An Investigation of Hedonic and Utilitarian Value on User Satisfaction and Loyalty for Mobile Music Streaming Application

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Abstract

Online music streaming service is becoming a popular way to play the music. Using a mobile device to listen to music is a very common phenomenon. Music Streaming Service Providers developed their respective application of mobile to increase the number of users. This study proposed a framework to examine the role of utilitarian and hedonic values in user loyalty and satisfaction. Finally, we expect our result of this study can help music streaming service providers to understand which value or factor can influence users behavioral intention and provide recommendations for improvement.

Keywords: Satisfaction, Hedonic, Loyalty, Music Streaming, Information System Success

1. Introduction

Beginning of the 21st century, digitally downloaded and streamed music, much of it illegally downloaded or streamed became more prevalent than physical recordings, such as CDs and tapes (Wikipedia). The music industry has experienced a tremendous transformation. The change gave consumers almost easily access to a broader variety of music than ever before. Due to the convenience of the Internet, digital music is a popular way to obtain the music. Though, get music from the Internet will be the problem of piracy. Physical music is still suffered a heavy blow. In order to keep up with the digital trend, some services were developed for users to download digital music such as iTunes. This is a legal way to download digital music which just need to pay a little money per song.

After that, with rapid growth of the Internet, a new kind of way to listen to music is music streaming service, which is an online system that collects a lot of digital music for consumers in the past few years. Consumers can unlimited to listen to music from the database that customers just need to pay a set monthly fee. At an early stage, the most famous online music streaming

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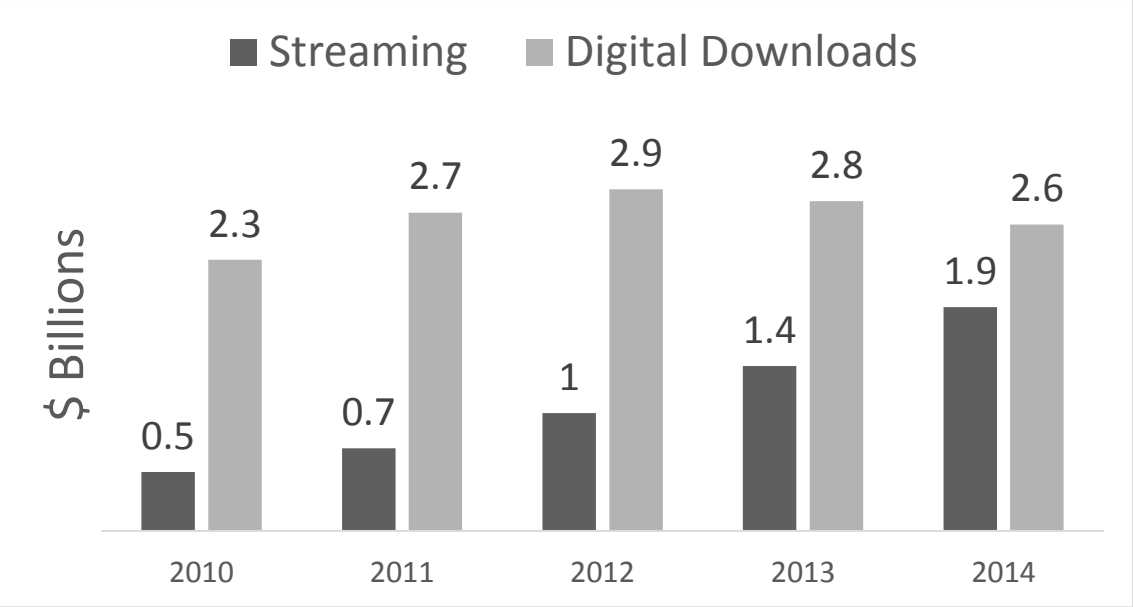
provider is KKBOX in Taiwan. But people who accept to pay a monthly fee is still not too much. However, in 2013, Spotify launched its service in Taiwan, which brought a significant impact for listening to music. Their primary strategy is to listen to music for free. Of course, the free version of the music streaming has some restrictions and interference of advertisements. But this strategy also makes a rapid increase in the number of users for the music streaming service. According to the report of the Recording Industry Association of America in 2014, the difference between revenues from permanent digital downloads and online streaming has decreased significantly in US (Figure 1). This phenomenon noted that growth potential of music streaming is very well in the future.

