



USER INTENTION TOWARDS THE USE OF MOVIE TICKETS BOOKING APPLICATIONS

JAGANATH M., RAJ KUMAR R.

AMRITA SCHOOL OF BUSINESS, COIMBATORE

mjagan632@gmail.com, r_rajkumar@cb.amrita.edu

Abstract-In the recent decade, technology has become a major intermediate and all businesses prefer to give their users the convenient way of carrying out their intended transactions. In the latest trend the companies give mobile applications to execute their business's services. [1] Davis (1989) TAM model has been used as a base model with many of the researches, to analyze the user intention of choosing the mobile applications of such businesses. I am motivated to check the relevance for the use of mobile applications to book the movie tickets online related to the previous studies carried out in other sectors. Responses from 300 users across India have been analyzed using the Structural equation modeling (SEM) methodology. Attitude represents greater influence over the other factors of TAM with regards to this study.

Key words: Movie tickets booking apps, Technology acceptance model, Perceived ease of use, Perceived usefulness, Perceived trust, Perceived risk, Attitude, Social image, Subjective norm, Intention to use

I. INTRODUCTION

Since the beginning of the smart phones era, it is very evident that it influences user's decision on choosing their necessities as well as luxuries. There has been many data relevant to the number of smart phone users get increased day by day and it currently crosses over 300 million users [2] (yourstory, 2017) upon the population of India. The company or the sector which delivers their core values by technology or as technology presumes those population as their primary target of the consumers and they rely upon many studies to analyze their behavior intention of how the users see themselves into their system when it comes to adopt the technology.

Now in the recent years, the concept of making or expecting the consumer group to use the computers to get their needs done has been diminishing and every companies has started to make use of the resources in which their consumers groups share their time in more and obvious the answer would be smart phones in this decade for which resources people spend their most of the time with. So companies have started make use of this by reducing the distance between the consumer groups and the technology adaptation.

There are applications for starting from how to cook foods to how to travel online. Now companies use applications on smart phones as a gateway to get into their target consumers.

Online movie tickets booking applications (Bookmyshow, Ticketnew, Justickets, Paytm, etc...) provide or act as a bridge between the users and movie theatres. Before if the users wanted to watch a movie, they would have to go the theatre manually to buy tickets and that evolved into reserving their tickets manually in the cinema hall prior to their show but all it involves the users time and presence to be involved for booking the movie tickets, the concept of this movie tickets booking applications on smart phones reduce the users effort and make the whole process of booking convenient for them by letting them choose seats of their interest and makes them to pay the amount through the online gateway.

The innovation each apps carry differs and also the benefits, efforts and risks the users are incorporated into varies, The analysis of why any user is intended to any such apps and what causes them to use it. [3] Davis (1989) had projected TAM to analyze the user's approval of a technology and he found that perceived usefulness in turn is influenced by perceived ease of use and they influence attitude and followed by behavioral intention to the actual use.

There are previous researches made for what intention drives the users to use or to accept the adoption in airline ticket bookings, e-banking apps and online hotel bookings. This makes me to motivate to check the relevance with regard to the user intention towards the use of movie ticket bookings and whether the same factors have an influence or there is any difference in the way the users or the consumers who use their smart phones to book movie tickets feel.

II. LITERATURE REVIEW

2.1 TAM: Technology Acceptance Model

The Technology acceptance model has the factors that measure the actual use or acceptance of any technology[3](Davis, 1989) (Fig.1). In general, Perceived ease of use and usefulness directs the users followed by the attitude and behavioral intention towards the actual use. The Technology acceptance model is used to analyze or measure the acceptance whenever the users or the people of any group are subjected to go with the technology under different situations. TAM model has been previously used to determine the adoption of internet based data by the doctors[4](Ajuwon and Popoola, 2015) and to analyze what drives the users to purchase the travel packages online rather than manual[5](Amora and Duarte, 2015) and what makes the users to book flight tickets online on mobile devices[6](NorazahMohdSuki and NorbayahMohdSuki, 2017). Now, in this paper, TAM helps to determine what makes the highest impact of booking movie tickets online for the users using their mobile phones.

