financial value they assign to an object in order to purchase the brand or service (Wertenbroch and Skiera, 2002). Since the premium version of MaaS is a periodical subscription, intention to purchase will be defined as intention to subscribe to the premium service in this study (Doerr et al., 2010, p. 15).

**Ad Intrusiveness (Annoyance of Advertising)**

While early research on MaaS suggests that treating freemium versions as ads themselves may be problematic, attitudes toward the advertising that is interspersed in freemium versions of MaaS likely still play a role in influencing consumer attitudes toward premium services. According to Yang and Ting (2016), nuisance created by advertisements or breaks in streaming lead to negative attitudes toward both the advertisement and the brand advertised and subsequently lead to advertisement avoidance. Yang and Ting’s (2016) conceptualization of nuisance level is adopted from the work of Anderson and Coate (2005) and Peitz and Valletti (2008). Yang and Ting (2016) hypothesized an interplay between nuisance level of advertising affecting attitude toward brand and therefore willingness to pay or subscribe to a MaaS based on the frequency of advertising.

Wagner et al. (2013), in their study, report that cognition toward the premium service brand positively affects attitude toward the premium service brand. Subsequently, a positive attitude toward the premium service leads to a positive intention to purchase the service.
However, this paper questions how the freemium versions of MaaS that include interruptive advertising affect attitude toward the premium services, leading to the users’ intentions to purchase premium services. In this paper, we specifically focus on the attitude of users based on the advertisements in the freemium platform juxtaposed with the experience of using the freemium service itself. That is, we will explore how the perceived ad intrusiveness on the freemium version (rather than cognitions about and attitudes toward specific ads) affects attitudes toward MaaS premium services. In turn we hypothesize that attitudes toward MaaS premium services lead to intentions to subscribe to these premium services.

Yang and Ting’s (2016) ongoing study looks at how audio advertisements are deemed intrusive in between the playback of a listening session of two songs. The ads on the freemium version of Spotify are of the audio as well as the visual kind (Loeb, 2015). Li, Edwards and Lee (2002) created measures for ad intrusiveness based off participant’s responses to an ad in a pop up window (p. 40). Li, Edwards and Lee found that pop up ads interrupt the cognitive processes of the consumers and are intrusive to the participant’s goals to engage in an activity online (p.44). Furthermore, such intrusiveness elicits a negative attitude in consumers.

Moore, Stammerjohan and Coulter (2005) discovered that moderately congruent ads that are somewhat related to the website the ad is placed in have no adverse effects on the attitude towards the website (p. 80). Moore, Stammerjohan and Coulter in their study on attitude towards the website have termed congruency as the consistency or inconsistency of the product that is advertised on a web site to that of the web site itself. Moore, Stammerjohan and Coulter (2005) conducted experiments that considered the advertiser’s web site context congruity, background banner ad and the contrast between background banner ad color and text on attention, attitude toward the ad and attitude toward the website (p. 74). Moore, Stammerjohan and Coulter’s
experiments suggested that the placement of the ad had no adverse effects on the attitude toward the web site (p.80). To summarize the definition for this study, congruency refers to how an individual advertisement on the freemium version of Spotify is consistent with the Spotify brand. The freemium version of Spotify has audio as well as banner and pop up ads at regular intervals while the songs are shuffled in the service (Loeb, 2015). The ads on Spotify often include ads by Spotify promoting the premium version and other ads by advertisers that are not related to Spotify. Congruency of ads on Spotify can only be considered for context, color and text if the ads are of banner and pop up nature, and not auditory to follow the results of the experiments by Moore, Stammerjohan and Coulter (2005).
CHAPTER 3  
RESEARCH QUESTIONS, HYPOTHESIS AND KEY CONCEPTS

Research questions and a hypothesis were formulated based on three major constructs and their relationship with each other. The three major constructs that help in the formation of the research questions and hypothesis are 1) intrusiveness of ads on the freemium service, 2) attitude toward the brand, and 3) intention to purchase.

**Research Questions**

Since Wagner et al. (2013) could not find support for attitude toward freemium services (as $A_{ad}$) affecting attitude toward premium services, this study will replace attitude toward freemium with perceived intrusiveness of ads on the freemium service. Prior literature suggests that intrusiveness is likely to affect users’ attitudes toward brands of MaaS, and this study will enable us to identify whether the construct of perceived ad intrusiveness plays a significant role in affecting attitude toward the premium service. Furthermore, understanding the perceived intrusiveness of advertising on freemium versions for non-subscribers of MaaS will allow us to better understand the direct or indirect link between perceived intrusiveness, attitude toward the premium service and purchase/subscription behavior.

Li, Edwards and Lee (2002) suggest that ad intrusiveness significantly leads to emotions of ad annoyance and irritation as well as ad avoidance. Furthermore, such emotions of irritation and avoidance may lead to negative perceptions about the ad. Li, Edwards and Lee, (2002) have stated that intrusiveness should be considered a cognitive process wherein ads evoke irritation or annoyance (p.39). Li, Edwards and Lee, (2002) have also suggested that the measures of intrusiveness should be positively correlated with measures of cognitive, behavioral and mechanical ad avoidance (p.39). Furthermore, ad intrusiveness is also distinct from cognitive, behavioral or mechanical intentions to respond to the ad (Li, Edwards and Lee, 2002, p.39). As
per MacKenzie and Lutz (1989), such negative perceptions lead to negative attitude toward the brand as well as the advertisement itself. Wagner et al. (2013) concluded that ad-free usage was one of the highly-rated attribute in the premium version of the service. But subsequently, Wagner et al. (2013) did not find attitude toward the freemium service having a significant effect on the cognitions and attitude toward the premium service. Therefore, this study substitutes perceived ad intrusiveness for attitude toward the freemium service and asks the following research questions:

- **RQ1:** Does perceived intrusiveness of ads on freemium services relate to users’ attitudes toward premium services?
- **RQ2:** Will non-subscribers who rate intrusiveness of ads higher report a higher intention to purchase/subscribe to premium services?

**Hypothesis**

Another goal of this study is to identify how non-subscribers (users of the freemium version) of the music streaming service perceive intrusiveness and how intrusiveness affects their attitudes toward the brand and intention to purchase. Wagner et al., (2013) discovered that users who prefer the freemium version due to the free availability of music develop a negative attitude toward paying for the premium service and hence have a lesser inclination to buy the premium service (p. 2935). In any case, however, attitude toward the premium service is expected to positively correlate with intention to purchase (Spears and Singh, 2004, p.63).

H1: Attitude toward the premium service is positively related to intention to purchase the premium service.
This section will seek to present operational and conceptual definitions of key concepts that are established in the hypothesis. The three major constructs are ad intrusiveness, attitude toward the premium service brand, and intention to subscribe.