Table 1. US Streaming and Permanent Download Revenues (Source: RIAA)



At the same time, wireless network technologies were quickly advanced. Mobile devices had been an important piece of our life. The applications of the mobile device are widely be developed and used. Music streaming service providers inevitably focused on applications of mobile device to extend their scope of services to get more subscribers.

Here we proposed to combine the different perspectives that would provide a synergistic framework to detect the users' loyalty and satisfaction. In the marketing field, the ability of a service provider to offer superior value to its customers is regarded as the success of the service. Hedonic and utilitarian values cover a wide range of factors that individuals consider necessary in IS use (Venkatesh & Brown, 2001).

Therefore, this study tries to develop a research model in order to understand the role of utilitarian and hedonic values in user behavioral intention with using mobile music streaming service. We are going to conduct this study questionnaires to who had experience with using this

kind of mobile music streaming service. After that, we will analyze the impact of this variable and validate our assumptions.

Finally, we expect our result of this study can help music streaming service providers to understand which value and factor should be a focus. Further, it can contribute to the service providers to improve their services application of mobile.

2. Literature Review

According to the background of the chapter 1, the following step will explore the relevant studies.

2.1 Hedonic and Utilitarian Values

Most previous studies regarded value as a measure of price and quality (Monroe, 1990). However, some scholars have proposed to measure the value needs to be considered the psychological dimensions. They need to consider more about values because consumption value will affect the decision-making choice for consumers. In the marketing literature, the most commonly mentioned are hedonic value and utilitarian value (Babin, Darden, & Griffin, 1994). Utilitarian and hedonic value are the basic concepts that can help to evaluate consumers' experience of consumption (Ryu, Han, & Jang, 2010).

The beginning concept of hedonic value has been derived from hedonic consumption theory (Hirschman & Holbrook, 1982). Hedonic consumption is a consumer behavior refers to the experience of enjoyment or pleasure-oriented. This behavior is focused on the experience of consumption process. The hedonic value is the value of the non-goal-oriented, experience and emotional (Sweeney & Soutar, 2001). Compared to the utilitarian value of the an information system, the hedonic value is more subjective and personal than utilitarian value, and results from the emotion of fun rather than task completion (Holbrook & Batra, 1987).

On the other hand, the utilitarian value is relative to the hedonic value. Utilitarian consumer behavior has been described as efficient, task-related, and rational (Babin et al., 1994). Consumers need thorough consideration for the purchase of a product or service. When a task-oriented needs are met, the utilitarian value for customers will increase. From a utilitarian value view, the usage of the service is understood as a means of finishing some task-related (Babin et al., 1994; Holbrook & Batra, 1987). Many studies on the information system domain have strongly supported utilitarian value as an essential determinant of promoting behavioral intention to use the system because customers make a rational assessment of the functional benefits and sacrifices of using information system (Hong & Tam, 2006; Kim, Chan, & Gupta, 2007).

2.2 System and Information Quality

In the past, there were a lot of ways to explore the information system is a success system or not. In 1992, two qualities were proposed to assess the success of a system, one is system quality, and the other one is information quality (DeLone & McLean, 1992).

Previous studies had many explanations for system quality, but their meaning were very similar. System quality described the quality of information system itself by software and components. The definition of the system quality is to measure of the information system itself (DeLone & McLean, 1992). Later, other studies defined the system quality as the system itself which is no error or bugs, it means reliability of the system (Seddon, 1997). System quality refers to the system itself to measure the process of processing information (Delone & McLean, 2003). From the above definition, almost all in measuring the quality of the system itself. Therefore, in this study, the definition of the system quality is to measure the quality of the mobile music streaming application itself.

The definition of the information quality is to measure the system outputs (DeLone & McLean, 1992). Information quality will affect satisfaction for the user to use the information system. Past studies have pointed out that the information quality will affect customer satisfaction (McKinney, Yoon, & Zahedi, 2002). Information quality should fit the needs of users. The content arrangement must make users easy to understand. In conclusion, the information quality means that is a quality of system output after processing.