2.2 Perceived ease of use and Perceived usefulness

Perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance[3](Davis, 1989). Perceived usefulness is the primary and important factor among the others in TAM model (Fig.1) since it affects the behavioral intention to use towards the actual use. Perceived ease of use is the degree to which a person believes that using a particular system would be free from effort [3](Davis, 1989). Perceived ease of use has a direct impact on perceived usefulness since the belief the users carry before they enter into any system determines the usefulness factor the user perceives [3](Davis, 1989)and the users feel the system is more useful and efficient when it requires lesser effort [7](Venkatesh and Davis, 2000). [8](Kim et al, 2009) and[9]Norazah and Norbayah (2011) found that the behavioral intention to use has been driven by the impact created by the perceived usefulness. The Subsequent hypothesizes were formulated based on the literature:

H1: Perceived usefulness impacts the user's intention towards the use of movie tickets booking apps on smart phones

H2: Perceived ease of use impacts the perceived usefulness towards the use of movie tickets booking apps on smart phones

H3: Perceived ease of use impacts the user's intention towards the use of movie tickets booking apps on smart phones

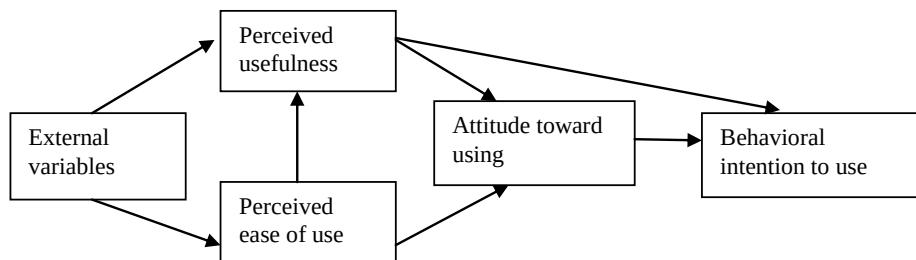


Fig 1: Technology Acceptance Model (Davis, 1989)

2.3 Social Image

Social image is a value that each person carries and holds by the interaction with others or with the group of people [10](Goffman, 1967). Social image is important and has a greater influence towards the use because at many cases users tend to get suggestions from the group of people where they belong and where they want to be in before the actual use. This social image is coordinated with values of user's honor, status, reputation, connection that lead to determine the actual use [11](Baoet al., 2003). [12]Lin and Bhattacharjee (2010) described social image as the "extent to which users may derive respect and admiration from peers in their social network as a result of their IT usage." The people the user surrounded by has a greater influence to accept or reject any particular system [10](White et al., 2004). [13]López-Nicolás, MolinaCastillo, & Bouwman (2008) has come up with social image can be able to influence the ease of use of advanced mobile services. The Subsequent hypothesizes were formulated based on the literature:

H4: Social image impacts the perceived ease of use of the movie tickets booking apps on smart phones

H5: Social image impacts the user's intention towards the use of movie tickets booking apps on smart phones

2.4 Perceived Trust

Perceived trust is the perception of reliability and confidence people hold towards the credentials they share. The belief the user has on his shared credentials when he comes to interact with the online system [14](Corritore et al., 2003, p. 740). Trust shares the major space in influencing the customers to shop online and the user's final use will get easily affected when there is uncertainty and low trust factors during their decision making stage [15](McKnight et al., 2002). [16]Wen (2010) has found that the perceived trust has an impact towards the intention to purchase online and the future use of any such online shopping sites has been highly influenced by the trust [17](Wang and Emurian, 2005). In this paper, the relationship between the trust and the actual user's intention towards the use of movie tickets booking applications on mobile devices is carried out. The Subsequent hypothesis was formulated based on the literature:

H6: Perceived trust impacts the user's intention towards the use of movie tickets booking apps on smart phones

