



CUSTOMERS PERCEIVED VALUE TOWARDS HOTEL MOBILE APPLICATION BOOKING IN MALAYSIA

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ABSTRACT

In this modern world, consumers are now able to associate with the World Wide Web on their cell phones through independent software that is known as mobile applications. Generally, mobile application has become so prevalent in Asia that many service industries have used mobile application. Not just that, it has also become an essential tool especially for hotel booking in the hotel industry. Therefore, this study is aimed to fulfil three objectives which are to examine the relationship between perceived functional value and customer behavioural intention towards mobile application, to investigate the relationship between perceived social value and customer behavioural intention towards mobile application and to investigate the relationship between perceived emotional value and customer behavioural intention towards the mobile application. The data for this study were collected in Klang Valley area. 300 questionnaires were distributed and as much as 261 questionnaires are usable questionnaire with a response rate of 73% used in this study. All the questionnaires are coded and analysed in Statistical Packages for Social Science (SPSS). In this study, descriptive statistics, reliability analysis, pearson correlation and multiple linear regression were measured. The results for this study shows that customer's perceived functional, social and emotional value has a significant relationship with the customer's behavioural intention.

KEYWORDS: *mobile application, hotel, Malaysia, behavioural intention, perceive value*

INTRODUCTION

Over time, people have been more technically advanced than before with the introduction revolutionary of smartphones and mobile apps. According to Statista (2017), there are about 2.32 billion people on this planet are using smartphones and the number is increasing and it is expected to increase to 2.87 billion by 2020. In 2015, the expanding number of cell phone users has driven to the use of application software for cell phones that are normally referred to as mobile "apps" as stated by Hsu and Lin (2015). The broad accessibility of hand-held cell phones that can be associated with computerized interchanges foundation has set the ground for the selection of a mobile application

At present, many service industries such as banks, airlines and hotels have used mobile commerce (m-commerce) and it has become an essential tool for hotel booking in the hotel industry. In this manner, the response of convincing m-commerce technique is the key thing for the hospitality industry. Although hotel industry is enthusiastic about the utilization and ramifications of mobile application innovation, however, there is a gap between customers' and managers' impression of how mobile application can be implanted helpfully into the field (Nie, 2016). Since the launch of smartphones, hospitality organizations including hotels, restaurants, and airlines have been enthusiastic about creating and applying mobile services for their customers.

However, most applications are simply a mobile version of the company's websites.

On the other hand, the lack number of mobile application usability is still very unclear. The absence of mobile application usability can be because of different reasons. For instance, numerous mobile applications did not prioritize the most fundamental parts of the application and the content is poorly displayed which thus negatively impacts customers' intention to use (Hoehle & Venkatesh, 2015). This refers to a functional value that concerns the utility functions and services that a product can offer.

The mobile application has several unique characteristics such as small screens, various screen resolution, and easy access. Firms regularly imitate the content of a website that is a convenience for the user. Hence, introducing huge content on cell phones is tricky because the application interface is overburdened with data, site connections, and information. Therefore, customers feel overpowered and become baffled because the application does not underline one of the key eases of use standards for mobile applications that leads to emotional value.

There is a developing body of research on customer perceived value in the mobile application. However, there seems to be little agreement on how to conceptualize and measure value. Some researchers settle with one overall value dimension and define several previous constructs that consist of benefits and sacrifices, whereas others have suggested several existing value dimensions. Commonly, the included value measurements and past results vary between studies. In particular, the structure of different perceived value by Sheth, Newman, and Gross (1992) has improved this investigation area by isolating between functional, social and emotional value. This point of view expected that administrations are a way to achieve alluring end states, however, it has not increased wide notoriety among researchers, and offers little data about the dimension of significant worth as expressed by Sheth et al. (1992).

In summary, there is still little concurrence on the most proficient method to best conceptualize customer's perceived value even in the more developed writing. Therefore, based on the above argument, this study would like to investigate the perceived value that consists of functional value, social value, the emotional value that will lead to customer's behavioral intention of the customers when using a mobile application for hotel booking.

