

Gender, Age, and Education: Do They Really Moderate Online Music Acceptance?

Norazah Mohd Suki

Labuan School of International Business & Finance, Universiti Malaysia, Sabah, Malaysia

Abstract

The objective of this paper is to investigate whether gender, age, and education really moderate online music acceptance of early adopters. An empirical survey was used to test the hypotheses. Data were collected from a total of 200 questionnaires distributed to early adopters of online music and were analysed using Structural Equation Modeling (SEM) via the Analysis of Moment Structure (AMOS 16) computer program. Results enumerates that younger people (younger than 25 years), male and higher educated were more strongly affected by Perceived Playfulness and Perceived Ease of Use towards online music. This study helps practitioners to extend online music market with greater understanding about early adopters' willingness to involve in online music purchase. The paper rounds off with conclusions and an agenda for future research in this area.

Keywords: Adopter, Internet, Intention, SEM

Introduction

The advent of powerful, widely, accessible and financially viable personal computers with network connections on the World Wide Web has lead to exciting possibilities for creating online music. In 2009, more than a quarter of the recorded music industry's global revenues (27%) came from digital channels (IFPI, 2010). In the US, the world's largest music market, online and mobile revenues in 2010 account for around 40 per cent of music sales (IFPI, 2010). Consumer choice has been transformed as companies have licensed more than 11 million tracks to around 400 legal music services worldwide. In 2010, iTunes is the biggest music retailer in the US, accounting for 28 per cent of the overall music market, followed by Walmart, Best Buy and Amazon (NPD Group, 2010). Fans can access and pay for music in diverse ways – from buying tracks or albums from download stores, and using subscription services, to using music services that are

bundled with devices, buying mobile apps for music, and listening to music through streaming services for free.

International Federation of the Phonographic Industry (IFPI) Digital Music Report 2010 stated that in Asia, around a quarter of the music business is now composed of digital revenues, set against a backdrop of sharply falling physical sales (IFPI, 2010). Digital sales in China, Indonesia, South Korea and Thailand now account for more than half of all music sales. South Korea has seen the benefits of a stronger copyright environment and there has been strong growth in MP3 subscription services. Japan, the biggest market in the region, was hit by mobile piracy and economic downturn, seeing CD sales fall by more than 20 per cent in the first half of 2009, while digital sales were flat.

According to Technology Adoption Life Cycle (Moore, 1991), the early adopters consist of technology enthusiasts and visionaries. The

enthusiast refers to whom feels a great interest in brand-new technologies and hopes to take the lead in obtaining them, and the visionaries refers to whom have inclinations of easily visualizing, understanding and accepting interests of new technologies and whom tend to buy the products in order to realize their dreams. Norazah, Mohd Ismail, & Thyagarajan (2007) found that the support and encouragement by friends to purchase the products through the Internet is the most important attribute in discriminating among five categories of online shoppers (Innovators, Early Adopters, Early Majority, Late Majority, and Laggards).

The main reasons for adopters using the online stores were the lower prices compared to traditional stores, the easement of online buying procedures and the wide variety of available products. Computer hardware/software and travel tickets were the most commonly purchased categories of products, followed by consumer electronics, CDs/DVDs and books (Saprikis, Chouliara, & Vlachopoulou, 2010). Moreover, who buys online and why, are crucial questions for e-commerce managers and consumer researchers if online sales are to continue to grow through increased purchases by current buyers and by converting those who have not yet purchased online (Norazah et al., 2007). Hence, the objective of this paper is to investigate whether gender, age, and education really moderate online music acceptance of early adopters.

This paper is structured as follows: Section 2 presents the model employed in this study, focusing on the rationale of the constructs used and deriving testable hypotheses. Section 3 describes the research methodology. The last section presents the results and discussions sections. The paper rounds off with conclusions and an agenda for future research in this area.

Literature Review

This study uses the Technology Acceptance Model (TAM) and value-intention framework

as the guiding principles. TAM, proposed by Davis (1989), is an information systems theory that models how users come to accept and use a technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it. In the TAM, perceived usefulness and perceived ease of use are believed to directly affect a person's attitude. The theory also advocates that behavioral intention has a high correlation with actual use. Dodds and Monroe (1985) developed the value-intention framework, which assumes that the individual willingness to perform a certain behavior is directly influenced by perceived value of behavior consequences. The framework proposed an overview of the relationships among the concepts of perceived sacrifice, quality, and value.

