

# Acceptance of Social Media Technology Affecting Intention to Use Online Travel Services of Tourists in Thailand

Teerapong Phongpheng\*

Lecturer, College of Innovation and Management, Suan Sunandha Rajabhat University, 1-U-Thong Nok, Dusit, Bangkok, Thailand, E-Mail: Teerapong.ph@ssru.ac.th

## ABSTRACT

Abstract—The research aimed to study the acceptance of social media technology that affected intention to use online travel service of tourists in Thailand. This research uses a quantitative research approach. The sample group was 300 tourists who used social media for travel services in Thailand which was sampling Multi-Stage Sampling from the group of users in social media. Data was collected by using questionnaires. The statistics used in the analysis were percentage, mean, standard deviation, Pearson correlation coefficient and Multiple regression analysis. The results of the research revealed that components in technology acceptance model in the aspect of subject norm, perceived usefulness, perceived ease of use, and attitude towards using could jointly predicted the intention of using online travel services in Thailand which was statistically significant. All the variables were able to explain the intention to use online travel services in Thailand by 72.59%. When considering the multiple regression coefficient as a standard score, the predictor with the highest multiple regression coefficient was perceived usefulness ( $\beta=0.431$ ), followed by perceived ease of use ( $\beta=0.331$ ), attitude towards using ( $\beta=0.232$ ), and subjective norm ( $\beta=0.129$ ).

Keywords— Online travel service, Social media, Technology acceptance model

## INTRODUCTION

Tourism is an industry that plays an important role in enhancing competitiveness in order to win a share of the world tourism market. The government has used the increase in tourism industry revenue as an important measure to boost the country's economic growth. The government's strategy is to accelerate campaigns in order to develop and promote all forms of domestic tourism to support and attract more domestic and international tourists to travel and spend more in the country. The challenge of tourism business each year is that at least 20 million tourists from all over the world travel to Thailand. As a result, the tourism industry is the main industry of the country that can make a lot of money for Thailand. Data from the Ministry of Tourism indicates that in January of 2020, the value of the tourism industry reaches 3.27 trillion baht, which has increased revenue (The Division of Tourism and Sports Economics (2020).

However, the current fierce competition in the tourism industry has forced new and old entrepreneurs to adapt to gain market share and keep their businesses safe. In particular, the world without borders plays an important role. Therefore, it is undeniable that entrepreneurs in Thailand need to adjust more. This includes adjusting the traditional business model. As the behavior of tourists shifts towards becoming a part of the cyberspace, the advent of high-speed internet and applications has transformed the way we travel Guler (2019). By giving travel enthusiasts the opportunity to search for information and plan their trips in advance. When the internet has become an essential tool for modern travelers. The internet has also brought new business opportunities and lost opportunities if entrepreneurs are unable to adapt themselves in time.

Considering the trend in the number of Internet users, it is found that the number of Internet users is expanding rapidly throughout the world. According to Internet World Stats' 2000-2020 statistics on the number of Internet users in the world by region, the number of Internet users in Asia is estimated to be the largest. 2,062,197,366 people in 2018 and accounted for 49.0% of internet users per capita. With the growth of internet users, it is predictable that the growth of digital technology used in tourism will continue to grow (Internet World Stats, 2020).

Tourism information nowadays is more popularly done in the form of application. In particular, the Internet media is used to present information widely through the website and social media such as Facebook, Blog, Twitter, Youtube and Instagram, etc. Social media channels are considered channels that is convenient to search for information and manage travel information easily. This is because the information and tourism-related products

are intangible products, where buyers or tourists cannot try the products. Therefore, the decision is based on the information that tourists receive. As a result of the popularity of online social transactions, online travel has evolved rapidly. Moreover, the concept of information and communication technology demonstrates the use of the Internet to enable the network of users are linked, can present and exchange information, and participation in creating issues to be exchanged. Therefore, utilizing the website for tourism promotion has a positive effect on promoting and developing tourism in Thailand. As well as it can meet both domestic and foreign tourist groups, entrepreneurs and communities to be able to access useful information conveniently and quickly, ready to support technological advances in the Thailand 4.0 era.