Relationship Between Perceived Functional Value and Behavioural Intention

This studies have been adapted to define values that customer seeks when mobile applications for hotel reservations are used by Sheth, Newman and Gross (1992). According to Liu (2016), consumption value could be applied to a wide range of product types such as consumer nondurables, consumer durables, and industrial goods and services. This

value is identified with the physical utility customers perceived from a specific product after they purchase it.

Traditionally, functional value is the primary driver of consumer choice. A profile of chosen attributes tests the usability quality. It concerns the utility functions and services that a product can offer. According to Wang, Liao, and Yang (2013), value is often established through product attributes such as qualities of features that can deliver impressions to a useful performance. This value is frequently showed through an item's composite traits, for instance, features or highlights that may express quality experiences (Tzeng, 2011).

In this study, functional value is referred to as the customer's viewpoint that the product is the source of value. By source, it implies that the product is viewed as a bundle of benefits rather than viewing it as a bundle of attributes. As Aulia, Sukati and Sulaiman (2016), they expect a number of advantages since the brand is at the heart of shopping practices where consumers spend money. These benefits or value can be seen from two key points of customer needs which are the requirement for product function and the requirement for the pleasure of using the product which also relates to the emotional value.

In mobile service contexts, as stated by Fadzil (2017), when the mobile application can provide useful functions to m-device users, for instance, navigation apps enables to lead users to the destination. Thus, if a user finds that mobile apps are useful, then he or she would have a higher intention to use mobile apps. Generally, functional value has empirically proven that positively affect users' behavioural intentions to use information systems or mobile services. The mobile application is information software and can provide mobile service to satisfy mobile users' needs (Wang et al., 2013).

Hence, the function value of the mobile application is expected to positively influence users' behavioural intention to use mobile applications. The functional value represents the value derived from an effective task of fulfilment. Often, it relates to monetary value or superiority compared with the alternatives (Sheth et al., 1992). Therefore, the functional value of the mobile app is assumed to positively influence a user's behavioural intention to use a mobile app. Based on the above argument, it leads to the following hypothesis:

H1: There is a significantly positive relationship between perceived functional values and customer's behavioural intention towards the mobile application system in the hotel industry.

Relationship Between Perceived Social Value and Behavioural Intention

Social value has been characterized as the "perceived utility acquired from an alternative's association with one or more specific social groups" (Sheth et al., 1992). Decisions involved in high visible products and merchandise or administrations imparted to other people are regularly determined by

social value. Consequently, the social value identifies with social validation and the improvement of mental self-image among different people (Wang et al., 2013). The intention of purchasing and utilizing product relies upon how a customer needs to be seen by others and additionally how he needs to see himself (Sheth et al., 1992). The purchase and utilization of the product is a method by which an individual can express self-image socially to others.

The results from previous studies often suggest that consumers tend to follow the other view or embrace it and to act accordingly. In other words, particularly in a social context, the customer may value certain products based on how other value that product. As explained in the theory of reason action, the customers tend to perform the behaviour according to what is expected by the people who are close or important to them such as family or friends.

On the other hand, the value of the product can likewise be seen from how the product can establish a great impression on others. In this point of view, the customer considers society to be where they can get compliments or appreciation from other individuals through the interaction (Kwak, 2014). This requirement for compliment can be considered as one of the essential needs that normally exists in each individual's life, in which it can make the customer feel respected and feel better about their self. It demonstrates that compliments address the essential human requirement for acknowledgment and being valued or regarded.

Many studies found that social value positively influences the intention to adopt mobile services. Those who use mobile apps could be promoting their self-image. In the information system (IS) and service contexts alike, previous literature has demonstrated that social value positively affects the intention to purchase or use mobile services or independent study artefacts. In this regard, the following hypothesis was proposed:

H2: There is a significantly positive relationship between perceived social values and customer's behavioural intention towards the mobile application system.