Purchase Intention and Perceived Value

Woodruff (1997) defined value as the trade-off between benefit, i.e. the received component, and sacrifices, i.e. the given component. However, the value is individualistic and personal. It can be considered from various aspects, and such value is evaluated as high or low depending on individual subjective assessment. Zeithaml (1988) defined perceived value as the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given. Customer-perceived value of downloadable music, in terms of expected value for money, was found to be quite low. Value could, however, be increased by improving the most important benefits. In addition to fundamental functions, such as ease of use and search, a large music catalogue, and good sound quality, flexibility in use is essential. This involves ensuring transferability, compatibility, possibility to duplicate files, and opportunity to sample. The high level of desired flexibility suggests that digital rights management (DRM) restrictions decrease value by making it difficult for consumers to use the product freely. Furthermore, Perceived Value could be enhanced by

decreasing privacy risk, such as concerns about paying with credit card online, and, most importantly, lowering prices. Consumers, on average, thought that a downloadable song should cost 5–6 SEK, i.e. about half of the current price. However, providing better value in terms of the proposed benefits, combined with lower risk, would improve consumers' willingness to pay (Maria, 2007).

Perceived Benefit

Individuals assess value based on the net gain of utility between what benefits are received and what sacrifices are incurred by performing the behavior. Perceived Quality can be defined as consumer assessment regarding the global excellence or superiority of a product (Holbrook, 1996). Perceived Quality can be inferred as intrinsic and extrinsic cues. Intrinsic cues involve the physical composition of products such as colour, flavour, and texture. Meanwhile, extrinsic cues are product-related but not part of the physical product itself, such as brand, advertising, and store image (Teas & Agarwal, 2000). In the context of online music, the matter that needs to be understood is the utility of consumers when listening to online music rather than physical components or product-related attributes. Consequently, this study considers that Perceived Benefit substitutes for quality to measure the gains from online consumer's view. Consistent with previous literature on consumer behaviors, the research model comprises two benefit dimensions, including functional and recreational benefits (Childers, Carr, Peck, & Carson, 2001), for predicting the benefits perceived by online consumers. In the online music setting, functional benefit refers to the Perceived Usefulness construct, while recreational benefit refers to the Perceived Playfulness construct.

Perceived Usefulness

This study defines Perceived Usefulness as the degree to which the consumer believes

that listening to music online would fulfill the certain purpose. Although online music web sites aim to provide people with an entertaining experience, they also provide functional benefits to them. For example, online music web sites provide more diversiform music works and quicker search service to online users than traditional music stores do. In fact, effectively accessing music and relevant information has become one of the key benefits sought by online music consumers. Perceived Usefulness was found to have positively influenced the Behavioural Intention to use a computer system (Fagan, Wooldridge, & Neill, 2008; Guriting & Ndubisi, 2006; Ha & Stoel, 2009; Hsu, Wang, & Chiu, 2009; Huang, 2008; Norazah, Ramayah, & Norbayah, 2008; Norazah, Ramayah, & Michelle, 2010; Ruiz-Mafe', Sanz-Blas, Aldas-Manzano, 2009; Seyal & Rahman, 2007; Tong, 2009). Hence, this study believes that Perceived Value will increase with Perceived Usefulness of online music.

Perceived Playfulness

Perceived Enjoyment (a dimension of Perceived Playfulness) was found to be positively influenced by Behavioural Intention to use a computer system (Davis, Bagozzi, & Warshaw, 1992; Lee, Cheung & Chen, 2007; Norazah, Ramayah, & Michelle, 2010; Teo, Lim & Lai, 1999). Perceived Playfulness is a significant predictor of Perceived Value of online music. This finding is consistent with the previous hedonic-oriented IT studies (Hsu & Lu, 2004; Van der Heijden, 2004). Hedonic motives focus on an element of fun, entertainment and the satisfaction derived from the experience (Childers et al., 2001; Sherry, 1990). Arnold and Reynolds (2003) studied the "entertainment" aspect of shopping and identified six broad categories of hedonic shopping: adventure shopping (i.e. shopping for stimulation and the feeling of "being in another world"), social shopping (i.e. gaining pleasure from visiting with others), gratification shopping (i.e. , shopping as a treat or way to improve a mood), idea shopping (i.e. keeping up with current

trend/new products), role shopping (i.e. happiness from buying for others), and value shopping (i.e. pleasure from seeking and finding a bargain). Perceived Playfulness is defined as the degree to which the consumer believes that enjoyment could be derived when listening to online music. Consequently, this study believes that Perceived Value will increase with Perceived Playfulness.

