Predicting Consumers’ Acceptance of Mobile Marketing in Malaysia: An empirical analysis

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ABSTRACT

This study investigates the influencing factors on mobile marketing adoption among young consumers in Malaysia. This study utilizes the theory of planned behaviour (TPB) in developing the framework towards predicting intention to use mobile marketing. This paper models the factors relationship such as attitude, subjective norm, and perceived behavioural control and integrating perceived risk as a new variable towards determining intention to use. A total of 334 usable responses were analyzed with valid response rate at 57.49 percent. The results of the study confirm that attitudes, subjective norm, perceived behavioural control, and perceived risk were statistically significant in influencing intention to use mobile marketing services. Our study offers some important implications for researchers and practitioners in mobile marketing services.

Keywords: Acceptance, attitude, subjective norm, behavioural intention.

1.0 INTRODUCTION

Mobile technology has grown increasingly more common in daily life. In terms of subscribers based, the mobile phone user has been recorded extremely as an increasing trend and it is predicted to rise more than 5 billion by the end of 2013. This forceful growth is expected to be contributed by Asia Pacific Region. Due to growing mobility of today's modern society, the number of mobile phone accounts has penetratingly increased in recent years and has led significant growth in the mobile telephony industry (Shierz, Schilke and Wirtz, 2010). Particularly in Malaysia, mobile phone has been considered as a vital communication tool and essential component in Malaysian society. Additionally, Malaysians are increasingly using more mobile phone rather than fixed line in order to keep in touch with their family, friends, colleagues and business associates (Sheeren & Rozumah, 2009). Statistical evidence provided by Malaysian communications and Multimedia Commission (MCMC) has shown that there are more than 30 million subscribers in the country, with the penetration rate for cellular phone has surpassed more than 100 percents. This high penetration rate is one of the indicators of potential growth of mobile marketing in Malaysia.

Various definitions have been used by researchers in studying mobile marketing and generally, there is no conceptual agreement on the definition of mobile marketing among the researchers. For example, Bauer et al., (2005) define mobile marketing as using the mobile
phone as a mean of conveying commercial content to customers. Leppaniemi et al., (2006) mention that mobile marketing is the use of the mobile medium as a mean of marketing communications. Sultan et al., (2009) have used the term mobile marketing by referring to any marketing activities like receiving marketing or promotional offers or receiving information on where to buy certain products or services via mobile phones. Following Sultan et al., (2009) in this present study, consumer acceptance of mobile marketing services is conceptualized as willingness to engage in activities such as receiving marketing or promotional offers. The conceptual definition will be discussed in section 2.

Based on the 2009 industry performance report by Malaysian Communications and Multimedia Commission (MCMC), global mobile data revenue recorded above USD 200 billion which is about 25% of total wireless revenue. Moreover, global non-voice revenue is expected to raise more with projected revenue amounting to USD 412 billion by 2014. The importance of this industry in Malaysia can be illustrated by the contribution of communications and multimedia (C&M) sector with a market capitalization of RM103.4 billion or 10.4% to Bursa Malaysia market capitalization in year 2009. In addition, the report has established that the telecommunication companies contributed RM35.5 billion (83%) to the overall C&M industry revenue with mobile services segment contributed 64% (RM26.2 billion) to the overall C&M industry revenue. The importance of this industry is also demonstrated by the C&M industry revenue which corresponds to 6.2% and 8.2% to the country’s GDP and GNP in 2009.