**Attitude toward the premium service**

**Conceptual definition:** Mitchell and Olson (1981, p.318) have defined attitude toward brand as an individual’s internal evaluation of a brand. Spears and Singh (2004) have defined attitude toward the brand as “a relatively enduring, unidimensional summary evaluation of the brand that presumably energizes behavior” (p. 55). Therefore, this study will utilize the above two definitions for attitude toward the premium service. Attitude toward the brand is the attitude toward the premium service and encapsulates an individual’s evaluation of the brand or in the case of this study the premium service.

**Operational definition:** Teng and Laroche (2007) measured this construct with “three items (dislike quite a lot/like quite a lot, unsatisfactory/satisfactory, and very unappealing/very appealing) on a range from one to seven (p. 14). Similar to Teng and Laroche, Spears and Singh
(2004) also applied semantic differential items to measure attitude toward brand. Their scale also contained items from the study by Teng and Laroche. In addition to those items, they included bad/good, unpleasant/pleasant, and unfavorable/favorable measured on seven-point scales. This study includes all six semantic differential items. The statement for this construct is: “Please describe your overall feelings about the premium version of Spotify based on your experience with the free version of Spotify.”

**Ad Intrusiveness**

**Conceptual definition:** Ad intrusiveness has been defined as a psychological or perceptive consequence caused due to the interruption of cognitive processes of the audience (Li, Edwards and Lee, 2002, p. 39). This study conceptualizes the above definition by Li, Edwards and Lee (2002) since it represents the intrusiveness of ads on the freemium version of the music streaming service.

**Operational definition:** To measure this concept, individuals were asked to rate the following statements using seven-point Likert-type scale responses ranging from strongly disagree to strongly agree. The question has been adapted from Li, Edwards and Lee (2002) and contains seven items that constitute ad intrusiveness. Since Wagner et al. (2013) also utilized the same scale to measure ad intrusiveness, this study will also utilize the scale by Li, Edwards and Lee (2002).

“Normally when I am using Spotify, I find the ads to be...”

1. Distracting
2. Disturbing
3. Forced
4. Interfering
5. Intrusive
6. Invasive
7. Obtrusive
Purchase Intention

**Conceptual definition:** Shah, Aziz, Jaffari, Waris, Ejaz, Fatima and Sherazi (2012) have defined purchase intention as a decision-making process to understand why consumers purchase a particular brand. Spears and Singh (2004) have defined it as “an individual’s conscious plan to make an effort to purchase the brand.” (p. 56). This study expands on the definition by Shah et al. (2012) and Spears and Singh (2004) wherein purchase intention is the conscious decision-making process made by consumer to purchase the premium version of the music streaming service.

**Operational definition:** Spears and Singh (2004) formulated a scale to measure purchase intention. This study has adapted the scale from Spears and Singh (2004) and was measured using five items: never/definitely, definitely do not intend to subscribe/definitely intend to subscribe, very low interest in subscribing/ very high interest in subscribing, definitely not subscribing/definitely subscribing and probably not subscribing/ probably subscribing. Participants were asked the following: “Please describe your intentions to subscribe to the premium version of Spotify.”
CHAPTER 4
METHOD

In this chapter, the method used for data collection and analysis for this study are explained in detail. Taking note from previous literature the sample population consists mainly of college-aged adults. This study is exploratory in nature since previous studies have not established a complete link between all the variables studied in this study. This section will go over the methods and analysis.

To measure the 3 variables (attitude toward premium service, ad intrusiveness and purchase intention), it is possible only by measuring responses from freemium users. This is because only the freemium users are exposed to the advertising on MaaS and have an intention to purchase the premium service. Therefore, freemium users are the primary focus in the study. Hence, this study only observed and reported data from freemium respondents as they are the solitary valid respondents for the data to be analyzed.

Previous research by eMarketer and CivicScience (n.d.) and Albert (2015) suggests that for the free and paid version of Spotify, consumers in the age group of 18-24 are the most frequent users, and that the 25-29 age group comprises the second most frequent users, based on usage parameters such as “every day,” “a few times a week,” and “a few times a month.” Furthermore, Albert (2015) also found that 31% of Spotify users are willing to subscribe to a music streaming service. Additionally, Albert (2015) states that 55% of Spotify users are female. This study adopted the usage parameters based on the report by Albert (2015). This study also looked at the frequency of usage of Spotify to better understand the usage habits of the respondents.

As a reference for comparison with the samples reported in this study, Wagner et al. (2013) conducted an online survey with a questionnaire to German university participants who
had already used MaaS beforehand. They looked at 152 responses with 71 valid responses as per the respondent’s experience with using a MaaS and the average age of the participants was 25 (Wagner et al., 2013, p. 2932). Therefore, one of the main purpose of this study is to perform a similar study with the adult users of Spotify who are in the age group of 18-29 and living in USA. This will help to understand the US market for MaaS users as compared to the German MaaS users observed by Wagner et al. (2013). Wagner et al. (2013) also conducted an online questionnaire in their study. This study also utilized an online questionnaire testing attitudes toward the premium service, perceived ad intrusiveness on the freemium platform and intention to subscribe to the premium service based on user experience with the freemium version.

As observed in the earlier chapters, MaaS has increasingly become a popular means of streaming and listening to music. The freemium version of Spotify is freely available in the market and is also one of the most popular music streaming service. This study adopts an online questionnaire format to collect data since there are a considerable amount of Spotify users in the market.

**The Sample**

Participants in this study were recruited with two different sampling methods. This is because one group consisted of students and the other consisted of general population so that the results could be analyzed for the most active adult users in US. The first group consisted of students currently studying in a college of journalism and communications at a large southeastern university in the U.S. The college uses a research management tool called Sona that allows students to opt in to research studies for extra credits. The Sona system employs online scheduling software used by researchers to recruit and manage studies, help instructors manage extra credits, and help students find studies that are being offered by researchers in return for course points (Sona, n.d.). The Sona system enables researchers to specify the
recruitment criteria and number of participants for their study (Sona, n.d.). Not all instructors use the system and not all courses include research participation in exchange for course points (Sona, n.d.). The Sona system allocates credits based on the duration of the study and .25 percentage point credits were allocated for this study because participation required less than fifteen minutes ($n = 89$).

The second group was recruited with a convenience sample of friends and colleagues of the author, recruited through immediate network. The link was provided to the friends and colleagues by the author from his personal e-mail and they were asked to gather respondents to participate in the study. The friends and colleagues recruited respondents using their personal email and social media network ($n = 127$). Thus, this set of participants was recruited using a snowball sampling method. Both sets of samples were given the same questionnaire but different links to ensure both sets of participants could be distinguished. This is because, as mentioned earlier only those respondents who participated through the Sona system were eligible for compensation in the form of credits. However, the data was analyzed collectively since both the samples were asked the same questions.