Many studies indicate that the system quality and information quality for a system or software is the most basic measurable variables. With using mobile music streaming applications, system quality and information quality will play an important role in impact the value and behavioral intention of customers.

2.3 Perceived Price

The price of the product for customers' purchase decisions is critical. The level of prices will influence customer satisfaction in the service industry (Parasuraman, Zeithaml, & Berry, 1994). Prices mean the amount of money required to pay by customers that in order to obtain a service or product (Quester et al., 2007). But a set of price from suppliers cannot represent the price of a service or product in the minds for customers.

Many scholars have different definitions of perceived price. Perceived price is a subjective impression for the price when consumers buy goods or services (Jacoby & Olson, 1977). Customers are not always remember the price of the product after purchased. However, the customers would be impressed by the price of the product is expensive or cheap. This kind of

feeling is perceived price (Zeithaml, 1988). Perceived price is a sensitivity that generate from customers paid to obtain services or products (Petrick, 2005).

The current mobile music streaming applications require to pay a monthly fee for use. Therefore, perceived price is a suitable variable to measure a product or service that required to pay the money.

2.4 Satisfaction

Customer satisfaction is a level of pleasant emotions for a result which is a comparison of expectations and actual use (Kotler, 1997). "Satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product of service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over-fulfillment" (R. Oliver, 1997).

Satisfaction is usually obtained through judgment and compared with expectations. If a system can provide a service that can equal the user needs, that will be able to increase user satisfaction. Satisfaction is viewed as the consequence of the consumer's evaluation of the value derived from the shopping experience. Previous studies on shopping value and satisfaction provide support for linking utilitarian shopping value and hedonic shopping value to satisfaction (M. A. Jones, Reynolds, & Arnold, 2006). Studies have shown that value will affect the satisfaction.

Thus, satisfaction is an indicator which is suitable to measure the product or service.

2.5 Loyalty

Previously, many researchers measured loyalty on the behavioral dimensions that focused on the number and frequency for the purchase of goods or services. General business and some scholars believe that as long as with repeat purchase behavior would equal to the customer loyalty. However, loyalty also has other different explanations.

Customer loyalty has been defined as the strength of the relationship between an individual's relative attitude and repeats patronage (Dick & Basu, 1994). Loyalty means customers that generate the favorable impression or reliance for services or products (T. O. Jones & Sasser, 1995). With the attitudinal concept, customer loyalty is a deeply commitment to repurchase or patronize a preferred product or service consistently in the future (R. L. Oliver, 1999). Various definitions found the loyalty is not only just a behavior of repeat purchase but also including the relationship between customer and company. If loyalty is not too high that is easy to enable customers to switch to other products or services.

Therefore, loyalty is seen as a critical factor for a business, brand, product or service.

3. Research Model and Hypotheses

In this section, we proposed our research model and hypotheses.

3.1 Research Model

Our framework of this study displays in Figure 2. This framework has seven variables which is based on the literature review to examine the impact for mobile music streaming applications.