Perceived Sacrifice

Perceived Sacrifice is defined as individual feeling regarding giving something up to get something that they intend. Price is frequently used as the key measure representing what consumers have to pay money to obtain a product. Researchers have reached a consensus that monetary costs should be used to measure Perceived Price encoded by consumers instead of using actual product prices (Monroe, 1973). Tam (2004) showed that the more monetary cost consumers perceived they have to pay in acquiring products, the lower value they have perceived. When making decisions with regard to online music purchase, online consumers certainly consider both monetary and non-monetary costs. Perceived Ease of Use captures the non-monetary cost and the associated instrumentality.

Perceived Price

Economically rational shoppers generally see price as an important financial cost component (Zeithaml, 1988). Previous studies found that price increases, perceptions of value would decline (Kwon & Schumann, 2001). Dodds (1999) pointed out that if a price is unacceptable, consumers will then assess the product with little or without net value. Indeed, seeking the best price is a key motivation of online consumers (Swatman Krueger, & Van der Beek, 2006). Price significantly influences online music purchase decisions (Chu & Lu, 2007). High price is the key inhibitor of purchase willingness. This study defines Perceived Price as the degree to which the consumer

believes that he/she must pay in money to obtain online music.

Perceived Ease of Use

Online shopping makes it easy for adopters to find real bargains or compare shopping across different websites or within a particular website as well (Saprikis et al., 2010). Atkinson and Kydd (1997) found significant effects of Ease of Use on the Internet usage for entertainment. Van der Heijden (2004) found that Perceived Ease of Use is a significant predictor of adoption intention for hedonic-oriented IT. Perceived Ease of Use was found to have positively influenced the Behavioural Intention to use a system (Fagan et al., 2008; Guriting & Ndubisi, 2006; Hsu et al., 2009; Huang, 2008; Ramayah, Chin, Norazah, & Amlus, 2005). However, it is also found in other research that Perceived Ease of Use is found to have not directly influenced the Behavioural Intention to use a system (Ruiz-Mafe' et al., 2009). Generally, when a system is found to be easy to use, users will have the intention to use the system. This study defines Perceived Ease of Use as the degree to which the consumer believes that listening to online music is effortless. Accordingly, this study believes that if online consumers perceive that they can reduce effort, namely reduce Perceived Sacrifice, an increase in value can then be achieved.

Gender, Age, and Education as Moderations

Demographics (gender, age, education) are key moderators of important relationships in the online shopping environment (Burke, 2002; Monsuwé, Dellaert, & de Ruyter, 2004; Venkatesh, Morris, Davis, & Davis, 2003). Gender differences can emanate from psychological differences (see Kim, Lehto & Morrison, 2007; Schumacher & Morahan-Martin, 2001; Zhang, Prybutok & Strutton, 2007) or men having earlier and more exposure to certain types of technologies (see Li & Kirkup, 2007; Yang & Lester, 2005). Males are assumed to hold more positive attitudes and be less anxious about

technology innovations (Francis, 1994; Gilroy & Desai, 1986; Whitely, 1997). In the TAM context, Ong and Lai (2006) found that men perceived more usefulness and ease of use of an e-learning system. Fang and Yen (2006) and Hills and Argyle (2003) found that male gender are more dominant in the usage of Internet when compared to female. Busch (1995) asserted that women usually showed lower confidence and a higher computer anxiety when using a technological device (Ziefle, Kunzer, & Bodendieck, 2004). Further, in the study of email-system utilization, Gefen and Straub (1997) concluded that woman holds a higher value of Perceived Usefulness while men have a higher level of Perceived Ease of Use. Finally, similar sentiment was shared by Venkatesh and Morris (2000) in their study of gender differences towards the perception of Perceived Usefulness and Perceived Ease of Use.