**The Questionnaire**

The questionnaire was designed to assist in understanding the attitudes and purchase intentions of adult individuals who currently use or have used the freemium version of Spotify. Similar to previous literature by Albert (2015), respondents were asked about their age, gender and usage habits. Furthermore, the questionnaire also separated subscribers and non-subscribers of Spotify and only considered non-subscriber’s responses for ad intrusiveness and purchase intention since freemium non-subscribers are the focus of this study. All the respondents were asked to rate their attitude toward the premium version of Spotify. The three variables measured have been adopted from previous studies. Participants were given a link to an online
questionnaire, which was created using Qualtrics (https://www.qualtrics.com) which is an online survey platform. Since this study solely focuses on Spotify, the questionnaire filtered users per their previous experience with the freemium or premium version of Spotify.

Additionally, freemium and premium users also were screened in the initial questions and redirected to appropriate follow-up questionnaire items so that freemium users could be clearly distinguished from the premium users. Subsequently, users were also asked to indicate the type of mobile devices they use (Android as well as iOS). This is because the freemium experience is different on mobile devices as compared to other devices. Furthermore, as observed earlier mobile is one of the most popular mediums of streaming music. To ensure a similar experience for participation in the survey, participants who did not report using either the premium or the freemium version of Spotify were asked to rate their attitude toward the premium service but they were not asked about the intrusiveness of ads and their intention to purchase the freemium version of Spotify. The study was active from January 4 to February 15 2017 and data was reported for that period.

Data Analysis

The data from the questionnaires and the responses were analyzed per the key concepts as mentioned in the previous chapter. The respondent data was imported into SPSS for Windows version 24 for analysis. Item scores ranged on a seven-point scales for attitude toward the brand, ad intrusiveness and intention to subscribe. Additionally, to ensure that the participants were based in the U.S. market they were asked whether they currently reside in the United States of America and directed to the end of the survey if they reported as not currently residing. They also were asked to enter their age as well as choose their gender, personal annual income and their highest education level.
Sets of items representing attitude toward brand, ad intrusiveness and intention to subscribe were analyzed to determine the Cronbach’s alpha and determine the reliability for the scales. The hypothesis and research questions were then analyzed by creating mean scores for each key construct, and bivariate correlation analysis was executed to calculate Pearson’s $r$. 
CHAPTER 5
RESULTS

A total of 234 individuals took part in the online survey. After removing cases with incomplete responses, 216 cases were considered for data analysis. Of the 216 respondents, only 75 participants qualified as freemium users and therefore only the data from these 75 respondents was analyzed. All participants were 18 years of age or older.

Total Sample

The survey participants from the total sample consisted of 73 percent female and 27 percent male collectively. Although, the sample population is not random in nature it compares well to the mostly female population sample as observed by Albert (2015). Similarly, the average age of respondents from the total sample is around 22 years ($M=22.13$, $S.D.=3.05$, $n=75$), which is somewhat similar the age group of 18-24 as reported by Albert (2015) to be the most frequent users.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Total Frequency(Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>20 (26.7%)</td>
</tr>
<tr>
<td>Female</td>
<td>55 (72.4%)</td>
</tr>
<tr>
<td>Total</td>
<td>75 (100%)</td>
</tr>
</tbody>
</table>

Furthermore, 61 percent of all the respondents who used the freemium version of Spotify, reported themselves as active users of Spotify. The remaining 39 percent of all the respondents who used the freemium version of Spotify were occasional users of Spotify. VentureBeat. (n.d.) defined active users as individuals who have listened to music on Spotify in the last 30 days.

While observing the medium of usage, of the respondents who claimed to have used either the freemium version of Spotify, 59 percent users reported iPhone, 15 percent reported Android and 26 percent reported “other” as their preferred medium to listen to Spotify.
Table 5-2. Frequency of usage – Total sample

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>26</td>
<td>34.7</td>
</tr>
<tr>
<td>Several times a week</td>
<td>17</td>
<td>22.7</td>
</tr>
<tr>
<td>Several times a month</td>
<td>3</td>
<td>4.0</td>
</tr>
<tr>
<td>Occasionally</td>
<td>29</td>
<td>38.7</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 5-3. Preferred medium of listening to music on Spotify – Total sample

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPhone</td>
<td>44</td>
<td>58.7</td>
</tr>
<tr>
<td>Android</td>
<td>11</td>
<td>14.7</td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
<td>26.3</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From the total sample, 61 percent of respondents reported annual personal income between $0-$4,999, 8 percent reported their annual personal income between $5,000-$9,999, 7 percent reported their annual personal income between $10,000-$14,999 and 7 percent reported their annual personal income as $45,000 and above. Furthermore, 25 percent of respondents indicated their highest education as master’s degree, 34 percent indicated some college, 18 percent indicated 4-year degree and 17 percent indicated 2-year degree. Since the average age is around 22 and the highest personal annual income is between $0-$4,999 and some college degree as the highest education level it can be estimated that the sample population somewhat represents the target population of Spotify users as per Albert (2015).
Table 5-4. Income – Total sample

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Total Frequency</th>
<th>(Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 - $4,999</td>
<td>46 (61.3%)</td>
<td></td>
</tr>
<tr>
<td>$5,000 - $9,999</td>
<td>6 (8.0%)</td>
<td></td>
</tr>
<tr>
<td>$10,000 - $14,999</td>
<td>5 (6.7%)</td>
<td></td>
</tr>
<tr>
<td>$15,000 - $19,999</td>
<td>5 (6.7%)</td>
<td></td>
</tr>
<tr>
<td>$20,000 - $24,999</td>
<td>4 (5.3%)</td>
<td></td>
</tr>
<tr>
<td>$25,000 - $29,999</td>
<td>1 (1.3%)</td>
<td></td>
</tr>
<tr>
<td>$30,000 - $34,999</td>
<td>2 (2.7%)</td>
<td></td>
</tr>
<tr>
<td>$35,000 - $39,999</td>
<td>1 (1.3%)</td>
<td></td>
</tr>
<tr>
<td>$40,000 - $44,999</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td>$45,000 and above</td>
<td>5 (6.7%)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75 (100%)</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 5-5. Highest level of education – Total sample

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Total Frequency</th>
<th>(Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school graduate</td>
<td>2 (2.7%)</td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>25 (33.3%)</td>
<td></td>
</tr>
<tr>
<td>2-year degree</td>
<td>13 (17.3%)</td>
<td></td>
</tr>
<tr>
<td>4-year degree</td>
<td>11 (14.7%)</td>
<td></td>
</tr>
<tr>
<td>Professional degree</td>
<td>1 (1.3%)</td>
<td></td>
</tr>
<tr>
<td>Doctorate</td>
<td>1 (1.3%)</td>
<td></td>
</tr>
<tr>
<td>Master’s degree</td>
<td>22 (29.3%)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75 (100%)</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Reliability of Key Concepts**

Reliability of all the scale items for attitude toward ad, ad intrusiveness and purchase intention were analyzed by obtaining the Cronbach’s alpha for the sets of variable items pertaining to each scale. Also, since this study only focuses on freemium non-subscribers, the reliability of all the scales was calculated only for the freemium users. The attitude toward brand scale was measured with six items on a seven-point scale. The six items included in the attitude toward brand scale were unappealing to appealing, bad to good, unpleasant to pleasant and
unfavorable to favorable, unlikable to likable and unsatisfactory to satisfactory. The attitude toward brand scale returned a Cronbach’s alpha of .942 for the six items together.