Despite this encouraging development, the fact is shown differently, and the situation is often unsatisfactory which is the acceptance of mobile marketing services is not so encouraging. Moreover, based on hand phone user survey report for 2009 by MCMC, the acceptance of mobile marketing is still uncertain based on a few mobile marketing services. For example, the survey indicates that about 61.8% of the consumers are still not aware about mobile TV. In terms of mobile internet, only 16.3% has accessed the internet through mobile phone which indicates low rate of acceptance. The unsynchronized development between mobile phone penetration and the mobile marketing usage leads to the question of why consumers have not adopted mobile marketing services and what factors
that influence their acceptance of mobile marketing services. Even though the penetration rate of mobile phones has tremendously increased but the user acceptance of these mobile marketing services are still remain uncertain. Previous studies have provided a reasonably limited understanding of the main factors influence consumer acceptance of mobile marketing. The study of overall acceptance of mobile marketing is significant due to by understanding the key factors of acceptance, it may offers the potential to obtain managerial implications regarding how to market mobile marketing services effectively to the right target market and consequently leading to better consumer acceptance. Furthermore, there is a strong need for empirical research as articulated by practitioners and academicians in mobile marketing. Additionally, Sultan et al., (2009) reveal that there is still little empirical research on factors that influence mobile marketing acceptance among consumers across global markets. Recently, Varnali and Toker (2010) verify that even though there is significant growth in the field of mobile marketing, but academic research in this field is still in its infancy stage and offers large research opportunities.

Therefore, it is important to better understand the key drivers that lead consumers in adopting mobile marketing services. Since most of the mobile phone operators are focusing on mobile marketing, using existing models for predicting their attitude towards mobile marketing acceptance may be still inadequate. Given the high practical relevance and lack of prior empirical evidence, the current research aims to develop and test an extension model of factors determining consumers’ acceptance of mobile marketing services. The overall acceptance of mobile marketing is important due to the acceptance of consumer that will determine the successful of marketing product or services (Bauer et al., 2005). Hence, in this paper we proposed the model for assessing the acceptance of mobile marketing by incorporating perceived risk by using theory of planned behaviour (TPB) as underpinning theory. The aim of this paper is the exploration of the TPB in explaining the consumers’ intention to use mobile marketing specifically among young consumers. Since the mobile revolution is changing the way people live and work (Wong and Hiew, 2005), this paper also may serve as a guideline for preparing future life and working culture in an organization especially among young consumers.
The outline of this paper is as follows: First, we define the key terms utilized in this study and detail out the theoretical background (TPB) which serve as basis for our research model. Second, we review the previous studies and then established the research hypotheses. Third, in the methodology section, we demonstrate the survey procedure, discuss the validity and reliability of the data. We present our significant finding and discussed in the next section. Then, a discussion of the implication of the research, limitation of the study and future research suggestion is presented before we end up the paper with the summary of the key findings.

2.0 CONCEPTUAL FOUNDATION

2.1 Terminology

The use of the term mobile marketing in this study refers to any form of marketing activities, advertising or sales promotion activity aimed at consumers and is conducted over a mobile channel. It also refers to all kinds of services that can be used by users. There are a few types of mobile marketing tools such as mobile banking, mobile payment, mobile internet, mobile coupon, etc. Mobile marketing services acceptance, as measured by behavioural intention to use mobile marketing services, is the key outcome variable in this study. Specifically in this present study, this construct relates to respondents’ receptiveness and intentions to engage in activities such as receiving product or service information related marketing communications, promotional offers, purchase the product or services such as mobile entertainment (e.g., mobile music, downloaded ring tone, wall paper), involved in mobile banking transaction and etc on their mobile phones. Several studies (e.g. Bauer et al. 2005; Luarn & Lin, 2005; Nysveen et al., 2005; Hong et al., 2008; Hsu et al., 2006; Jayasingh and Eze, 2009) have examined behavioural intention to be used in mobile context such as text messaging, mobile banking, mobile services, mobile data services, mobile text coupons etc. Similar to those studies, this present study includes behavioural intention to use mobile marketing as the main variable outcome.
3.0 LITERATURE REVIEW