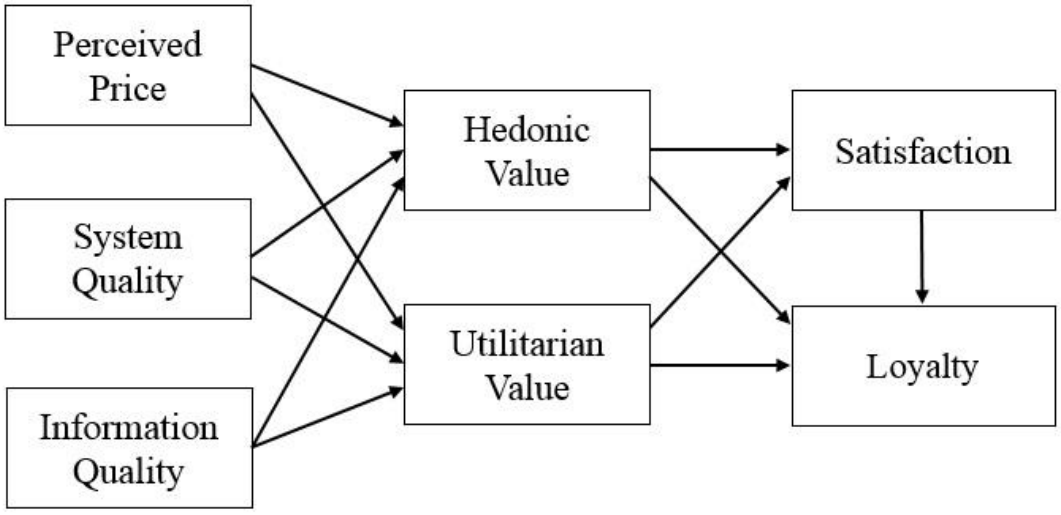


Figure 2. Research Model

3.2 Hypotheses development

In section 2, we have completed to introduce all the variables that we want to explore. Therefore, we proposed several hypotheses as below:

3.2.1 Perceived Price

Perceived price is a subjective impression for the price when consumers buy goods or services (Jacoby & Olson, 1977). Consumers will evaluate their costs and gain to measure a product or service. When consumers feel the price of service or product is high, they will feel the need to pay is too high. This will cause the customer to reduce the perceived value of the product or service. Previous studies on technology diffusion and marketing have showed that perceived price is negatively related to perceived value (Cronin, Brady, & Hult, 2000). Therefore, we assume the hypotheses as below:

H1a: Perceived Price negatively affect hedonic value.

H1b: Perceived Price negatively affect utilitarian value.

3.2.2 System Quality and Information Quality

Previous study divided the perceived quality of information system into information and system quality (DeLone & McLean, 1992). System quality described the quality of information system itself. The definition of the information quality is to measure the system outputs. After that, many empirically researches have focused on the information and system quality as pre-factors of usage in a variety of system. It is not difficult to find that two qualities have become an important factor in the success of the system.

In the marketing discipline, a service provider offer a high value to its customers is regarded as the success of the service. Several studies in the marketing and information system domain showed that perceived value is an important factor in users' decision processes in pay-per-use service behavior (Kim et al., 2007; Turel, Serenko, & Bontis, 2007). Therefore, we assume the hypotheses as below:

H2a: System quality positivity affect hedonic value.

H2b: System quality positivity affect utilitarian value.

H3a: Information quality positivity affect hedonic value.

H3b: Information quality positivity affect utilitarian value.

3.2.3 Hedonic Value and Utilitarian Value

Most studies on the information system domain have strongly supported utilitarian value as a critical value of prompting behavioral intention to use the system because customers make an assessment for the functional benefits and sacrifices of using the system (Kim et al., 2007). Compared to the utilitarian value of information system, hedonic value is more subjective and personal. It also refers the hedonic value that is more suitable for using the system of non-task-oriented, including more like to experience or enjoy a thing.

Perceived value on satisfaction and repurchase intention has a significant relationship (Oh, 1999). When the customer's perceived value is higher, the customer satisfaction and repurchase intention will also be higher. And customer loyalty has been defined as the strength of the relationship between an individual's relative attitude and repeats patronage (Dick & Basu, 1994). Therefore, we assume the hypotheses as below:

H4a: Hedonic value positivity affect user satisfaction.

H4b: Hedonic value positivity affect loyalty.

H5a: Utilitarian value positivity affect user satisfaction.

H5b: Utilitarian value positivity affect loyalty.

3.2.4 Satisfaction

Satisfaction is usually obtained through judgment and compared with expectations for a product or service. Some studies refer if customer satisfaction is higher, then repurchase intention will also be higher (Narayandas, 1996). Some scholars refer that the company will add new customer if the customer are satisfied their products or services. This means customers will help the company to promote their products or services. And loyalty is an overall dimensions of these customer behaviors. Therefore, we assume the hypotheses as below:

H6: User satisfaction positivity affect loyalty.

4. Research Methodology

In chapter 4, we designed the questionnaire in the beginning. Then, we will do the data collection from the customers who have used music streaming APP. After that, we will process reliability analysis, validity analysis, and hypotheses analysis.