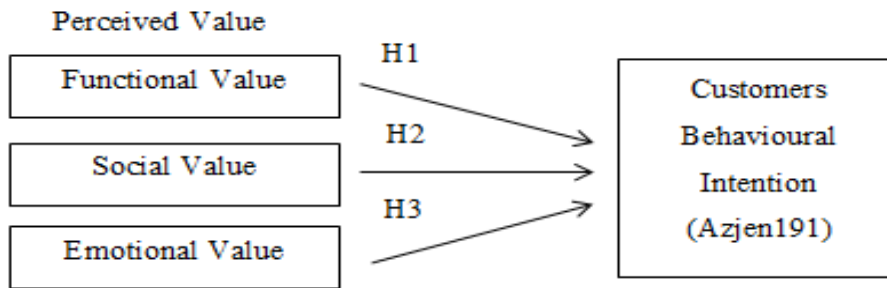
Relationship Between Perceived Emotional Value and Behavioural Intention

Emotional value is a social-mental measurement that is reliant on a product's capacity to stir emotions or full of feeling states (Sheth et al., 1992). A product secures passionate esteem when identified with express feelings or while hurrying or spreading those suppositions. In this study, the emotional value reflects fulfilment, vitality, fun, and delight of using a flexible application. It has been battled that energetic portions, for instance, joy, and vitality, could propel the usage of information systems, independently (Tzeng, 2011).

On the other side, the product's quality can also be seen in the context of how consumers will profit from the brand. With this in mind, the on-line booking experience is received by customers, including factors such as ease, convenience, fun, communication and self-satisfaction. The customer often takes the experience in the use of the product as a basic requirement when using the product. As the product is used or consumed, the good experience such as enjoyment from using the product will also influence the customer's perception of product value (Aulia et al., 2016). It was discovered that emotional value straightforwardly impacts utilization and decision, and figures out what products buyers would select when given a range of hotels from which to choose. Products or services secure emotional value when they are related to specific emotions (Hsiao & Chen, 2016).

However, it was found that emotional value directly influences consumption and choice, and determines what products consumers would prioritize when given a range of products from which to choose. A few researchers have recommended that emotional components like fun-loving nature and happiness could help the utilization of different data frameworks (Tzeng, 2011). Essentially, in the context of mobile services, studies showed that emotional value influences the intention to use a mobile application. For this reason, the current study proposed that users who found enjoyment and emotional fulfilment in the use of mobile apps would be more likely to develop a higher intention to use. Therefore, the following hypothesis was proposed:

H3: There is a significantly positive relationship between perceived emotional values and customer's behavioural intention towards the mobile application system.



Sources: This framework is adapted from Liu (2016) and Wang et al. (2013)

Figure 1: Theoretical Framework

METHODOLOGY

This research used a quantitative data approach and focuses on gathering numerical data and generalizing it across groups of people and the research strategy is using the survey research. That approach allows people to collect data through asking questions, evaluation and clarification of their experiences and behaviour. The time horizon for this study will be a cross-sectional study. A cross-sectional study is undertaken in which data are gathered just once, perhaps over days or weeks or months to answer a research question (Sekaran & Bourgie, 2016). All information from participants with different aspects such as sex, age and race were obtained at the same time.

POPULATION AND SAMPLE SIZE

For this research, hotel guests will be the unit of analysis. The Klang Valley, Malaysia was selected as the area for this study because the place has the most number of hotels. Next, Klang Valley also has the highest usage number of mobile application as stated by the Malaysian Communication and Multimedia Commission (2017) with 7,780,301 million mobile users.

In this study, the questionnaires will be distributed to individuals who are familiar with the usage of a mobile application system for hotel booking as our reference to the study. According to Statista (2019), the number of mobile phone internet users in Malaysia as of 2019 is 19.5 million people.