3.1 Theoretical Background

TPB (Ajzen, 1985, 1991) is the extension of theory of reasoned action (Fishbein & Ajzen, 1975 and Ajzen and Fishbein’s, 1980). TPB is also one of the theories that broadly used in technology acceptance studies. According to TPB, an individual’s behaviour can be explained by his or her behavioural intention, which is jointly influenced by attitude, subjective norms and perceived behavioural control. Attitude refers to an individual’s positive or negative evaluation about performing a particular behaviour. Subjective norm refers to an individual’s perception of other people’s opinions on whether he or she should perform or not a particular behaviour and perceived behavioural control refers to an individual’s perceptions of the presence or absence of requisite resources, or opportunities necessary for performing a behaviour (Ajzen & Madden, 1986). TPB is applied to several information technologies studies such as computer resource center (Taylor & Todd, 1995a), internet banking (Shih & Fang, 2004), e-commerce (George, 2004, Maruf et al., 2005), instant messaging (Lu et al., 2009), internet tax filling (Ramayah et al., 2009) etc.

3.2 Research Framework and Hypotheses

Based on intention-based models such as TPB view an individual’s behaviour is primarily determined by their behavioural intention, which is in turn, is predicted by three belief structures namely attitude, subjective norm and perceived behavioural control. Moreover, TPB is open to include any variables in the event can provide a significant influence on intention (Ajzen, 1991). Hence, this study proposed to include perceived risk as new variable in predicting the consumers’ intention to use mobile marketing services. In addition, many researchers have ignored the role of risk perceptions (Gefen et al., 2003). There is still very scant research conducted in the area likes risk perception (Mohammad & Razli, 2011). Figure 1 in Appendix illustrates the research framework of this study.

Numerous studies have focused on behavioural intention and defined BI related to their study context. Generally, behavioural intention has been defined as “the strength of one's intention to
perform a specified behaviour” (Fishbein & Ajzen 1975, p. 288). First behavioural intention idea has been found by Fishbein and Ajzen’s (1975) in theory of reasoned action (TRA) which describe that intentions are assumed to capture motivational factors that influence a behaviour and can also be a measure of how much effort someone is willing to exert when performing a behaviour. Additionally, behavioural intention is an individual’s subjective probability of performing specific behavior (Ajzen, 1985; Ajzen & Fishbein, 1980).

Furthermore, adoption intention is more appropriate when the IT artifact is still in the early stages of its diffusion cycle (Hong & Tam, 2008). Additionally, Bhattacherjee (2000) justifies in his study for focusing on behavioural intention due to greatly support the relationship between intention and information system (IS) acceptance in previous studies (e.g., Davis et al., 1989; Mathieson, 1991; Taylor & Todd, 1995a). He also argued that retesting the relationship of intention and behaviour will not serve any purpose beyond validating the obvious. Another study by Lu et al., (2009) concludes that behavioural intention is significantly related to actual used of instant messaging services in China. Based on the above arguments, the use of behavioural intention as the key or final outcome variable in this present study is reasonably appropriate.

**Attitude (ATT) vs. Intention to use**

Attitude towards a behaviour “is a person’s judgment that performs the behaviour is good or bad, that he is in favor of or against performing behaviour” (Ajzen & Fishbein, 1980, p.56). A person's attitude towards a behaviour is determined by salient beliefs about the consequences of that behaviour and the evaluation of the desirability of the consequences (Fishbein & Ajzen, 1975). An individual having more positive attitude towards a behaviour is likely to develop an intention to carry out that behaviour (Ajzen, 1991). In this present study, consumers’ attitude towards using the mobile marketing services refers to individual’s positive or negative evaluation towards intention to use mobile marketing services.

Various studies have confirmed that attitude is the most significant influence on intention to use and have significant direct relationship with behavioural intention (e.g. Bauer et al.2005; Davis et
Mohammad and Razli

al.1989; Hong et al.2008; Hsu et al.2006; Md Nor & Pearson, 2008; Norazah 2011; Nysveen et al.
2005; Rohm & Sultan, 2006; Shih & Fang, 2004; Shin, 2009; Taylor & Todd, 1995a). Taking
consideration of the consistency result from previous studies, therefore the proposed Hypothesis is:

H1 : There is a positive relationship between attitude and intention to use
mobile marketing.