Increased age has been shown to be associated with difficulty in processing information and using websites effectively. Older people are less interested in using new technologies, and for them, it is a hassle to overcome; therefore, they rely stronger on Perceived Ease of Use than younger people (Monswé, Dellaert, & de Ruyter, 2004; Venkatesh et al., 2003). They are more likely to consider how much effort they have to make in adopting a new technology and leverage the risks and benefits more carefully. Young employees showed a higher interest in computers compared to older employees when a new technology is being deployed in an organization (Comber, Colley, Hargreaves, & Dorn, 1997). Younger people have been assumed to place more importance on extrinsic rewards of a technology use, such as usefulness. Perceived Usefulness has a stronger effect on technology use for younger people (Arning & Ziefle, 2007; Venkatesh et al., 2003). Pijpers, Bemelmans, Heemstra, and van Montfort (2001) also indicated that age is found to predict Perceived Usefulness and Perceived Ease of Use.

Higher educated customers are more comfortable using nonstore channels, and may rely less strongly on Perceived Ease of Use, but more on Perceived Usefulness as they have experienced the benefits of shopping online (Venkatesh et al., 2003). Igarria and Parsuraman (1989) found a negative relationship between education level and computer anxiety. Bower and Hilgard (1981) further explained that a person might show greater ability to learn in a novel situation or when handling a sophisticated system, if he or she has a higher education background. Hill, Loch, Straub and El-Sheshai (1998) concluded that class and education impact the success of IT adoption within the Arab individuals. Pijpers et al. (2001) found that the education level predicts both Perceived Usefulness and Perceived Ease of Use.

In view of that, the study hypothesizes that:

H1a. Perceived Value has a greater influence on Purchase Intentions towards online music among males than among females.

H1b. Perceived Value has a greater influence on Purchase Intentions towards online music among younger than among older people.

H1c. Perceived Value has a greater influence on Purchase Intentions towards online music among higher educated than among lower educated persons.

H2a. Perceived Usefulness has a greater influence on Purchase Intentions towards online music among males than among females.

H2b. Perceived Usefulness has a greater influence on Purchase Intentions towards online music among younger than among older people.

H2c. Perceived Usefulness has a greater influence on Purchase Intentions towards online music among higher educated than among lower educated persons.

H3a. Perceived Playfulness has a greater influence on Purchase Intentions towards online music among males than among females.

H3b. Perceived Playfulness has a greater influence on Purchase Intentions towards online music among younger than among older people.

H3c. Perceived Playfulness has a greater influence on Purchase Intentions towards online music among higher educated than among lower educated persons.

H4a. Perceived Price has a greater influence on Purchase Intentions towards online music among males than among females.

H4b. Perceived Price has a greater influence on Purchase Intentions towards online music among younger than among older people.

H4c. Perceived Price has a greater influence on Purchase Intentions towards online music among higher educated than among lower educated persons.

among higher educated than among lower educated persons.

H5a. Perceived Ease of Use has a greater influence on Purchase Intentions towards online music among males than among females.

H5b. Perceived Ease of Use has a greater influence on Purchase Intentions towards online music among younger than among older people.

H5c. Perceived Ease of Use has a greater influence on Purchase Intentions towards online music among higher educated than among lower educated persons.

The construct relationships of these hypotheses are illustrated in Figure 1 which identifies factors that influence purchase intention of early adopters in an online music setting.