Concerning the previous studies, Technology Acceptance Model presented by Davis (1989) has received extensive empirical support through validations, applications and replications for its power to predict the use of information technology. TAM was used to describe the innovative adoption behavior of social media technologies that affect the intention of using online travel services in Thailand. The elements of technology adoption in this study consisted of subjective norm, perceive usefulness, perceived ease of use, perceived credibility, behavioral attitudes, and intention to use. The Technology Acceptance Model (TAM) can explain the behavior and relationship of factors in adopting innovative social media technologies in the context of tourism (Guler, 2019; Huang, 2017; Kaushik et al., 2015; Kim et al., 2008; Kulkrisada, 2017)

The research objectives aim to study the characteristics of online media innovation acceptance that affect the intention of using online travel services in Thailand, and study the influence of the adoption of technological innovations on the intention of using online travel services in Thailand. The researcher realized that the study on the adoption of technological innovations affecting the intention of using online travel services in Thailand. It will provide useful information to support the decision of tourists to visit Bangkok. Including entrepreneurs in the tourism industry have a form of acceptance of social media innovations that affect their intention to use online travel services in Thailand. As well as the data from the study can be used to formulate appropriate strategic approaches in order to create innovative online media that are more quality and meet the needs of tourists.

## LITERATURE & THEORY

Social media is a computer-based technology that facilitates the sharing of ideas, thoughts, and information through the building of virtual networks and communities. By design, social media is Internet-based and gives users quick electronic communication of content. Content includes personal information, documents, videos, and photos. Users engage with social media via a computer, tablet, or smartphone via web-based software or applications. Social media originated as a way to interact with friends and family but was later adopted by businesses that wanted to take advantage of a popular new communication method to reach out to customers. The power of social media is the ability to connect and share information with anyone on earth, or with many people simultaneously.

In the context of businesses, social media is an indispensable tool. Companies use the platform to find and engage with customers, drive sales through advertising and promotion, gauge consumer trends, and offering customer service or support. Social media's role in helping businesses is significant. It facilitates communication with customers, enabling the melding of social interactions on e-commerce sites. Its ability to collect information helps focus on marketing efforts and market research. It helps in promoting products and services and can help in building customer relationships.

### *Technology Acceptance Model*

Theoretical concepts on the adoption of innovation and technology refers to the acceptance of individuals who will make decisions to fully adopt technology through the recognition process and learning until sure that the technology can definitely benefit. Therefore, investment and acceptance followed which there is no fixed time limit for the decision to accept. It depends on the person and the nature of the technology. The Technology Acceptance Model, or TAM, proposed by Davis (1989) is an extension of the Theory of Reasoned Action (TRA) introduced by Ajzen and Fishbein (1980) and Theory of Planned Behavior: TPB) presented by Ajzen (1985; 2012). The principle of the technology adoption model is to study the factors that influence the adoption or decision to use a new technology, including when users will use it and how likely to use it.

The components of technology adoption according to the technology acceptance model used in this study are as follows.

1. Subjective norm refers to beliefs arising from the influence of references in order to change behaviors, thoughts, and feelings which is one of the factors in predicting intention to act (Ajzen & Fishvien, 1980). The motivational factors influencing behavior are attitude, conformity and perception factors. Subjective norm is the social influence of people who influence decision-making, such as family and friends. It also refers to the power of a colleague or supervisor to influence the behavior of technology users. This is very important for social media technology because it is a technology that is socially relevant (Venkatesh et al., 2012) which users can exchange information and stories by engaging with everyone. It is expected that those contacts will have goodwill and good things for each other. Subjective norm is a significant factor affecting the adoption and intent of the technology significantly (Olschewski et al., 2013; Lee and Song, 2013).

2. Perceived usefulness refers to a person's attitude and belief in using a technology or system to enhance one's work potential. It is the belief or perspective to analyze and recognize the value or expected benefit of technology. If the benefits of technology match the needs of individuals, it will lead to further adoption and use of that technology. Including if using this new technology will make the work done better or completing faster, resulting in more income, which is an external motivation.

3. Perceived ease of use refers to the level of belief and expectation of people who use information systems is a system that can be learned easily without any effort much to learn to use the system or to understand the system. Perceived ease-of-use is a key factor that users expect of the targeted technology to be simple and independent of effort. Perceived ease of use directly influenced acceptance behavior. or the intention to use and indirectly influence its use through acceptance behavior. It was also found that perceived ease of use influenced perceived benefit.