Subjective norm (SN) vs. Intention to use

Subjective norm refers to the perceived pressure from the people who consumers think are
important to them. Subjective norm refers to an individual’s perceptions of other people’s opinions
on whether he or she should perform or not a particular behaviour (Ajzen, 1991). In mobile
marketing context, subjective norm refers to the perceived pressure from the people who consumers
think are important to them. Prior studies have proved that, the influence of subjective norm on
behavioral intention has shown conflicting result. The study by (George, 2004; Hsu et al. 2006; Shih
and Fang, 2004) discloses that subjective norm does not significantly influence behavioural intention.
On the other hand, the study by (Bauer et al. 2005; Jayasingh & Eze, 2009; Lu et al. 2009; Ma'raf et
al. 2005; Md Nor & Pearson, 2008; Pedersen, 2005; Shin et al. 2009; Taylor & Todd, 1995a) has
established that subjective norm has a positive direct influence towards behavioural intention.
Therefore, we proposed the following Hypothesis:

H2 : There is a positive relationship between subjective norm and intention to use mobile
marketing.

Perceived Behavioral Control (PBC) vs Intention to Use

Perceived Behavioural Control relates to the extent in which the person believes that he/she
has controlled over personal or external factors that may facilitate or constrain the behavioural
performance (Ajzen, 1991). Perceived behavioural control describes users’ perception if they have
the necessary resources such as time and money (external factors), capability such as ability and self-
efficacy (internal factors) in successfully performing the behaviour.
Based on the theory of planned behaviour, perceived behavioural control is a determinant factor of behavioural intention (Ajzen, 1991). The person or individual will perform in a certain behaviour if they believe that he/she has enough resources and have her/his confidence in performing the specific behaviour. Specifically, perceived behavioural control is positively related to behavioural intention (see Harrison et al., 1997; Ma'ruf et al. 2005; Md Nor & Pearson, 2008; Lu et al., 2009; Mathieson 1991; Taylor & Todd, 1995a, 1995b; Truong, 2009). In mobile services context, the studies also have verified that perceived behavioural control positively influence behavioural intention (e.g. Hsu et al., 2006; Pedersen, 2005; Shin et al., 2009). Since previous studies have proposed that perceived behavioural control positively influences behavioral intention, the present study come up with third hypothesis:

Hypothesis 3 : Perceived behavioural control positively affects the intention to use mobile marketing services.

Perceived Risk (PR) vs Intention to Use

According to Taylor (1974), choice is the fundamental problem of consumer behaviour. Considering the fact that the result of a choice can only be known in the future, the consumer is enforced to deal with uncertainty, or risk. Perception of risk is one crucial aspect of consumer behaviour due to risk is often perceived to be hurting in that it may create anxiety, in which case it must be dealt with in some manner by the consumer. In previous studies on consumer research, PR was defined as the perceived uncertainty in a purchase situation. In this study, perceived risk refers to the users subjectively perceived the losses or consequences due to uncertainties of use mobile marketing services. Im et al., (2008) declared that perceived risk or uncertainty affects people’s confidence in their decisions. Manzano et al., (2009) disclosed that perceived risk occurs from the uncertainty that customers face when they cannot anticipate the consequences of their purchase decisions. Therefore, if businesses want to reduce consumers’ perceived risk, they need to identify the effects of risk on consumer’s intention to use. Kim and Prabhakar (2002) conclude in their study pertaining the effect of perceived risk on accepting technology like internet banking by suggesting that the more perceived risk one has, the less likely he will accept new technology. We reviewed
previous studies and found that researchers identified there is a negative relationship between perceived risk and purchase intention (Crespot et al., 2009; Kim et al., 2008; Mitchell, 1999; Park & Jun, 2003). Particularly in mobile services context, a number of studies have established the effect of perceived risk and intention (Kleijnen et al. 2004; Lee & Lee, 2007; Wu & Wang, 2005; Chen (2008); Luo, Li, Zhang & Shim (2010). Considering the important of perceived risk on intention to use, the present study therefore hypothesizes:

Hypothesis 4 : Perceived risk negatively affects the intention to use mobile marketing services.