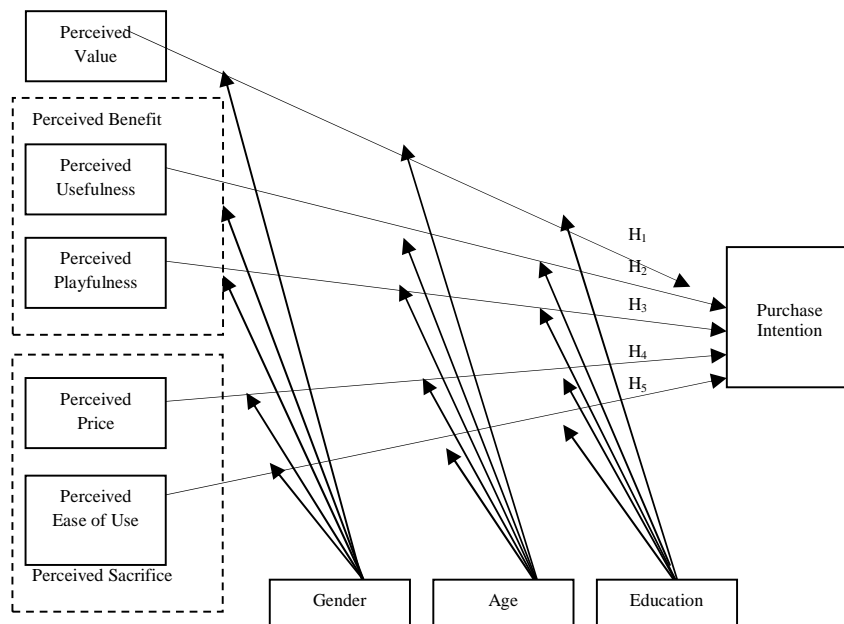


Fig 1. Theoretical Framework

Methodology

Questionnaires were completely responded by 200 staffs and students in one of the private higher learning institution in Selangor, Malaysia with 80% response rate following simple random sampling technique; a technique that each element in the population has a known and equal probability of selection. The collected data were analysed using Structural Equation Modeling (SEM) via the Analysis of Moment Structure (AMOS 16) computer program, a second-generation multivariate technique. It is used in confirmatory modeling to evaluate whether the data collected fit the proposed theoretical model. The variables used (see Appendix 1) were adapted as follows: Perceived Usefulness and Perceived Ease of Use (Davis, 1989; Van der Heijden 2004), Perceived Value and Purchase Intention (Dodds, Monroe, & Grewal, 1991), Perceived Playfulness (Van der Heijden, 2004), and Perceived Price (Sweeney, Soutar, & Johnson,

1997; Tam, 2004). Respondents were asked to express their agreement/disagreement with a statement on a five-point Likert-type scale with anchors ranging from "1=strongly disagree" to "5=strongly agree".

Data Analysis

Personal Characteristics of Respondents

A personal profile of the respondents, summarized in Table 1 indicates that there were more female than male: 60% versus 40%, respectively. The results also show that 80% of the respondents were Malay. Most respondents were 26-31 years of age. More than 70% indicated hold Bachelor, Master and PhD Degree level of educational background. 62% respondent is single, 47% are students and 38% are professionals. The monthly income or allowances indicated by the respondents was more than Malaysian Ringgit 2001 for over 80% of the respondents.

Table 1: Demographic Characteristics of Respondents

	Frequency	%
Gender		
Male	120	60
Female	80	40
Race		
Malay	80	40
Chinese	60	30
Indian	48	24
Others	12	6
Age		
Less than 20 years	34	17
21-25	66	33
26-31	80	40
31 years above	20	10
Educational level		
SPM	5	2.5
STPM/Diploma	40	20
Bachelor Degree	120	60
Master Degree/PhD	35	17.5
Marital Status		
Single	124	62
Married	76	38
Occupation		
Student	94	47
Professional	76	38
Clerical/technical	25	13
Others	5	2
Salary/Allowances		
Less than RM 1000	8	4
RM 1001- RM 2000	30	15
RM 2001-RM 3001	79	40
More than RM 3001	83	41

Structural Equation Modelling

Researchers developed the Structural Equation Modelling (SEM) to evaluate how well a proposed conceptual model containing observed multiple indicators and hypothetical constructs explains or fits the collected data (Yoon & Uysal, 2005). This

study utilized SEM to empirically test the relationships between constructs using the AMOS 5 software. AMOS is more confirmatory in nature and it provides various overall goodness-of-fit indices to assess model fit for convergent validity (Byrne, 2001). Convergent and discriminate validity were assessed with several tests.

Reliability and Validity

Convergent validity was assessed with three tests recommended by Anderson and Gerbing (1988). Table 2 lists the standardized loadings, composite reliabilities and average variance extracted estimates. Standardized factor loadings are indicative of the degree of association between scale items

and a latent variable. As depicted in Table 2, the loadings were highly significant and surpass the cut off point of 0.50. Composite reliabilities, similar to Cronbach’s alpha, for all variables range from 0.860 to 0.939. Thus, all factors are reliable as it values exceeding the minimum limit of 0.70 (Hair, Black, Babin, Anderson, & Tatham, 2010).