4. Perceived Credibility is the degree to which an individual believes that the use of technology will not cause personal harm or will be secured. Security threats related to protecting user data and systems from unauthorized access (Luarn & Lin, 2005). The collection and management of personal data is therefore a primary concern of users in adopting new technologies. Credibility is the trust of the customers that comes from receiving consistent service. It is safe, accurate, and error-free by the operator, which positively influences behavioral reliability and intent (Kim, 2016).

5. Attitude toward using are the feelings, beliefs, and tendencies of a person's behavior towards any person or thing or idea as a way of evaluating feelings, beliefs, and behavioral tendencies. Attitudes towards behavior are influenced by a person's belief that any behavioral action will have a definite effect and the outcome is assessed (Kim, 2016).

6. Intention to use refers to the possibility that the user will accept the technology and the user's intention to use the technology. This depends on the behavior of the individual's interest in using technology. They will be ready to use the technology as soon as there is an opportunity or attitude to use it in the future. Perceived Usefulness and Subject Norm had a significant effect on intention to work.

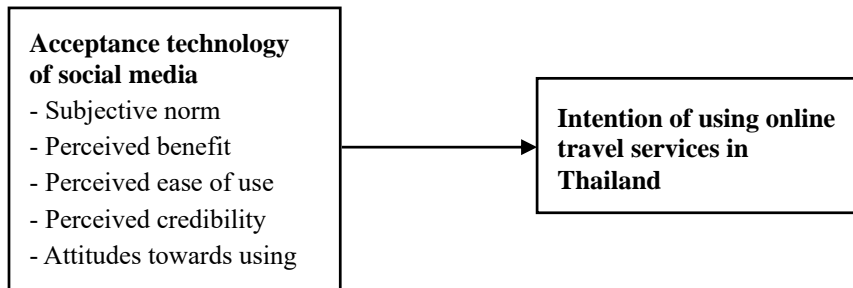
## **RELATED WORKS OR DISCUSSION**

Concerning studies within the TAM framework, prior research has empirically demonstrated a positive relationship between the variable in the TAM. The research of Kim et al. (2008) as well as Guler. (2019) Lin et al. (2020) Singh & Srivastava (2019) Huang et al. (2017) Kaushik et al. (2015) revealed that perceived usefulness and perceived ease of use together determine user attitudes towards using mobile devices and, consequently, influence user intention and willingness to adopt mobile devices in the tourism context. Singh et al. (2019) shown the results of a confirmatory factor analysis and structural equation modelling that trip experience and technology experience positively influenced perceived performance and perceived ease of use, and the factors positively related to travellers' attitudes towards using mobile devices and intention to use them within the tourism context. As well as Kaushik et al. (2015) revealed that the model has been extended to include perceived trust and social capital as important constructs to explain the travellers' use of social media and social media was found to have an effect on all the variables in the constructs. Moreover, the research of Kaushik et al. (2015), Luarn & Lin (2005) and Kaushik et al. (2015) revealed that perceived trust has an effect on travellers' intention to use application for tourism

The relationship model of the variables studied in this study as illustrated in the research framework as Figure 1.

**Figure 1**

Conceptual framework of the adoption of LINE application innovations affecting the acceptance of LINE applications among the elderly



## METHODS

### *Population and sampling*

The target population used in this research is people who are interested or intent to use online travel services through social media and live in Bangkok which cannot determine the exact population. The researcher used the formula of W.G. Cochran (1953) at 95% confidence level, the number of samples was 300 units, while the multi-stage sampling method was used.

### *Data collection*

Research tools used to collect is a generated questionnaire in accordance with the definition of the operation according to the characteristics to be measured. The researcher tested the validity and reliability of the questionnaire to obtain accurate research results and achieve the stated objectives. In this regard, the researcher provided 40 preliminary pre-test and the results of the confidence check revealed that the confidence values of each question and the total confidence values are between 0.7-1.00. In addition, the questionnaire generated has passed the content review by the advisor. Therefore, it was concluded that the questionnaires could be used to collect data.