4.0 METHODOLOGY

4.1 Sample and Data Collection

A total of 800 questionnaires were distributed to the students in a few public universities located in the northern region, Malaysia. University students were selected as the respondents for this research because of a few reasons. Firstly, Student represents a key target market due to majority of them having grown up in the technological age (Roach, 2009). Secondly, this particular demographic group is generally more familiar with mobile services and uses them more than the general population (Karjaluoto et al., 2005). Finally, prior research in mobile marketing confirmed that the 18-25 age group is the age group most likely to be familiar with mobile marketing (Jayawardhena et al., 2009).

Of the 800 questionnaires distributed, a total of 581 questionnaires were returned, yielding a response rate of 72.6%. Of these, 247 responses were found to be non usable and 67 responses were identified as outliers. Therefore, a total of 334 responses were usable and used for subsequent analysis, giving a valid response rate of 57.49%.

4.2 Measurement

This study adapted the measures drawn from prior studies that had established their validity and reliability. Minor adjustment was made to tailor the measures with the study context of mobile marketing. The measures of behavioural intention, attitude and subjective norm were adapted from previous studies mainly from Taylor and Todd (1995). To address the elements of perceived
behavioural control, this study utilized items by Shih and Fang (2004). The measure used to measure perceived risk was taken from Chen (2008). All items were measured by respondents indicated their agreement with a set of statements, anchored by a 7-point Likert scale (ranging from “strongly disagree to “strongly agree”).

5.0 RESULTS

Table 1 demonstrates the respondents’ characteristics which made up 28.4% male respondents and majority of respondents are female with 71.6%. This unbalanced outcome is consistent with Ministry of Higher Education (MOHE) Entrant and Enrolment of Students report 2009, the students’ enrolment dominated by female group. Most of the respondents are between the age of 21 to 23 years old which significantly reflect to the age group that familiar with mobile marketing. The ethnicity distribution of the respondents is Malay, 225 respondents representing 67.4%, Chinese representation of 25.1%, Indian representation 6.6% and other races representation of 0.9%. Majority of the respondents are currently under Bachelors’ Degree programme which consist of 276 respondents representing 82.6%, students that currently under diploma programme representation of 14.4% and the small portion of respondents are currently doing Master/PhD which is 3.0%.

5.1 Factor Analysis and reliability

Principal component factor analysis with varimax rotation was carried out to validate the measures whether the respondents perceived the five constructs to be distinct. Factor analysis was conducted by five separate factor analysis on attitude, subjective norm, perceived behavioural control, perceived risk and behavioural intention. As suggested by Hair et al.,(2010) factors with eigenvalue of less than 1.0 would be rejected and factors with eigenvalue of more than 1.0 would be maintained for further analysis (Hair et al.,2010). The criteria used by Igbaria et al., (1995) to identify and interpret factors were: each item should load 0.50 or greater on one factor and 0.35 or lower on the other factor. Table 2 shows that result of the factor analysis. These results confirm that each of this construct is unidimensional and factorially distinct and that all items used to measure a particular
construct loaded on a single factor. KMO measure of sampling adequacy value for the items was ranged from 0.87 to 0.93 indicating that the items were interrelated and they shared common factors. These loadings were greater than 0.35 which is the minimum level required for sample size 250 and above (Hair et al., 2010). Reliability (Cronbach’s Alpha) for this factor is specifying high reliability which is ranged from 0.91 to 0.96. This reliability analysis showed that all factors had alpha values exceed the recommendation value of 0.70 (Nunnally, 1978). The results of this analysis are outlined in Table 2.