Table 2: Reliability and Item Loadings

Constructs	Items	Standardized Loadings	CR	AVE
Perceived Usefulness (PU)	PU1	0.55	0.898	0.718
	PU2	0.741		
	PU3	0.802		
	PU4	0.625		
Perceived Playfulness (PL)	PL1	0.767	0.939	0.747
	PL2	0.935		
	PL3	0.811		
	PL4	0.771		
Perceived Price (PR)	PR1	0.825	0.919	0.673
	PR2	0.879		
	PR3	0.74		
	PR4	0.838		
Perceived Ease of Use (PE)	PE1	0.768	0.903	0.729
	PE2	0.788		
	PE3	0.782		
	PE4	0.707		
Perceived Value (PV)	PV1	0.786	0.860	0.762
	PV2	0.818		
	PV3	0.481		
Purchase Intention (PI)	PI1	0.766	0.863	0.694
	PI2	0.912		
	PI3	0.731		

Note: CR = Composite Reliability, AVE = Average Variance Extracted

Average Variance Extracted (AVE) estimates are measures of the variation explained by the latent variable to random measurement error (Netemeyer, Johnston, & Burton, 1990) and ranged from 0.673 to 0.762 (see Table 2), all exceeding the recommended lower limit of 0.50 (Fornell & Larcker, 1981). All tests supported convergent validity of the scales. Hence, all factors in the measurement

model had adequate reliability and convergent validity.

To examine discriminate validity, we compared the shared variances between factors with the AVE of the individual factors. Table 3 shows the inter-construct correlations off the diagonal of the matrix. This showed that the shared variance

between factors were lower than the AVE of the individual factors, confirming discriminate validity (Fornell & Larcker,

1981). In summary, the measurement model demonstrated discriminate validity.

Table 3: Correlation Matrix and Roots of the AVEs (Shown as Diagonal Elements)

	Mean	Standard Deviation	PU	PL	PR	PE	PV	PI
PU	2.141	.569	0.847					
PL	2.289	.784	0.303**	0.864				
PR	2.878	.883	0.091	0.141	0.820			
PE	2.430	.691	0.330**	0.329**	-0.111	0.854		
PV	2.604	.577	0.334**	0.384**	0.028	0.486**	0.873	
PI	2.829	.815	0.237*	0.350**	0.061	0.275**	0.395**	0.833

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

* Correlation is significant at the 0.05 level (2-tailed)

Model Fit

Bagozzi and Yi (1988) suggested a similar set of fit indices used to examine the structural model. The Comparative Fit Index (CFI), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Normed Fit Index (NFI), and Root Mean Square Error of Approximation (RMSEA) were used to judge the model fit.

CFI: The Comparative Fit Index is a recommended index of overall fitness (Gerbing & Anderson, 1993). This index compares a proposed model with the null model assuming that there are no relationships between the measures. CFI values close to 1 are generally accepted as being indications of well-fitting models (Raykov & Marcoulides, 2000). A CFI value greater than 0.90, indicates an acceptable fit to the data (Bentler, 1992).

GFI: The Goodness of Fit Index measures the fitness of a model compared to another model. The index tells what proportion of the variance in the sample variance-covariance

matrix is accounted for by the model. This should exceed 0.90 as recommended by Hair et al. (2010) for a good model.

AGFI: Adjusted GFI is an alternate GFI index in which the value of the index is adjusted for the number of parameters in the model. Few numbers of parameters in the model are relative to the number of data points. A GFI value greater than 0.80, indicates an acceptable fit to the data (Gefen, Krahana, & Straub, 2003).

NFI: The Normed Fit Index measures the proportion by which a model is improved in terms of fit compared to the base model (Hair et al., 2010). The index is simply the difference between the two models' chi-squares divided by the chi-square for the independence model. Values of 0.90 or higher indicate good fit. NFI values of 0.90 or greater indicate an adequate model fit (Bentler, 1992).