2.5 Perceived Risk

Uncertainty and the possible negative outcome are the two major factors related to the risk involved with transactions the users carry [18](Bauer, 1960). Also, [19]Gerrard and Cunningham (2003) approached the same concept as "the uncertainty about what the innovation gives" (p. 19); Few other studies also exist that the perceived risk influences the attitude negatively (Zimmer et al., 2010) and so the actual purpose to adopt e-commerce [20](Crespo & delBosque, 2010; [21]Herrero & San Martín, 2012). The Subsequent hypothesis was formulated based on the literature:

H7: Perceived risk doesn't impact the attitude and so the user's intention towards the use of movie tickets booking apps on smart phones

2.6 Attitude

TAM model has shown that attitude is happened as a predetermining factor when it comes to develop behavior towards the actual use. [22]Fishbein and Ajzen (1975) defined attitude into three factors which are cognitive, affective or emotional and a co native or behavioral dimension. According to the previous researches made, attitude is expected to smooth the progress of transactions and trim down the barriers toward the acceptance of innovation [23](LiébanaCabanillas et al., 2014). The Subsequent hypothesis was formulated based on the literature:

H8: Attitude impacts the user's intention towards the use of movie tickets booking apps on smart phones

2.7 Subjective Norm

Subjective norms are the perceptions the users get influenced by the surroundings they belong into. Those are their friends, family and community they are into. Subjective norms influence people to behave in any particular way their surroundings do [24](Ajzen, 1991). Their surroundings are their referents and these referents are very influential on people to act in any particular way and they have an impact on their behavioral intentions to use [25](Liao et al., 2007). Previous findings determined by [26]Mouakket and AlHawari (2012) denote the subjective norm impacts on e-loyalty intention towards online reservations. [8]Kim et al. (2009) comes up with the finding of subjective norm is efficient in reusing the ecommerce website of airline B2C in South Korea. The Subsequent hypothesis was formulated based on the literature:

H9: Subjective norm impacts the user's intention towards the use of movie tickets booking apps on smart phones

2.8 Intention to use

An user's intention to take part in any innovation is determined when the individual is actually carried or not carried out the specific innovation ([24]Ajzen, 1991; [27]Ajzen and Fishbein, 1980). Further, it is an "indication of how hard people are planning to try and how much effort they are planning to exert in order to perform the behavior" ([24]Ajzen, 1991, p. 181). Individuals carry out searches which give them the best value ([26]Mouakket and Al-Hawari, 2012) on individual's perception towards the booking of airline seats.

III. METHODOLOGY

The conceptual model (Fig.2) was adopted from the models proposed by [3]Munoz Leiva, F., Climent, S., Liebana (2017) and [6]Norbayah (2017) to check the relevance of factors whether in the same way or in another way get impacted with regards to the movie ticket bookings.

3.1 Questionnaire development

7 questions on Perceived usefulness, 5 questions on Perceived ease of use, 3 questions on social image, 3 questions on Subjective norm, 4 questions on Perceived trust, 3 questions on Perceived risk, 1 question on attitude and 2 questions on Intention to use were asked by framing out the questions which are taken from [3]Munoz; Climent, and Liebana (2017), [28]Venkatesh and Bala (2008), [7]Venkatesh and Davis (2000), [29]Wu and Chen (2005), [30]Cheng et al. (2006), [31]Lai and Li (2005), [32]Chau and Hu (2002), [33]Corbitt et al. (2003), [34]Kim et al. (2011) and [35]Veera (2015). Questionnaire was floated over 350 participants across the country and the results were noted down for the further calculations to happen.

3.2 Methodology

Structural equation modeling (SEM) was used to interpret the responses collected from the questionnaire. Analysis has been carried out by using the software named smartpls v2.0.