Similarly, the ad intrusiveness scale was measured with seven items on a seven-point scale. The seven items were anchored by “Strongly disagree” to “Strongly agree” and the items were distracting, disturbing, forced, interfering, intrusive, invasive and obtrusive. The ad intrusiveness scale returned a Cronbach’s alpha of .876 for the seven items. Deleting the item “Disturbing” from the data would result in an increase in the Cronbach’s alpha reliability of the scale from .876 to .883. However, the item was not deleted from the analysis for the purpose of this study since the validity of the scale was demonstrated in previous literature by Li, Edwards and Lee, (2002).

The purchase intention scale was measured with five items on a seven-point Likert scale. The five items included in the purchase intention scale were never to definitely, definitely do not intend to subscribe to definitely intend to subscribe, very low interest in subscribing to very high interest in subscribing, definitely not subscribing to definitely subscribing and probably not subscribing to probably subscribing. The purchase intention scale returned a Cronbach’s alpha of .968 for the five items together.

**Research Question and Hypothesis testing**

The following section will look at how the results aid in answering the research questions and testing the hypothesis.

RQ1: Does the perceived intrusiveness of ads on freemium services relate to users’ attitudes toward premium services?

To examine the relationship between the perceived ads on freemium services to that of attitude toward the premium services, new variables were created that measured the mean of all the items of ad intrusiveness scale and all the items measuring attitude toward the premium
service. A Pearson correlation analysis was run on the two variables that measured the means of ad intrusiveness and attitude toward the premium service variables.

Table 5-6. Relation between Ad Intrusiveness and Attitude toward premium service

<table>
<thead>
<tr>
<th>Mean Attitude Toward Premium service</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Ad Intrusiveness</td>
<td>-.055</td>
<td>.637</td>
<td>75</td>
</tr>
</tbody>
</table>

The bivariate two-tailed Pearson correlation analysis of the ad intrusiveness mean and attitude toward premium service mean showed a statistically insignificant correlation between the variables for the total sample ($r = -.055, p = .637, n = 75$). Hence, it can be said that the data collected in this study did not indicate that perceived intrusiveness of ads on freemium services is related to users’ attitudes toward premium services.

RQ2: What is the influence of non-subscribers who rate a high intrusiveness of ads have on their intention to purchase?

To examine the relationship between perceived ad intrusiveness on freemium services to intention to purchase the premium service, a Pearson correlation analysis was run on the two variables that measured the means of the ad intrusiveness and purchase intention variables.
Table 5-7. Relation between ad intrusiveness and purchase intention

<table>
<thead>
<tr>
<th>Mean Purchase Intention</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Ad Intrusiveness</td>
<td></td>
<td></td>
<td>75</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

The bivariate two-tailed Pearson correlation analysis of the ad intrusiveness mean and the intention to purchase mean showed that there was a negative moderate correlation that was found to be statistically significant ($r = -.315$, $p = .006$, $n = 75$). Therefore, based on the total sample it can be said that the non-subscribers who perceive a higher intrusiveness of ads generally rated a lesser intention to purchase.

H1: Attitude toward the premium service is positively related to the intention to purchase.

To examine the relationship between attitude toward the freemium services to that of intention to purchase the premium service, a Pearson correlation analysis was run on the two variables that measured the means of the attitude toward the premium service and purchase intention variables.
The bivariate one-tailed Pearson correlation analysis of the attitude toward the brand and the intention to purchase mean (Table 5-8) showed that there was a positive and statistically significant correlation ($r = .416$, $p = .000$, $n = 75$). Since the hypothesis was testing a positive relationship between the two variables, a one tailed test of correlation was implemented.

It can be said that for the total sample, there is generally a positive correlation between the attitude toward the premium service and the intention to purchase the service. The findings of this hypothesis are in alignment with previous research that also confirmed a positive relationship between attitudes toward a brand and intentions to purchase (Wagner et al. 2013, 2014; Brown and Stayman, 1992).

**Additional Analyses**

To understand the effect of ad intrusiveness on the freemium service and attitude toward the brand on intention to purchase the premium service, a multiple linear regression was run. Ad intrusiveness and attitude toward the brand were entered as independent variables and purchase intention of the premium service as treated as a dependent variable. Using the stepwise method, it was found ad intrusiveness had a negative and statistically significant relationship with intention to purchase the premium service, and attitude toward the brand had a positive and statistically significant relationship with intention to purchase the premium service as a dependent variable in the model.

---

Table 5-8. Relation between attitude toward the brand and purchase intention

<table>
<thead>
<tr>
<th>Mean Purchase Intention</th>
<th>Mean Attitude Toward Brand</th>
<th>Pearson Correlation</th>
<th>Sig. (1-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>.416**</td>
<td>.000</td>
<td>75</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.001 level (1-tailed).
The stepwise regression created two models wherein ad intrusiveness was excluded from the initial regression. Of the two models, the second model, which included both attitude toward brand and ad intrusiveness as predictor variables, accounted for the most variance in purchase intention in the overall sample. The increase in variance explained by entering ad intrusiveness into the model was also statistically significant.

The regression model including attitude toward brand and ad intrusiveness together explained 26% of the variation in purchase intention ($R^2 = .259, F(2, 72) = 12.57, p = .005$). It was found that attitude toward brand predicted purchase intentions ($\beta = .41, p = .000$) as did ad intrusiveness ($\beta = -.29, p = .005$). (Table 5-10).