RMSEA: The RMSEA provides information in terms of discrepancy per degree of freedom for a model. The index used to assess the

residuals. It adjusts the parsimony in the model and is relatively insensitive to sample size. According to Hu and Bentler (1999), RMSEA must be equal to or less than 0.08 for an adequate model fit.

To summarize, goodness-of-fit indices for this model were Chi-square/df = 1.257, CFI = 0.951, GFI = 0.924, AGFI = 0.812, NFI

= 0.903, and RMSEA = 0.052 (see Table 4). All of the model-fit indices exceed the respective common acceptance levels suggested by previous research, demonstrating that the model exhibited a good fit with the data collected. Thus, we could proceed to examine the path coefficients of the structural model.

Table 4: Goodness-of-fit Indices for Structural Model

Fit Indices	Benchmark	Value
<i>Absolute fit measures</i>		
CMIN (χ^2)		248.882
DF		198
CMIN (χ^2)/DF	< 3	1.257
GFI (Goodness of Fit Index)	> 0.9	0.924
RMSEA (Root Mean Square Error of Approximation)	< 0.10	0.052
<i>Incremental fit measures</i>		
AGFI (Adjusted Goodness of Fit Index)	> 0.80	0.812
NFI (Normed Fit Index)	> 0.90	0.903
CFI (Comparative Fit Index)	> 0.90	0.951
IFI (Incremental Fit Index)	> 0.90	0.952
RFI (Relative Fit Index)	> 0.90	0.932
<i>Parsimony fit measures</i>		
PCFI (Parsimony Comparative of Fit Index)	> 0.50	0.815
PNFI (Parsimony Normed Fit Index)	> 0.50	0.689

Hypotheses Testing

The test of structural model was performed using SEM in order to examine the hypothesized conceptual framework by performing a simultaneous test. The test of the structural model includes: (a) estimating the path coefficients, which indicate the strengths of the relationships between the dependent variables and independent variables, and (b) the R-square value, which represents the amount of variance explained by the independent variables. The path coefficients in the SEM model represent standardized regression coefficients.

The structural model reflecting the assumed linear, causal relationships among the

constructs was tested with the data collected from the validated measures. The square multiple correlation for the structural equations index connotes that the predictors Perceived Usefulness, Perceived Playfulness, Perceived Price and Perceived Ease of Use together have explained 45% of the variance in Perceived Value. Next, Perceived Value has explained 23% of the variance in Purchase Intention in online music. In other words, there are other additional variables that are important in explaining Perceived Value and Purchase Intention in online music that have not been considered in this study.

Multi-group structural equation within AMOS was used to testing for differences in the strengths of the structural relationships

(Arbuckle & Wothke, 1999; Byrne, 2001). In other words, to assess the moderating variable effects on the structural model (Byrne, 2001). In comparison to other methods, multiple group analysis is considered to be a good technique to test for interaction effects (Dabholkar & Bagozzi, 2002). For each of the three moderation tests, the dataset was split into two subgroups. Then, after establishing partial metric invariance, the increase in the Chi-square due to the constraining of a structural relationship was tested with one degree of freedom; a significant worsening of the fit indicates that the structural relationships are different between the two subgroups.

Demographics (gender, age, and education) clearly impact the importance of the TAM predictors. In contrast to findings of Venkatesh et al. (2003), this study finds that women rely stronger on Perceived Value ($\beta_{1a} = 0.086, p < .05$) than men on their purchase intentions towards online music. Men appear to be more strongly affected by Perceived Playfulness ($\beta_{4a} = 0.466, p < .05$), Perceived Ease of Use ($\beta_{5a} = 0.660, p < .05$), and Perceived Price ($\beta_{3a} = 0.362, p < .10$). Men tend not to be influenced by the Perceived Usefulness on their purchase intentions towards online music. This finding can be explained as women visit the comparison website more seriously for values, and really consider the actual purchase of products, whereas men appear to use the website more as a tool, and as a means to get an indication of the price offer. In this respect, men are more likely to be influenced by playfulness.