4.1 Questionnaire Design

The question for conducting our research contains 28 items. Each construct contains four items. This study uses items selected for measuring the constructs from previous literatures. The scales for measuring the perceived price were adopted from Voss et al. (1998). The scales for measuring the quality of system and information were adopted from DeLone & McLean (1992) and Wang (2008). The items of system quality is based on ease of use, response time, ease of learning, and availability. And the items of information quality is based on ease of understanding, content, reliability, and timeliness. The scales for measuring the value of hedonic and utilitarian were adopted from Babin et al. (1994), Mathwick et al. (2001), and Wang et al. (2007). The scales for measuring the satisfaction were adopted from DeLone & McLean (1992) and Wang (2008). Lastly, the scales for measuring the loyalty were adopted from Zeithaml, Berry, & Parasuraman (1996). All questions are showed in Table 1.

Table 1. Item scales measurement

Variables	Items	Reference
Perceived Price	PP1. The monthly fee that I have to pay for the use of the music streaming APP would be reasonable. (R)	Voss et al. (1998)
	PP2. The monthly fee that I have to pay for the use of the music streaming APP would be acceptable. (R)	
	PP3. I would be pleased with the monthly fee that I have to pay for the use of the music streaming APP. (R)	
	PP4. The monthly fee that I have to pay for the use of the music streaming APP would be reasonable.	
System Quality	SQ1. The music streaming APP is easy to use.	DeLone & McLean (1992)
	SQ2. The response time of the music streaming APP is fast.	Wang (2008)
	SQ3. The music streaming APP is easy to learning.	
	SQ4. The music streaming APP is availability.	
Information Quality	IQ1. The output of the music streaming APP is easy to understanding.	DeLone & McLean (1992)
	IQ2. The output of the music streaming APP meets your need.	Wang (2008)
	IQ3. The output of the music streaming APP is reliability.	
	IQ4. The music streaming APP would provide information in a timely fashion.	
Hedonic Value	HV1. Compared to other things I could have done, the time spent on using music streaming APP was truly enjoyable.	Babin et al. (1994)
	HV2. The use of the music streaming APP was truly a	Mathwick et al. (2001)

	joy. HV3. I enjoyed being immersed in exciting new information on the music streaming APP. HV4. During the use of the music streaming APP, I felt the excitement of the hunt.	Wang et al. (2007)
Utilitarian Value	UV1. Compared to the fee I need to pay, the use of the music streaming APP would offer a good value for the money. UV2. Using music streaming APP to search music could save time. UV3. Using music streaming APP could find the music that I need. UV4. I feel really smart about using the music streaming APP.	Babin et al. (1994) Mathwick et al. (2001) Wang et al. (2007)
Satisfaction	SA1. I am contented with using music streaming APP. SA2. I am satisfied with using music streaming APP. SA3. Using music streaming APP has met my expectations. SA4. Overall, I am satisfied with using the music streaming APP	DeLone & McLean (1992) Wang (2008)
Loyalty	L1. Say positive things about the music streaming APP to other people L2. Recommended the music streaming APP to someone who seeks your advice. L3. Encourage friends and relatives to do business with using the music streaming APP. L4. I will use the music streaming APP in the next few years.	Zeithaml et al. (1996)

5. The Expected Contribution

In the popularity of mobile devices, mobile applications are seen as a new business opportunity for service providers that include the music streaming service. Rapid advances in wireless network technology significantly enhance the usability of mobile applications that need to access the data from Internet. The trend and advancement of wireless technology allows mobile music streaming applications can launch. And almost all mobile music streaming applications need to pay a monthly fee. This means that music streaming service providers can increase profitability if they can improve the mobile applications satisfaction and loyalty. Because the satisfaction and loyalty are important indicators to measure the repurchase intention of customers. Therefore, success of music streaming APP depends on whether the values or other factors of APP can affect consumer satisfaction and loyalty. And this study provided system quality, information quality and perceived the price to explore whether those factors can influence the hedonic value and utilitarian value. Thereby affecting the loyalty and satisfaction.

Although these factors are only basic measurable variables for a software or system. Finally, we expect our result of this study can help music streaming service providers to understand which values and factors should be focus on. Further, it can contribute to the service providers to improve their services application of mobile.

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