Table 5-9. Linear Regression Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R^2$</th>
<th>Std. Error of Estimate</th>
<th>$R^2$ Change</th>
<th>$F$ Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. $F$ Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.416$^a$</td>
<td>.173</td>
<td>.136</td>
<td>1.53356</td>
<td>.173</td>
<td>15.291</td>
<td>1</td>
<td>73</td>
</tr>
<tr>
<td>2</td>
<td>.509$^b$</td>
<td>.259</td>
<td>.238</td>
<td>1.46197</td>
<td>.086</td>
<td>8.325</td>
<td>1</td>
<td>72</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Mean Attitude Toward Brand  
b. Predictors: (Constant), Mean Attitude Toward Brand, Mean Ad Intrusiveness  
c. Dependent Variable: Mean Purchase Intention

Table 5-10. Coefficients and t-test of predictors

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td></td>
<td>.294</td>
<td>.728</td>
<td>.404</td>
<td>.687</td>
</tr>
<tr>
<td></td>
<td>Mean Attitude toward brand</td>
<td></td>
<td>.554</td>
<td>.142</td>
<td>.416</td>
<td>3.910</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td></td>
<td>2.615</td>
<td>1.062</td>
<td>2.461</td>
<td>.016</td>
</tr>
<tr>
<td></td>
<td>Mean Attitude toward brand</td>
<td></td>
<td>.533</td>
<td>.135</td>
<td>.400</td>
<td>3.936</td>
</tr>
<tr>
<td></td>
<td>Mean Ad Intrusiveness</td>
<td></td>
<td>-.434</td>
<td>.151</td>
<td>-.293</td>
<td>-2.885</td>
</tr>
</tbody>
</table>

a. Dependent Variable: MeanPI
Overall the there was no established relationship observed with this data with regards to attitude toward brand and ad intrusiveness as it was not statistically significant. A correlation analysis between ad intrusiveness and intention to purchase indicated a negative correlation between the two variables. Furthermore, support was found for the suggested hypothesis wherein a positive attitude toward the brand leads to a positive intention to purchase the premium service.

Additional questions were asked to rate the attributes of a MaaS that are important to them as well as how often respondents think of the same attributes while comparing with other music services. These questions were not a considered for hypothesis or research question testing. The respondents were asked to rate price, offline access, audio quality, ad-free usage, unlimited usage, mobile access and an open-end response to enter an attribute of their own choice. The respondents were asked the question “In deciding whether or not to pay for subscription music services, how valuable are the following factors?” to ascertain how valuable are the aforementioned attributes to them. The attributes were measured on a five point Likert scale ranging from not at all important to extremely important. Similarly, to ascertain how often they think of the same attributes compared to other music services, the respondents were asked the question “How often do you think about the following attributes of the premium version of Spotify compared to other music services?” The attributes were measured on a five point Likert scale ranging from never to always.

Of respondents who answered how valuable are the attributes when paying for subscription music services, 65% reported price, 61% reported mobile access, 55% reported unlimited usage, 45% reported audio quality and 44% reported ad free usage, as “extremely important” on the scale.
Table 5-11. Valuable factors to pay for subscription music services

<table>
<thead>
<tr>
<th>Factor</th>
<th>Not at all important Frequency (Percent)</th>
<th>Slightly important Frequency (Percent)</th>
<th>Moderately important Frequency (Percent)</th>
<th>Very important Frequency (Percent)</th>
<th>Extremely important Frequency (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>1(1.3%)</td>
<td>2(2.7%)</td>
<td>8(10.7%)</td>
<td>13(17.3%)</td>
<td>49(65.3%)</td>
</tr>
<tr>
<td>Offline access</td>
<td>2(2.7%)</td>
<td>3(4%)</td>
<td>18(24%)</td>
<td>22(29.3%)</td>
<td>28(37.3%)</td>
</tr>
<tr>
<td>Audio quality</td>
<td>1(1.3%)</td>
<td>1(1.3%)</td>
<td>12(16%)</td>
<td>25(33.3%)</td>
<td>34(45.3%)</td>
</tr>
<tr>
<td>Ad free usage</td>
<td>1(1.3%)</td>
<td>4(5.3%)</td>
<td>16(21.3%)</td>
<td>19(25.3%)</td>
<td>33(44%)</td>
</tr>
<tr>
<td>Unlimited usage</td>
<td>1(1.3%)</td>
<td>1(1.3%)</td>
<td>2(2.7%)</td>
<td>28(37.3%)</td>
<td>41(54.7%)</td>
</tr>
<tr>
<td>Mobile access</td>
<td>1(1.3%)</td>
<td>0</td>
<td>5(6.7%)</td>
<td>21(28%)</td>
<td>46(61.3%)</td>
</tr>
<tr>
<td>Other</td>
<td>53(70%)</td>
<td>0</td>
<td>12(16%)</td>
<td>4(5.3%)</td>
<td>4(5.3%)</td>
</tr>
</tbody>
</table>

Additionally, when the respondents were asked to rate how often they think of the attributes when compared to other music streaming services, the respondents that reported “always” for the attributes ad-free usage was 28%, unlimited music was 25%, price was 21%, audio quality was 16%, offline access was 15%, and mobile access was 25%.

Table 5-12. Time spent thinking about attributes of premium version of Spotify

<table>
<thead>
<tr>
<th>Factor</th>
<th>Never Frequency (Percent)</th>
<th>Sometimes Frequency (Percent)</th>
<th>About half the time Frequency (Percent)</th>
<th>Most of the time Frequency (Percent)</th>
<th>Always Frequency (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>13(17.3%)</td>
<td>15(20%)</td>
<td>12(16%)</td>
<td>17(22.7%)</td>
<td>16(21.3%)</td>
</tr>
<tr>
<td>Offline access</td>
<td>13(17.3%)</td>
<td>13(17.3%)</td>
<td>20(26.7%)</td>
<td>16(21.3%)</td>
<td>11(14.7%)</td>
</tr>
<tr>
<td>Audio quality</td>
<td>18(24%)</td>
<td>16(21.3%)</td>
<td>12(16%)</td>
<td>15(20%)</td>
<td>12(16%)</td>
</tr>
<tr>
<td>Ad free usage</td>
<td>8(10.7%)</td>
<td>11(14.7%)</td>
<td>11(14.7%)</td>
<td>22(29.3%)</td>
<td>21(28%)</td>
</tr>
<tr>
<td>Unlimited music</td>
<td>10(13.3%)</td>
<td>7(9.3%)</td>
<td>10(13.3%)</td>
<td>27(36%)</td>
<td>19(25.3%)</td>
</tr>
<tr>
<td>Mobile access</td>
<td>10(13.3%)</td>
<td>15(20%)</td>
<td>10(13.3%)</td>
<td>19(25.3%)</td>
<td>19(25.3%)</td>
</tr>
<tr>
<td>Other</td>
<td>55(73.3%)</td>
<td>1(1.3%)</td>
<td>10(13.3%)</td>
<td>1(1.3%)</td>
<td>6(8%)</td>
</tr>
</tbody>
</table>

Summary

In this chapter, it was observed that the demographic data for this study is somewhat similar to previous research. Three variables were tested based on scales adopted from previous research. Reliability tests of the scales resulted in a high Cronbach’s alpha and indicated that
scales were reliable in nature. Furthermore, a correlation analysis was run for the first research question. Correlation analysis was conducted between attitude toward brand and ad intrusiveness which yielded statistically insignificant results suggesting that there may be other factors involved that determine the relationship between the two variables. A similar correlation analysis was run for the second research question to determine the correlation between ad intrusiveness and intention to purchase the premium version of the service. The correlation analysis showed that a high intrusiveness of ads correlated to negative intention to purchase the premium service. Additionally, one hypothesis was tested using correlation analysis between attitude toward the premium service and purchase intention based on previous literature. The correlation analysis yielded a positive correlation between attitude toward the premium service an intention to purchase the premium service.