5.2 Hypothesis Testing

Multiple regressions were used to investigate the relationship between independent variables and dependent variable as posited in the research hypotheses. Four hypotheses were proposed and all the variables retain after filtering with factor analysis. The coefficient of determination $R^2$ was 56 per cent which indicates that the four factors be able to significantly account for 56 per cent in the consumers’ intention towards using mobile marketing services. As shown in Table 3, all the hypotheses were revealed significant results. The results shows that the relationship between attitude and intention to use is significant ($\beta = .403, p < 0.01$), therefore, H1 is supported. Previous studies reported that the inconsistency finding of the relationship between subjective norm and behavioural intention. The results for the relationship between subjective norm and intention in this study have demonstrated a significant result ($\beta = .110, p < 0.05$), hence H2 is verified. Next, H3 displayed a similar result with H1 which is a significant relationship between perceived behavioural control and intention to use mobile marketing services ($\beta = .291, p < 0.01$, thus H3 is also supported. Lastly, the final hypothesis, H4 also reveals a significant relationship between perceived risk and intention to use mobile marketing services ($\beta = -.179, p < 0.01$), it is specify that H4 is supported.
6.0 DISCUSSION

6.1 Implication for theory and practice.

The purpose on this study is to empirically extend the TPB in order to investigate the young consumers’ behavioural intention towards mobile marketing services by incorporating perceived risk as a new variable. This study is among the first to empirically examine the determinants of the consumer overall acceptance of mobile marketing services particularly in Malaysian setting. The empirical findings express that consumers’ perceived risk would be a valuable extension of TPB in the mobile marketing services context as it was identified to be important in predicting intention to use mobile marketing. The finding is constant with the findings by Crespo et al., (2009), Kim et al., (2008), Mitchell (1999) and Luo, Li, Zhang & Shim (2010). The findings proposed that risk perception is important which can significantly reduce potential users’ behavioural intention to adopt mobile marketing services. Hence, these results may entail that the consumers who perceived mobile marketing services have lower potential risks will tend to embrace this kind of services.

It is essential for managers to recognize the various drivers that influence acceptance of mobile marketing practices among consumers especially on young consumers segment. The findings of this study suggest several implications to managers in developing their marketing strategies and planning. The finding on direct relationship between attitude, subjective norm and behavioural intention is constant with previous studies of behavioural intention (Bauer et al. 2005; Davis et al. 1989; Hong et al. 2008; Hsu et al. 2006; Md Nor & Pearson, 2008; Morris & Dillon, 1997; Nysveen et al. 2005; Ramayah et al. 2009; Rohm & Sultan, 2006; Scharl et al. 2004; Shih & Fang, 2004; Taylor & Todd, 1995a). Recent study by Schierz et al. (2010) and Tsai (2010) also proved that attitude has a direct positive relationship with intention. This finding is also in line with the suggestion by Kim et al. (2009) attitude is the main variable which cannot be omitted from the model in examining the technology acceptance of individuals. This proved that, the managers need to stimulate the consumer’s attitude towards using mobile marketing services due to the positive attitude will reflect to their intention towards using the technology.
The significant findings of subjective norm also point out that the effect of social context on intention to use. This highlights the importance to consider the social pressure by managers in stimulating the consumers to use mobile marketing especially among young consumers. Moreover, the significant findings of perceived behavioural control also indicates that, the mobile service providers should consider and offer the support services that enable users to familiarize with the services. By doing so, it may increase the consumers’ perceived control.

In all, it can be said that intention to use mobile marketing services can be enhanced by stimulating favorable attitude, support services and social pressure. The more favorable is the attitude, the stronger is the behavioural intention, the more support services offered by mobile services providers, the stronger their intention to use, the greater influence of social context the stronger intention to use mobile marketing. and the lesser potential risk perceived by the users, the stronger their intention to use.