Number of mobile phone internet users in Malaysia from 2017 to 2023 (in millions)

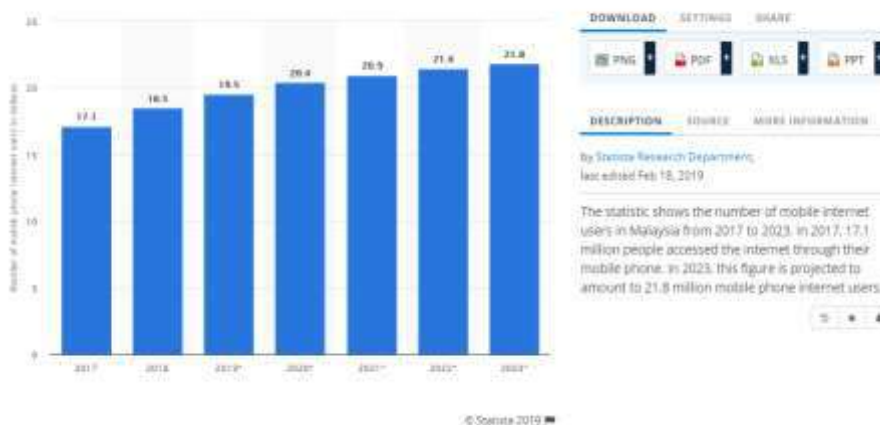


Figure 2: Number of Mobile Phone Internet Users in Malaysia

As for the sample size, it can be determined by the level of precision and confidence desired in estimating the parameters and variability in the population itself. In other words, the sample statistics should be reliable and valid to generalize the findings from sample to population under investigation (Sekaran & Bougie, 2016). Therefore, the sample for this study is individuals who are familiar with the use of the mobile application for hotel booking.

In this manner, the sample size for this study is drawn based on two methods by Krejcie and Morgan (1970) and Hair et al. (2010). Be that as it may, the population estimate in Klang Valley is 7,780,301 million mobile users. The number of sample size is which featured that for one hundred thousand individuals or more, the sample size number is 384. Also, according to Hair et al. (2010), sufficient sample size is an important consideration in this

study. However, there is no consensus on the fixed number of the number of respondents, as every study differs in terms of population characteristics and the number constructs used in the model (Awang, 2014). Accordingly, Hair et al. (2010) offer a solution that seven or less latent constructs with each latent construct has more than three items and the minimum number of respondent is 150. Therefore, this study met the requirements as it managed to deliver 300 questionnaires.

RESEARCH INSTRUMENT

A questionnaire is defined as a set of structured questions designed to collect the data required for research. Normally the researcher employed the survey instruments design by the previous researcher who is prominent in the respective field (Awang, 2014). The questionnaire was adapted from previous researchers to obtain accurate information from the respondents. The design of the questionnaire is bilingual and divided into 3 main sections which are Section A, Section B, and Section C.

Section A comprises independent variable which is perceived value on functional value, social value, and emotional value. Meanwhile for Section B, it is for behavioural intention and Section C is for the demographic profile of the respondents. For section C, it will be an ordinal scale of measurement that contains questions such as gender, age, race, and income, the number of using mobile applications for hotel booking and numbers of hotel booking mobile application on phone.

Moreover, all sections will be used as a nominal scale of measurement in Likert scale to measure the respondents' level of agreement and disagreement in various items. The five-point Likert scale measurement consists of point 5 for Strongly Agree, 4 for Agree, 3 for Neutral, 2 for Disagree and 1 for Strongly Disagree.

DATA COLLECTION METHOD

The questionnaires distributed using two ways, personally distributed to respondents and using social media. The researcher distributed questionnaires to respondents in Klang Valley, Malaysia. Second, to increase the data collection speed, Google forms were distributed through social media such as WhatsApp, Twitter, and Instagram all around Klang Valley and as much as 300 questionnaires were distributed. By using this

method, questionnaires can be distributed to a larger number of sample and reduced the cost of interviewing Data collection was about three weeks starting from early August, 2019.

RESPONDENTS RESPONSE RATE

To achieve 150 minimum sample sizes, 300 questionnaires were distributed to ensure a high response rate and in case of incomplete and inconsistent responded questionnaires. All questionnaires were distributed to respondents who are familiar with hotel booking mobile application in Klang Valley area. However, only 261 questionnaires were returned. Thirty-nine questionnaires were excluded because the questionnaires were incomplete and unsuitable to be included in the analysis. Therefore, there are 261 usable questionnaires with a response rate of 73% used in this study.