Additional analyses were conducted by performing a multiple linear regression model on the three variables. The results of the regression model for attitude toward brand and ad intrusiveness together explained 26% of the variation in purchase intention. Lastly, two additional questions were asked for all the respondents regarding the value and importance of the attributes in MaaS when asked to pay for subscription music service as well how often they thought about the attributes in Spotify. Price was one of the most valued and extremely important attribute. Similarly, ad-free usage was the highest rated attribute which was always thought about when comparing other MaaS with Spotify.
CHAPTER 6
DISCUSSION

This research focused on the role of ad intrusiveness, attitude toward brand and intention to purchase the premium service. To better understand the role of the aforementioned variables, the DMH model was partially adapted for this study. This research study builds on previous research on attitude toward the brand and purchase intention in the DMH model (Teng, Laroche and Zhu, 2007; Teng and Laroche, 2007; MacKenzie et al., 1986; Brown and Stayman, 1992) in a MaaS context (Wagner et al., 2013, 2014). While the previous research by Wagner et al. has utilized the DMH model to show the linkage between attitude toward the brand and purchase intentions while accounting for attitude and cognitions toward the ad and brand, this study sought to understand the role of ad intrusiveness in such a model. Although research has been done in a MaaS context to look at the attitudes toward the ads and brands along with the intention to purchase the brand or its service, the current study is unique in examining the intrusiveness of ads on the freemium version influencing the respondent’s response to intention to purchase the premium version.

The literature review established the formation of two research questions based on the intrusiveness of ads affecting attitude toward brand and purchase intention. Additionally, based on previous literature this study tested the hypothesis for the relationship between attitude toward brand with purchase intention. A statistically insignificant correlation was found between ad intrusiveness and attitude toward brand. However, support was found for ad intrusiveness negatively correlating with purchase intention. Additionally, the hypothesis test also confirmed a positive relationship between attitude toward the brand with purchase intention. The multiple regression analysis also confirmed 26% of variance in purchase intention could be explained
when ad intrusiveness and attitude toward the brand were considered together as predictors. The two research questions and the hypothesis will be discussed individually in this section.

RQ1: Does the perceived intrusiveness of ads on freemium services relate to users’ attitudes toward premium services?

A correlation analysis was run to understand how perceived ad intrusiveness relates to users’ attitudes toward premium services. The overall means were calculated for both sets of the variables.

The correlation analysis showed a statistically insignificant correlation between ad intrusiveness and users’ attitude toward the premium services. One of the possible reasons for insignificance can be attributed to the low number of respondents (n = 75).

RQ2: What is the influence of non-subscribers who rate a high intrusiveness of ads have on their intention to purchase?

The results of the correlation suggest that non-subscribers who perceived a higher-level of intrusiveness of ads reported negatively on the intention to purchase scale. Non-subscribers who perceive advertising to be more intrusive are less likely to report a positive intention to purchase the premium service.

Wagner et al. (2013), in their study, reported that a positive attitude toward the premium service leads to a positive intention to purchase the service. However, this paper questions how the freemium versions of MaaS that include interruptive advertising affect attitude toward the premium services, leading to the users’ intentions to purchase premium services. Li, Edwards and Lee (2002) found that intrusiveness elicits a negative attitude in consumers. However, as observed in the current study, even though ad intrusiveness does not directly affect the attitude toward the premium service, it does affect the intention to purchase the premium service. The
lesser likelihood of intention to purchase the premium service due to the intrusion of ads also suggests that the non-subscribers may not be bothered by the ads and therefore continue to use the freemium service regardless of the positive attitude toward the premium service.

H1: Attitude toward the premium service is positively related to the intention to purchase.

The hypothesis was tested by analyzing the correlation between attitude toward the premium service to that of intention to purchase the premium service based on the responses of non-subscribers.

Support was found for the hypothesis testing the positive relationship between attitude toward the brand to that of intention to purchase the premium service. In other words, the supported hypothesis suggests that non-subscribers that had a positive attitude toward the service also reported positively on the intention to purchase scale. The results of this hypothesis align with previous research that also established a positive relationship between attitude toward the brand and intention to purchase (Teng, Laroche and Zhu, 2007; Teng and Laroche, 2007; MacKenzie et al., 1986; Brown and Stayman, 1992).

**Additional Analysis:** A statistically insignificant relationship was found between attitude toward the premium service to the intrusiveness of ads. However, the regression analysis revealed that the intrusiveness of ads along with the attitude toward the brand of premium services together may affect respondent’s response to intention to purchase the premium service. This suggests that there is an indirect relationship between ad intrusiveness, attitude toward the brand and purchase intention. A high intrusiveness of ads leads to a negative intention to purchase but a positive attitude toward the brand indicates a positive intention to purchase. Future studies in this area are suggested and discussed appropriately in the next chapter.
Based on the additional questions it was observed that price was the most important attribute considered when deciding to pay for a music service. Additionally, the respondents always thought about the attribute ad-free usage when comparing to other music streaming services. These attributes may help in understanding the negative correlation between ad intrusiveness and intention to purchase the premium version of the service.

A larger, random sample might help to provide greater insight as to how these results may represent the experiences of non-subscribers’ intrusiveness of ads to that of their attitude toward the premium service as well as intention to purchase. Other limitations are discussed in the next chapter as well as conclusions, potential contributions, and suggestions for future research.

Figure 6-1. Results Research model
CHAPTER 7
CONCLUSIONS, CONTRIBUTIONS, LIMITATIONS AND FUTURE RESEARCH

The following chapter will look at the how this research study helps in answering research questions and a hypothesis formulated in the earlier chapters of this study. The chapter will also attempt to contribute to the discussion in past literature regarding attitude toward brand, ad intrusiveness and purchase intention in a MaaS context. This chapter will discuss overall conclusions of the study, potential contributions, limitations, and suggestions for future research.

Conclusions

The intention of this study was to understand the role of advertising, specifically the intrusiveness of ads in a music streaming service, and how it affects freemium users’ attitudes toward the premium service. Additionally, this study sought to understand the relationship between attitude toward the premium service and their intention to purchase or subscribe to the premium version of the music service. This study explores the role of advertising as a feature of freemium MaaS and how it affects intention of non-subscribers to subscribe to premium MaaS services. Lastly, the effect of ad intrusiveness and attitude toward the brand were observed in terms of intention to purchase the premium service. Previous literature has explored the relationships between attitude toward brand and purchase intention in a different context (e.g., DMH) and ad intrusiveness has been observed in isolation by Li, Edwards and Lee, (2002). By incorporating ad intrusiveness with relation to attitude toward the brand and intention to purchase the premium service, this study hopes to contribute to several fields by encouraging future academic study and interest in how these ideas relate to one another.