Age also impacted the influence of Perceived Usefulness and Perceived Playfulness on purchase intentions towards online music. Younger people (younger than 25 years) were more strongly affected by Perceived Usefulness ($\beta_{2b} = 0.367, p < .05$), Perceived Playfulness ($\beta_{4b} = 0.273, p < .05$), Perceived Ease of Use ($\beta_{5b} = 0.611, p < .05$), and Perceived Price ($\beta_{3b} = 0.254, p < .10$) in comparison with older people (25 years and older) with regards to purchase intentions towards online music. Younger people rely

stronger on the process variable enjoyment; for them an increase in the level of enjoyment strongly increases future purchase intentions through the website. What's more, younger people rely more on the outcomes of the process (saving time and effort, getting more value for money).

Education was split into two subgroups (Primary/Secondary/College versus Graduate). Consistent with prior research (Venkatesh et al., 2003), higher educated people tend to rely stronger on Perceived Ease of Use ($\beta_{5c} = 0.714, p < .05$), Perceived Playfulness ($\beta_{4c} = 0.474, p < .05$) and Perceived Value ($\beta_{1c} = 0.419, p < .05$) in terms of purchase intentions towards online music. Lower educated persons are not affected by Perceived Playfulness ($p > .05$) but rely heavily on Perceived Usefulness ($\beta_{2c} = 0.372, p < .05$).

Conclusion and Recommendations

Pithily, the result is an evidence for younger people (younger than 25 years), male and higher educated that they were more strongly affected by Perceived Playfulness and Perceived Ease of Use towards online music. Adopters perceived the positive impact of online shopping to a higher degree compared to non-adopters in terms of the Internet that provides them with the ability to shop abroad and purchase any time of the day (Saprikis et al., 2010). Perceived value of downloadable music, in terms of expected value for money, that is relative to other outlets for disposable income, should be stressed by the marketers. Giving people mechanisms to audition new music with ease of use and search, a large music catalogue, and good sound quality, flexibility in use is essential and later will let them find the music that they will want to play enough to warrant purchasing it. Online music practitioners should extend their knowledge and insight about this field to create an innovative, brand new and interesting attractiveness to attract to purchase online music which is more easier to purchase without going to store to procure it. If

practitioners cannot launch the early market smoothly, it is very difficult to make a profit to support the financial issue, and it may even withdraw from the market. Thus, music online practitioners should be very up to date with environmental and have a creative idea how to attract customers.

The investigation of the moderating influence of consumer characteristics yields important insights. From a theoretical perspective, insights into the influence of customer traits may help researchers in explaining inconsistent findings. This study can help online music practitioners to develop better marketing strategies and to create a successful business model. This study also helps practitioners to extend online music market with greater understanding about early adopters' willingness to get involved in online music purchase. In addition, it can help purchaser to be more keen to buying music online with an attractive market strategy. In order to ensure that this research will more accurate and reliable, future research should expand or increase the involvement of respondents. The more geographic area of research included, the more representative the result will be. Besides that, the research should include variables of other factors more than the variables that the researchers have done. This is because the variables cannot explain the whole factor influence of purchase intention of early adopter towards online music.

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Appendix 1: Measurement of Constructs

Perceived Usefulness

- PU1 I can better decide which music I want to listen to than in the past
- PU2 I can acquire music information more easily through the online music web sites
- PU3 The online music web sites provide a variety of music
- PU4 Overall, I find online music web sites is useful

Perceived Playfulness

- PL1 I enjoy the course of listening to online music
- PL2 Listening to online music makes me feel pleasant
- PL3 When listening to online music, I feel exciting
- PL4 Overall, I found online music is interesting

Perceived Price

- PR1 The price for online music is a lot of money to spend
- PR2 The price for online music is much more than I expected
- PR3 What I would expect to pay for online music is high
- PR4 In general, I find listening online music would cost me a lot of money

Perceived Ease of Use

- PE1 My interaction with online music web site is clear and understands
- PE2 Learning how to listen to online music would be easy for me
- PE3 It would be easy for me to become skillful at listening to online music
- PE4 In general, I found online music web site is easy to use

Perceived Value

- PV1 The online music is valuable for me
- PV2 I would consider that online music to be a good value
- PV3 The online music service is considered to be a good buy

Purchase Intention

- PI1 The likelihood that I would pay for online music is high
- PI2 My willingness to buy online music is very high
- PI3 In near future, I would consider purchasing online music