### *Data analysis*

Statistics used in data analysis to answer the objectives of this research are descriptive statistical analysis used to describe the demographic characteristics of the sample, the statistics used were frequency and percentage, mean, and standard deviation. Also, inferential statistical analysis is used to test hypotheses which used a simple Pearson Product Movement Correlation Coefficient analysis to test the correlation of two independent variables, and multiple regression analysis to test the influence of independent variables on dependent variables in the research conceptual framework.

## RESULTS

### *Descriptive analysis*

The general information of sample group were Thai tourists who used tourism services via social media in Thailand and lived in Bangkok, amounting to 300 samples. Most of them were female, 58.7%, age between 31-40 years old, 35.0%, status in marital, 52.25%, the highest level of education at the bachelor's degree level, 47.5%, worked as employees of private companies the most, 35.5%, and monthly income average between 30,001-45,000 baht, 34.25% and domiciled in Bangkok and its vicinities at most 72.00%.

Descriptive data on the acceptance of social media technology affecting the intention of using online travel services in Thailand, the overall factors are at a high level. If considering each aspect, the first is perceived usefulness at a high level, followed by perceived ease of use, attitude toward using, intention to use, and perceived credibility. and subjective norm, respectively, at a high level in all items.

### *Hypothesis testing*

An analysis of the correlation coefficient between all variable in the model was used Simple Pearson Product Moment Correlation Coefficient statistic, shown in Table 1.

**Table 1**

The correlation coefficient between all factors of the adoption of social media innovations affecting the intention to use online travel services in Thailand

Variables	Z	X1	X2	X3	X4	X5
Z	1					
X1	.621**	1				
X2	.545**	.521**	1			
X3	.581**	.466**	.634**	1		
X4	.480**	.547**	.710**	.742**	1	
X5	.704**	.705**	.484**	.411**	.575**	1

\* Significant level at .05 \*\* Significant level at .01

Z-intention to use online travel services X1-Subjective norm X2-Perceived usefulness  
X3-Perceived ease of use X4-Perceived Credibility X5-Attitude toward using

Table 1 shown the correlation coefficient between all factors of the adoption of social media innovations was found that the correlation did not exceed 0.80. All independent variables did not exceed the multiple correlation between the factors because of multicollinearity (Hair et al., 2010). Therefore, all independent variables can be used in stepwise multiple regression analysis, which is to bring the variables to predict in the model one by one.

The results of the analysis of technology acceptance of social media affecting the intention to use online travel services in Thailand was shown in Table 2.

**Table 2**

Regression analysis of social media innovation acceptance models affecting intention to use online travel services in Thailand

Model	b	$\beta$	t	p-Value	Tolerance	VIF
Constant	3.452	-	10.254	.000**	-	-
Subjective norm	.138	.129	2.214	.041*	.276	3.621
Perceived usefulness	.436	.431	5.254	.000**	.302	3.314
Perceived ease of use	.339	.331	4.624	.000**	.260	3.845
Perceived Credibility	.052	.048	1.124	.096	.359	2.783
Attitude toward using	.237	.232	3.748	.004**	.351	2.845

\*\* Statistically significant at the .01 level, maximum Eigen value = 4.956

R = .852, R<sup>2</sup> = .7259, S.E.=.063, F=52.48

The results of the correlation of all variables in the model shown that the highest value of VIF (Variance inflation factor) was 3.845, which was not more than 5, while the lowest value of Tolerance was 0.260, which was not less than 0.2 and highest maximum Eigen value was 4.956 which did not exceed 10.0. The correlation value indicated not all independent variables were related which did not form multicollinearity. Then data was appropriate to use a multiple regression analysis (Hair, et al., 2010).

The result of regression analysis was found that the acceptance of social media technology in the aspect of subjective norm, perceived benefits, perceived ease of use and attitude towards using can predict the intention to use online travel services with a statistically significant value at F=52.48, and all variables could explain the variability of online travel services in Thailand at 72.59 %. When considering the multiple regression coefficients in the standard score form, it was found that the predictors with the highest multiple regression coefficients were perceived usefulness ( $\beta=0.436$ ), followed by perceived ease of use ( $\beta=0.339$ ), attitude towards using ( $\beta=0.237$ ), and subjective norm ( $\beta=0.138$ ). It can be created an equation for forecasting intention to use online travel services in Thailand as the forecast equation as follows:

$$\text{Intention to use} = 3.452 + .138 (\text{subjective norm}) + .436 (\text{perceived usefulness}) \\ + .339 (\text{perceived ease of use}) + .237 (\text{attitude towards using})$$