### 6.2 Limitations and Future Research Directions

It is important to state that this study has several limitations. First, this study has focused on university students which represent young consumers’ group. This young consumers group may not represent a whole view of the different segments in Malaysia. Future study can be fortified by including other respondent’s age category in other region in Malaysia. Second, since the sample only consists of respondents in Malaysia only, the generalization of the data to other countries might be restricted due to cultural differences especially in mobile consumers’ behaviour. Thus there is a need for researchers to allocate more attention and to explore this field especially in different context of study (Mohammad & Razli, 2011). Finally, this study focuses on the acceptance of mobile marketing in general. Therefore, future research may consider on single type of mobile marketing such as mobile TV, mobile banking, mobile music, etc. To conclude, given that the research in mobile marketing offers large opportunity to be explored by the researchers (Varnali & Toker 2010), future study may take in to account the effect of perceived risk on other variables.
CONCLUSION

This study is purposely to explore the factors that influence the consumers’ intention to use mobile marketing services. For this goal, an extension of TPB model was developed and measured by incorporate perceived risk as a new predictor factors. The findings significantly proved that attitude, subjective norm, perceived behavioural control and perceived risk play a significant role in influencing consumers’ intention to use. For practitioners, this finding also gives a challenge to industry players to help consumers to reduce their risk uncertainty and they should plan how to convince the social context towards influencing intention of young consumers to use using the product or services. Mobile marketing service providers should offer their value added product or services that may aid consumers to learn and use the services. Generally, the study managed to enlighten the factors that influence intention to use mobile marketing, on the other hand the limitations emphasizes in this study need to be considered carefully in performing the research in near future.
Appendix

![Conceptual Framework Diagram](image)

Figure 1: A Conceptual Framework

Table 1. Sample characteristics

*Profile of Respondents (N = 334)*

<table>
<thead>
<tr>
<th>Demographics Variables</th>
<th>Categories</th>
<th>Frequencies</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>95</td>
<td>28.4</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>239</td>
<td>71.6</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Malay</td>
<td>225</td>
<td>67.4</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
<td>84</td>
<td>25.1</td>
</tr>
<tr>
<td></td>
<td>Indians</td>
<td>22</td>
<td>6.6</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>3</td>
<td>0.9</td>
</tr>
<tr>
<td>Age</td>
<td>20 and below</td>
<td>107</td>
<td>32.0</td>
</tr>
<tr>
<td></td>
<td>21-23</td>
<td>200</td>
<td>59.9</td>
</tr>
<tr>
<td></td>
<td>Above 23</td>
<td>27</td>
<td>8.1</td>
</tr>
<tr>
<td>Study Programme</td>
<td>Diploma</td>
<td>48</td>
<td>14.4</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s Degree</td>
<td>276</td>
<td>82.6</td>
</tr>
<tr>
<td></td>
<td>Master/PhD</td>
<td>10</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Table 2. Factor analysis and reliability

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>Factor Loadings</th>
<th>KMO</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATT</td>
<td></td>
<td>0.87</td>
<td></td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>ATT1</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATT2</td>
<td>0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATT3</td>
<td>0.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATT4</td>
<td>0.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATT5</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SN</td>
<td></td>
<td>0.88</td>
<td></td>
<td>0.95</td>
</tr>
<tr>
<td></td>
<td>SN1</td>
<td>0.87</td>
<td></td>
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<tr>
<td></td>
<td>SN2</td>
<td>0.95</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>SN3</td>
<td>0.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variables</td>
<td>Beta (β)</td>
<td>t-value</td>
<td>p-value</td>
<td>Hypothesis</td>
</tr>
<tr>
<td>----------------------------</td>
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<td>---------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>Attitude</td>
<td>.403</td>
<td>8.815</td>
<td>.000**</td>
<td>H1</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>.110</td>
<td>2.425</td>
<td>.016*</td>
<td>H2</td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>.291</td>
<td>6.452</td>
<td>.000**</td>
<td>H3</td>
</tr>
<tr>
<td>Perceived Risk</td>
<td>-.179</td>
<td>-4.654</td>
<td>.000**</td>
<td>H4</td>
</tr>
</tbody>
</table>

R² = .559  
Adjusted R² = .554  
F-value = 104.832

Dependent Variable: Intention to use  
Note: *p-value < 0.05, **p-value < 0.01

### REFERENCES