RESPONDENTS PROFILE

The statistics of the demographic profile of the respondents who were voluntarily participated in is explained in this section. In this study, the highest percentage of respondents participated in this survey majority are female with 58.9% and as for male contributes 41.1%. The majority of respondents for this study are aged 31 years old and above with a percentage of 55.5%. 90% of Malays responded to this study. In terms of income, under RM 3000 of wages recorded 39.2%.

ANALYSIS AND FINDINGS

Descriptive Analysis of the Overall Mean Score and Standard Deviation for each Dimension

The mean scores and standard deviations for each dimension are shown in Table 1, 2 and 3. From the variables above, it was calculated based on the 5-point Likert scale Scales (1 = Strongly Disagree to 5 = Strongly Agree). Mean scores were used to determine the levels of agreement of the variables. With 5 points Likert scale, the A mean score of 2.59 or less were considered as 'low', mean scores between 2.60 and 3.59 were categorized as "moderate" while mean score of 3.60 or higher were labelled as 'high'.

Scale Item	Mean (M)	Standard Deviation (SD)
The hotel booking mobile application fulfil my needs.	4.30	0.62
The hotel booking mobile application has an acceptable standard of quality.	4.15	0.65
The hotel booking mobile application for hotel booking offers consistent quality.	4.06	0.76
The interface of the application is attractive.	3.99	0.75
The interface of the application is aesthetically designed.	3.89	0.78

N=261

Table 1: Descriptive Analysis of Functional Value

Scale Item	Mean (M)	Standard Deviation (SD)
Using a hotel booking mobile application helps me to feel accepted by others.	3.39	1.13
Using a hotel booking mobile application makes a good impression on other people.	3.42	1.15
Using a hotel booking mobile application gives me social approval.	3.27	1.18
Using a hotel booking mobile application improves the way I am perceived.	3.33	1.15
Using a hotel booking mobile application because of peer influence.	3.14	1.34

N=261

Table 2: Descriptive Analysis of Social Value

Scale Item	Mean (M)	Standard Deviation (SD)
Using a hotel booking mobile application is interesting.	3.97	0.90
Using a hotel booking mobile application makes me feel good.	3.74	0.95
Using a hotel booking mobile application gives me pleasure.	3.69	1.03
Using a hotel booking mobile application makes me feel relaxed.	3.84	0.99
Using a hotel booking mobile application is an enjoyment.	3.73	1.06

N=261

Table 3: Descriptive Analysis of Emotional Value

Scale Item	Mean (M)	Standard Deviation (SD)
I plan to use a mobile application for hotel booking.	4.42	0.66
I intend to use a mobile application in the near time.	4.31	0.72
I will use the mobile application to continue in the future for hotel booking.	4.41	0.70
I would use a mobile application without hesitation to satisfy my needs.	4.26	0.77
I will recommend to others to use a mobile application for hotel booking.	4.37	0.74

N=261

Table 4: Descriptive Analysis of Behavioral Intention

Variables	Number of Items	Cronbach's Alpha
Functional Value	5	.852
Social Value	5	.915
Emotional Value	5	.907
Behavioral Intention	5	.905

N=261

Table 5: Cronbach's Alpha Coefficient for study variables

PEARSON CORRELATION ANALYSIS

According to Chinna (2015), the Pearson correlation is the measurement to test the strong association between two variables. Thus, the Pearson correlation coefficient is used to identify the relationship and strength of the relationship between

all variables of functional value, social value, emotional value, and behavioural intention. Table 6 indicate the result of the relationships of those variables.

Variables	Functional Value	Social Value	Emotional Value	Behavioural Intention
Functional Value				.59**
Social Value				.34**
Emotional Value				.47**
Behavioural Intention	.59**	.34**	.47**	1.0

N=261, *p<.05; **p<.01

Table 6: Pearson Correlations Matrix for Study Variables

From the table above, it shows that functional value and customer behavioral intention have a moderate positive relationship $r = 0.59$ ($p <$

0.01). Next, emotional value and customer behavioral intention has moderate positive relationship as well with $r = 0.54$ ($p < 0.01$). Lastly, social value and

customer behavioral intention has the low positive relationship with $r = 0.34$ ($p < 0.01$). Therefore, it can be concluded that there is positive and significant relationship between the variables of the study.