## CONCLUSION AND FUTURE WORK

### *Conclusion*

1. Adoption of Social Media Innovations affecting the intention of using online travel services, the overall level is at a high level. If considering each aspect, it was found that the first priority was the perceived benefit the most level, followed by the perceived ease of use, attitude towards using, intention to use, perceived credibility, and subjective norm at a high level, respectively. The fact that tourists see the importance of perceived benefits over other factors, it shows that social media is a form of technology application that can present information widely through social media such as Facebook, Blog, Twitter, Youtube and Instagram, etc. Each social media has its own unique and diverse features that make it an easy, fast and efficient way to find and manage travel information. Buyers or tourists cannot try the products because information and tourism-related products are intangible products. Therefore, the purchase decision is based on the information travelers receive via social media. The popularity of social transactions has led to the rapid development of online travel. The tourists will be aware of the benefits that contribute to improving operational efficiency. Perceived usefulness is a key factor in the adoption of social media technology which is consistent with the research of many researchers such as Lin et al. (2020) and Kim et al. (2008), While subjective norm is the least important factor for tourists. This may be due to the affinity of references as social influences of individuals influencing decision-making such as family and friends (Venkatesh et al., 2003). It will change behaviors, thoughts and feelings according to Ajzen & Fishbein's Theory of Planned Behavior (1977) concerning behavior and intention comes from motivational factors that influence behavior which takes time to mold to the belief. However, perceived usefulness and subject norm have a significant effect on intention to use (Chaweasuk et al., 2012; Venkatesh et al., 2012). Because it is a technology that can be exchange information and stories by engaging with everyone which it is expected that those contacts will have goodwill and information on their collective interests.

2. The results of the analysis of social media innovation acceptance models that affect the intention to use online travel services in Thailand. It was found that conformity with subject norm, perceived usefulness, perceived ease of use, and attitude towards using could jointly predicted the intention of using online travel services in Thailand which was statistically significant. This is consistent with the theory of Ajzen and Fishbein (1977) and the concept of Davis (1989), which describe the behavior and relationship of factors in acceptance of technological innovations that the perception of ease of use results in the perception of the benefits of technology. The result is consistent with the research of Kaushik et al. (2015) who have studied the acceptance of technology in various matters and found that the factors of acceptance of the technology used in this study influence the intention of use. As well as the research of Kim et al. (2008) revealed that perceived usefulness and perceived ease of use together determine user attitudes towards using mobile devices and, consequently, influence user intention and willingness to adopt mobile devices in the tourism context. In addition, there are many researches revealed that the perception of ease of use directly influenced attitudes towards the use of information systems and has an indirect influence on attitudes towards the use of information systems through perceived benefits in the context of tourism such as Guler. (2019), Huang et al. (2017), Kaushik et al. (2015), Kim et al. (2008), Kulkrisada (2017), Lin et al. (2020), Singh & Srivastava (2019). Moreover, the results showed that perceived usefulness had more influence on travellers' intentions to use social media than perceived ease of use. This implied that the needs for social media for tourism is associated with more benefits than social media usage characteristics (such as convenience, efficiency and effectiveness) and also than hedonic aspects such as interaction with the devices and ease of use.

3. The results of the analysis of social media innovation adoption model affecting intention to use online travel services in Thailand found that the perceived reliability does not influence the intention of using online travel services in Thailand which is inconsistent with the hypothesis. This may be due to perceived credibility as the degree to which a person believes that the use of technology will not cause personal harm or will be secured in the same way as a potential security threat, and deal with protecting user data and systems from unauthorized access (Luarn & Lin, 2005). However, the research of Kaushik et al. (2015) revealed that perceived trust has an effect on travellers' intention to use application for tourism.

### *Recommendations and Future work*

Recommendations obtained from applying the research results is that the development of social media should focus on the security of privacy and the security threats posed by technology that negatively affect and cause harm whether it is the loss of sensitive personal information of customers. In addition, there should be a focus on the



impact of social influences, in the case of using social networks which is a belief that is influenced by a group of people in social networks. There should be an organized traveler's social networking group by creating interactions to be able to classify users that are consistent with the brand and it can create a form of social media to reach consumers, generate ideas, react and talk about products and brands.