The results of this study showed that ad intrusiveness is correlated to purchase intentions. It was observed based on the results of this study that intrusiveness of ads on
the freemium service leads to a negative intention to purchase the premium service.

Although no correlation was observed between the attitude toward the premium service and ad intrusiveness, it was observed that respondents who reported a positive attitude toward the premium service had a higher intention to purchase the service. The implications of these findings are discussed in further detail in the next section.

**Contributions**

The study adapted theories and measures from past literature for attitude toward the brand and purchase intention in the DMH context. The concept of ad intrusiveness was also implemented from previous literature and was analyzed along with attitude toward brand and purchase intention. The results of this study attempted to contribute to the discussion in the theories from the past literature based off the results of this study.

The results of this study contribute to the DMH model as well as the literature on intrusiveness of ads affecting purchase intentions in a MaaS context. Wagner et al. (2013) in their study adopted the DMH model to understand how attitudes toward ads and brand affect the purchase intentions of the MaaS users. Wagner et al., (2013) considered the freemium version as an advertisement for the premium version that might affect the attitude and purchase intentions toward the premium service. This study implemented ad intrusiveness and the how it affects the respondent’s attitude and purchase intentions toward the brand. As described in the earlier chapters, freemium services operate on the basis of offering full or partial features of the premium service interspersed with advertising that funds the freemium version. There has been very scant research conducted in terms of MaaS and the intrusiveness of ads on such services affecting the intention to purchase the service. The results of this study indicate that ad intrusiveness leads to negative intent in purchasing the premium version of the service. Although a
correlation was not observed between ad intrusiveness and attitude toward the premium service. Furthermore, this study observed that freemium users that had a positive attitude toward the brand also had a positive intention to purchase the premium version of the service. Thus, the results contribute additional support to the positive relationship between attitude toward the brand and purchase intentions in the DMH model as observed by previous literature (Teng, Laroche and Zhu, 2007; Teng and Laroche, 2007; MacKenzie et al., 1986; Brown and Stayman, 1992). The additional analyses suggest that price may be an important variable that contributes to understanding the correlation between intrusiveness of ads or attitude toward the premium service.

The results of this study also contribute in understanding the freemium MaaS market. As observed in the results, a higher reported ad intrusiveness leads to a lesser intention to purchase the premium service. This indicates that the advertising on the freemium version of Spotify is intrusive to the extent that the respondents reported a negative intention to purchase the premium service. This is vital for a content-as-a-service platform that provides a freemium option to convert the freemium users of the service into premium users. The freemium service provides a similar experience as that of the premium service and hence, the experience on the freemium version should increase the intention to purchase of the freemium users. Consequently, any MaaS as well as any content as a service that provides an advertising based freemium version of their service may benefit by implementing the advertisements on the freemium version in a way that does not deter the freemium users’ intention to purchase the service. It was also observed that freemium users of Spotify that reported a positive attitude toward the premium version based on their experience on the freemium version reported a positive intention to purchase the service.
Further support was obtained from the additional analysis which revealed that respondents considered the price to be an important attribute when considering purchasing subscription to a music streaming service. However, when comparing Spotify to other music streaming services, the respondents always thought of ad-free usage as the biggest attribute differentiating Spotify with other music streaming services.

**Limitations**

One of the major limitations in this study is the low number of respondents that reported themselves as freemium users. It was observed that in both the Sona and Non-Sona sample the number of premium users outnumbered the freemium users. Around 216 valid responses were analyzed for this study, however only 75 respondents claimed to be current users of the freemium version of Spotify. Despite the total sample closely representing the sample observed by Albert (2015) the number of participants was too low in number (75 freemium respondents). The study only observed users’ experience with the freemium version on mobile devices, which also affected the total number of respondents considered for analysis. The survey implemented a snowball sampling method and therefore the validity of the sample respondents could not be identified. Additionally, the Sona sample were compensated with credits for participation in the survey whereas there was no compensation provided to the Non-Sona sample and that may have affected the quality of responses for the Non-Sona sample. Lastly, the results only suggest a very weak statistical significance for ad intrusiveness and purchase intention as well as the positive relation between attitude toward the premium service and the intention to purchase the premium service, a larger sample may provide a clearer understanding of the relationship between all the variables. This would allow for more
sophisticated analyses such as structural equation modeling or path analysis yielding a high statistically significant model.

**Directions for Future Research**

This study incorporated the ad intrusiveness variable in the DMH model. Future studies should incorporate attitude and cognitions toward the advertisements on the freemium version and their possible effect on the attitude and cognition toward the premium version along with the significance of ad intrusiveness in the DMH model. The results of this study indicate an indirect relationship between attitude toward the brand, ad intrusiveness and purchase intention toward the premium version of Spotify and further studies should explore this relationship in further detail.

Li, Edwards and Lee, (2002) in their study stated that ad intrusiveness may develop feelings of ad irritation which may further lead to ad avoidance. This study did not observe the possible effects of ad irritation and ad avoidance which may provide a much more vivid explanation for reasons behind ad intrusiveness. Ad avoidance and ad irritation along with ad intrusiveness should be studied to identify if there is a correlation with the attitude toward the premium service. Future studies should also incorporate the characteristics of ads such as the length of the advertisement, the context and relevance of the advertising message in the ad. Along with the characteristics of the ad, usage habits and personal behavior regarding the use of the freemium version will also shed some light on the attributes of the freemium version itself. Data obtained for the attributes may provide a better understanding of the interplay between attitude toward the premium service, ad intrusiveness and purchase intentions.

Adding to Yang and Ting’s (2016) ongoing study, the length of the advertisement as well as how well the advertisement can be recalled can also contribute towards
literature based on the intrusiveness of such advertisements in a music streaming service. This study also did not look at the placement and the interval of every advertising interval between a regular play session which may also help understand the intrusiveness of ads in MaaS. Furthermore, this study only conceptualized the concept of congruency by Moore et al. (2005) that conducted experiments to ascertain the context and background banner color congruency of ads on a website. This study did not observe the congruency of ads on the mobile version of Spotify since the ads on Spotify are a combination of auditory and textual. A detailed study replicating the experiments by Moore et al. may provide valuable literature on the theory of congruency in a MaaS context. Future studies should observe the advertisements on the freemium version of Spotify to be checked for context congruity based on auditory advertisements only as well as the banner color and text congruency.

This study also looked at the purchase intentions of the respondents rather than ascertain the price value for the premium version of the service. Doerr et al. (2010) in their study say that MaaS providers generate revenue by ad-based financing on the freemium model. Additionally, they utilized the concept of willingness to pay to determine the price value that users of the MaaS consider as ideal. Future studies should also incorporate the willingness to pay variable as it will provide a monetary value for purchase intentions. Furthermore, as observed in the additional analysis, there might be other factors or attributes that contribute to the purchase intentions and attitude toward a MaaS.