DISCUSSION AND CONCLUSION

The result shows that there is a significant relationship between perceived functional value and customer's behavioural intention. The findings illustrate that functional value gives a significant contribution and have a positive relationship. Functional value has been the primary driver of consumer choice. This value is measure by the utility and functions that a product or services could offer. Normally functional value is measured through the performance of the product, characteristics and the benefits that the product of service could provide to the customers. Thus, in mobile service context, an application has to provide a useful functions and easy for the users to navigate.

It can be said that perceived functional value has a positive influence on customer's behavioural intention towards mobile application. This finding is strongly supported by previous research (Liu, 2016) and the results from other researchers also show a positive and significant relationship between functional value and customer's behavioural intention (Wang et al., 2013). Functional value concerns the utilitarian functions and services that a product can offer and it is empirically proven that positively affect users' behavioural intentions to use information systems or in other words mobile application.

The study also investigated the relationship between perceived social value and customer's behavioural intention towards mobile application. The result shows that there is a significant relationship between perceived social value and customer's behavioural intention. The findings illustrate that social value gives a significant contribution and have a positive relationship.

Social value is a perceived value that associates with social image and social validation in one or more specific social groups. Most decisions involve in this value are high visible products that could give an impact to the society. Therefore, the intention of purchasing in this value is normally based on how others perceived on that particular users. Not just that, social value is a value of the product that also could give a great impression on the users. These impressions are important as they are part social validation.

The results obtained from the findings show the intention of customers is significantly influenced by perceived social value, also many previous studies suggested that social value positively affected the intention to purchase or use mobile services. As mentioned by Wang et al (2013), social value is the utility of mobile application derived from its perceived ability to enhance social well-being. In the context of e-commerce and m-commerce, the finding was also supported by Chong (2013), who confirmed

empirically that social value plays an important part in m-commerce adoption.

Finally, the study investigated the relationship between emotional value and customer's behavioural intention towards the mobile application. There is a significant relationship between these two variables and the findings show the intention of customers is significantly influenced by perceived emotional value. In the scope of mobile applications, previous studies investigating a device user's behavioural determiner showed that the psychological interest that the consumer perceives significantly affected his decision to use mobile apps (Liu, 2016).

Hence, emotional value is a social mental measurement that relies on the product's ability to perform. If the product could give passionate feelings of fun, joy and vitality when using the products customers will tend to have the intention of using the product over and over again as they are emotionally attached to the product. Therefore, we could conclude that it has a significant relationship between the two variables.

IMPLICATIONS OF THE STUDY

The conceptual framework of this study was based on the customer's perceived value literature to investigate the link between the behavioural intentions towards mobile application systems. Thus, the implications and outcomes of this study were relevant and could be applied to the hotel industry. The main contribution from this study serves as guidance for hotel management to understand their customers better in what they perceived and to implement the usage of mobile applications since the adoption of mobile applications has taken over.

This study also contributes to the literature by identifying the relationship between perceived value and customer's behavioural intention. Given the scarcity of research on the relationship between functional value, social value, emotional value and customer's behavioural intention, the findings of this study constitute a significant addition to the literature that may serve as a foundation for future research.

The results of the study also give App developers and hotel management two ramifications as to how to design and sell the software that is considered valuable to consumers and used in the future. Similarly, the purpose of the development of mobile technology is to enhance customer's lives and satisfy their needs. The findings show that perceived value does influence the customer's intentions of using a mobile application.

Finally, effective marketing strategies require good knowledge about the needs and value perceptions of customers. The results of this study lend support to the intuition that functional, social and emotional value play important roles in the usage of the mobile application.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Few drawbacks were noticed by the researcher and the first consequence is the time limitation. In order to obtain the replied questionnaire, the researcher must compile all information over about a month and this has extended the data collection period. Next, for future research, it is suggested that other researcher consider conditional and epistemic value since this study is limited to only three perceived values which are functional, social and emotional. In order to measure the perceived customer value, the result of this future research can be linked to the previous study.

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