Further research recommendations may be explored in conjunction with other factors that are relevant or expected to influence intent to use social media tourism services to gain insights covering all dimensions and all relevant concepts. It should also be studied in the scope of other population groups or another area apart from Bangkok and may be studied as a specific case group, such as the elderly group or various generation groups, etc. Moreover, it should bring a qualitative research approach to analyze the data in depth or support quantitative research results by using qualitative research techniques such as in-depth interviews target group conversations, etc.

## REFERENCES

- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. New Jersey: Prentice-Hall.
- Ajzen, I. (1985). *From intentions to actions: a theory of planned behavior*. In Action control: from cognition to behavior (pp. 11-39). Berlin: Springer-Verlag.
- Ajzen, I. (2012). *The theory of planned behavior*. In Handbook of theories of social psychology Vol. 1 (pp. 438–459). London: Sage
- Chaweesuk, S. & Sunanta Wongchaturapat, S. (2012). Theory of acceptance of the use of information technology. *KMITL Journal of Information Technology*, 1 (1), 1-21.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Economics Tourism and Sports Division. (2020). *Final Report: Survey of Attitudes and Satisfaction of Thai and Foreign Tourists Traveling in Thailand*. URL: [https://secretary.mots.go.th/ewtadmin/ewt/policy/download/final%20report\\_63.pdf](https://secretary.mots.go.th/ewtadmin/ewt/policy/download/final%20report_63.pdf).
- Guler, O. (2019). Usage of Technology Acceptance Model in Tourism Studies: Suggestions for Gastronomy Studies. Conference Paper. *International Eastern Mediterranean Tourism Symposium*, 19-20 April 2019 Anamur/ Mersin / Turkey.
- Hair, J. F., Black, W. C., Babin, B. J. (2010). *Multivariate Data Analysis: A Global Perspective*. Pearson Education.
- Huang, C. D., Goo, J., Nam, K., & Yoo, C. W. (2017). Smart tourism technologies in travel planning: The role of exploration and exploitation. *Information & Management*, 54(6), 757-770.
- Internet World Stats. (2020). *World Internet Usage and Population Statistics 2021 Year-Q1 Estimates*. URL: <https://www.internetworldstats.com/stats.htm>.
- Kaushik, A. K., Agrawal, A. K., & Rahman, Z. (2015). Tourist behaviour towards self-service hotel technology adoption: Trust and subjective norm as key antecedents. *Tourism Management Perspectives*, 16, 278-289.
- Kim, D., Jungkun Park, J. & Morrison, A. M. (2008). A Model of Traveller Acceptance of Mobile Technology. *International Journal of Tourism Research* 10, 393–407 (2008).
- Kim, J. (2016). An Extended Technology Acceptance Model in Behavioral Intention Toward Hotel Tablet Apps with Moderating Effects of Gender and Age. *International Journal of Contemporary Hospitality Management*, 28(8), 1535-1553.
- Kulkrisada, Y. (2017). *The Effect of Acceptance and Use of Online Media on Decision to Visit Tourist Attractions in Chonburi*. Business Administration for Executive. College of Commerce. Burapha University.
- Lee, J.-H., and Song, C.-H. (2013). Effects of Trust and Perceived Risk on User Acceptance of a New Technology Service. *Social Behavior and Personality: An International Journal*, 41(4), 587-597.
- Lin, S., Juan, P. & Lin, S. (2020). A TAM Framework to Evaluate the Effect of Smartphone Application on Tourism Information Search Behavior of Foreign Independent Travelers. *Sustainability* 2020, 12, 9366; DOI:10.3390/su12229366.

- Luarn, P. and Lin, H. H. (2005). A Customer Loyalty Model For E-Service Context. *Journal of Electronic Commerce Research*. 4(4): 156-167.
- Olschewski, M., Renken, U. B., Bullinger, A. C. & Moslein, K. M. (2013). Are You Ready to Use? Assessing the Meaning of Social Influence and Technology Readiness in Collaboration Technology Adoption. Proceeding. *System Sciences (HICSS)*, 2013 46th Hawaii International Conference, 620-629.
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012) Consumer acceptance and use of information technology: Extending the Unified Theory of Acceptance and use of technology. *MIS Quarterly*, 36 (1), 157 - 178.