Lastly, this study suggests a similar approach toward understanding how the attitude toward brand, ad intrusiveness and purchase intention affect similar music streaming services, freemium content as a service. Different freemium music streaming
services incorporate different methods of advertising on their service and replicating this study on such services may provide additional insight as well as a different result based on the service. The focus of this study was purely on mobile devices and exploring other mediums of the freemium service is encouraged for possible future research.
APPENDIX
SURVEY QUESTIONNAIRE

This study attempts to collect information about your usage habits of music streaming services and your attitude toward the premium version and intention to purchase the premium version.

Please read this consent document carefully before you decide to participate in this study.

Purpose of the research study

The purpose of this study is to examine the intention to purchase and attitude toward the premium version of music streaming services.

What you will be asked to do in the study

Based on your experience in using the free versions of music streaming services you will be asked questions about your usage habits on the free versions of music streaming services, your attitude toward the premium versions of the service and also your intention to purchase (subscribe) to the premium version of such music streaming services.

Time required 8-10 minutes

Risks

Risks are minimal for involvement in this study. We do not expect any harm to come upon any participants due to electronic malfunction of the computer. There are no known risks or hazards associated with participation in this study. Only the researchers will have access to the information we collect online. There is a minimal risk that security of any online data may be breached, but since no identifying information will be collected, and the online host (Qualtrics) uses several forms of encryption protections, it is unlikely that a security breach of the online data will result in any adverse consequence for you.

Compensation and benefits
There is no direct compensation, however, participants may earn .25 credit only through participation in the University of Florida College of Journalism and Communication’s SONA systems, at the discretion of their professors. Participants who are not students of the University of Florida and are not participating through the SONA systems will not receive any compensation or benefits.

Confidentiality

Your participation will be confidential to the extent provided by law; your responses will be anonymous, with no connection to your name or other identifying information. Your name will not be used in any report. All data obtained from participants will be kept confidential and will only be reported in an aggregate format (by reporting only combined results and never reporting individual ones). All questionnaires will be concealed, and no one other than the primary investigator and assistant researchers listed below will have access to them. The data collected will be stored in the HIPPA-compliant, Qualtrics-secure database until it has been deleted by the primary investigator.

Voluntary participation

Your participation in this study is completely voluntary. There is no penalty for not participating.

Right to withdraw from the study

You have the right to withdraw from the study at any time without consequence.

Who to contact if you have questions about the study

Shardul Madan, Graduate Student, Department of Advertising, 2019 Weimer Hall, Gainesville, FL 32611. Phone: 352-281-8841. E-mail: shardulmadan@ufl.edu. Dr. Tom Kelleher, 2088 Weimer Hall, Phone: 352-392-4046, E-mail: tkell@jou.ufl.edu.
Who to contact about your rights as a research participant in the study

If you have questions, you may contact the director of the Institutional Review Board at: IRB02 Office Box 112250 University of Florida Gainesville, FL 32611-2250 phone: 352-392-0433.

Q1.2 I have read, understood, and printed/saved a copy of, the above consent form and desire of my own free will to participate in this study.
- Yes
- No
If No Is Selected, Then Skip To End of Survey

Q2.1 Please write down your age in years

Q2.2 Please select your gender
- Male
- Female

Q2.3 Do you currently reside in the United States of America?
- Yes
- No
If No Is Selected, Then Skip To End of Survey

Q2.4 Please indicate your annual personal income.
- $0 - $4,999
- $5,000 - $9,999
- $10,000 - $14,999
- $15,000 - $19,999
- $20,000 - $24,999
- $25,000 - $29,999
- $30,000 - $34,999
- $35,000 - $39,999
- $40,000 - $44,999
- $45,000 and above
Q2.5 Please indicate your highest level of education
- Less than high school
- High school graduate
- Some college
- 2-year degree
- 4-year degree
- Master’s degree
- Professional degree
- Doctorate

Q3.1 Have you ever used the paid version of Spotify before?
- Yes
- No
If Yes Is Selected, Then Skip To Please select the preferred medium of...If No Is Selected, Then Skip To Do you currently use or have ever use...

Q3.2 Do you currently use or have ever used the free version of Spotify?
- Yes
- No
If Yes Is Selected, Then Skip To Please select the preferred medium of...If No Is Selected, Then Skip To End of Block

Q3.3 Please select the preferred medium of listening to music on Spotify
- iPhone
- Android
- Other ____________________

Q3.4 How often do you listen to music on Spotify?
- Daily
- Several times a week
- Several times a month
- Occasionally
Attitude Toward the Brand of MaaS

Please describe your overall feelings about the premium version of Spotify based on your experience with the free version of Spotify?

<table>
<thead>
<tr>
<th>unappealing</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>appealing</th>
</tr>
</thead>
<tbody>
<tr>
<td>bad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>good</td>
</tr>
<tr>
<td>unpleasant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>pleasant</td>
</tr>
<tr>
<td>unfavorable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>favorable</td>
</tr>
<tr>
<td>unlikable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>likable</td>
</tr>
<tr>
<td>unsatisfactory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>satisfactory</td>
</tr>
</tbody>
</table>

Intrusiveness

Normally when I am using Spotify, I find the ads to be...

<table>
<thead>
<tr>
<th>Distracting</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Somewhat disagree (3)</th>
<th>Neither agree nor disagree (4)</th>
<th>Somewhat agree (5)</th>
<th>Agree (6)</th>
<th>Strongly Agree (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disturbing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forced</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interfering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrusive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invasive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obtrusive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Intention to Subscribe**

Please describe your intentions to subscribe to the premium version of Spotify.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>never</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>definitely</td>
</tr>
<tr>
<td>definitely do not intend to subscribe</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>definitely intend to subscribe</td>
</tr>
<tr>
<td>very low interest in subscribing</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>very high interest in subscribing</td>
</tr>
<tr>
<td>definitely not subscribing</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>definitely subscribing</td>
</tr>
<tr>
<td>probably not subscribing</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>probably subscribing</td>
</tr>
</tbody>
</table>

In deciding whether or not to pay for subscription music services, how valuable are the following factors (rating from not at all important to extremely important)?

<table>
<thead>
<tr>
<th></th>
<th>Not at all important</th>
<th>Slightly important</th>
<th>Moderately important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>price</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>offline access</td>
<td>○</td>
<td>○</td>
<td></td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>audio quality</td>
<td>○</td>
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How often do you think about the following attributes of the premium version of Spotify compared to other music services?

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<th>Never</th>
<th>Sometimes</th>
<th>About half the time</th>
<th>Most of the time</th>
<th>Always</th>
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LIST OF REFERENCES


BIOGRAPHICAL SKETCH

Shardul Madan enrolled in the Department of Advertising in the College of Journalism and Communications at the University of Florida in August 2014. He received his Master of Commerce and Business Management from Mithibai College, Mumbai, India.