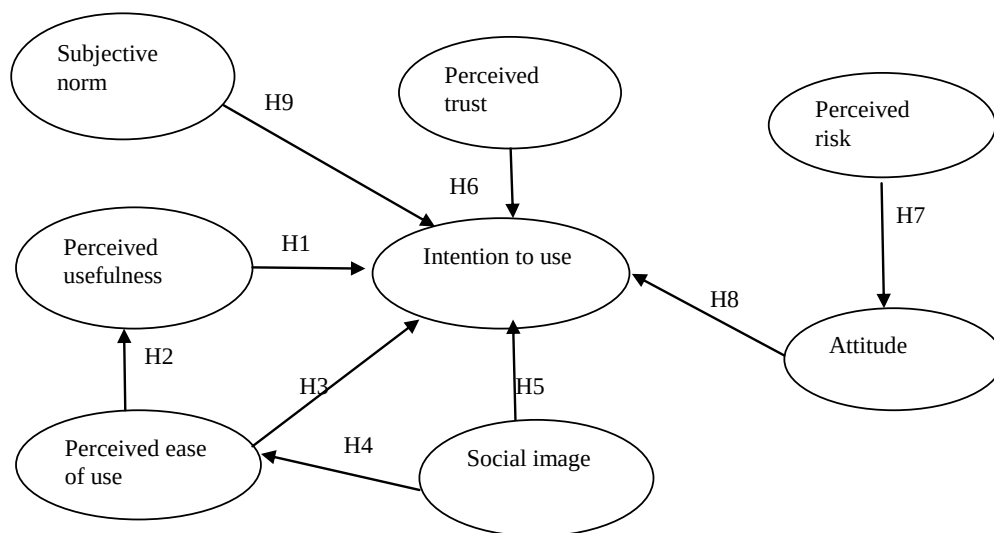


Fig.2 Proposed Model

IV. ANALYSIS AND FINDINGS

The following values were obtained by running the pls algorithm on smartpls (Fig.3)

Path	Factor loadings
Perceived usefulness -> Intention to use	0.248
Perceived ease of use -> Perceived usefulness	0.638
Perceived ease of use -> Intention to use	0.087
Social image -> Perceived ease of use	0.078
Social image -> Intention to use	0.049
Perceived trust -> Intention to use	0.172
Perceived risk -> Attitude	-0.149
Attitude -> Intention to use	0.366
Subjective norm -> Intention to use	-0.042

Table 1: Results from the PLS Algorithm

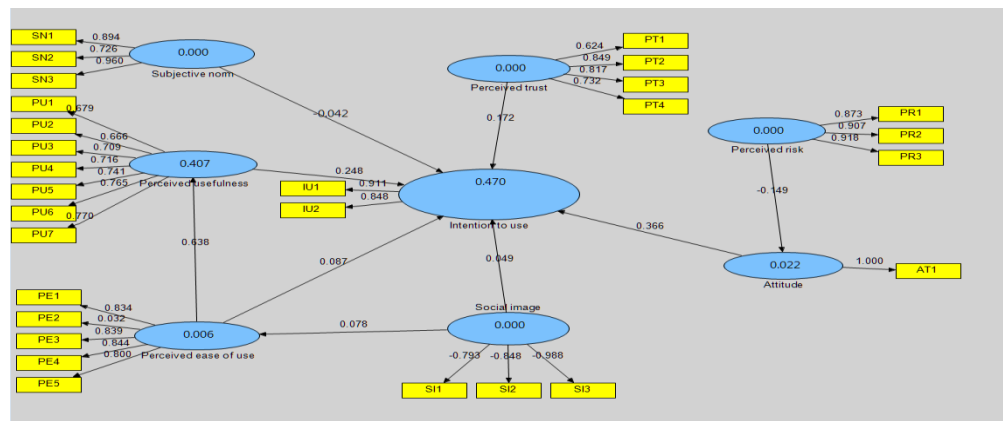


Fig.3 PLS Algorithm

Fig.4, When it comes to movie ticket bookings on smart phones, perceived usefulness (H1) (1.901) has a minimal influence towards the use of movie tickets booking apps, the value is little lesser than the standard deviation (1.96) which says the users get little influenced by the usefulness they perceive about such apps to the final intention of using it.

And the perceived ease of use (H2) (7.939) the users feel highly influences their perceived usefulness of such apps on smart phones which says their perceived ease of use factors is what makes them to think about the usefulness they get. The value we get says the usefulness of such apps get impacted by the ease of use factor it has.

Perceived ease of use (H3) (0.709) alone doesn't influence much towards the intention of the users to use movie tickets booking applications on smart phones. Social image (H4) (0.546) as well doesn't influence much on perceived ease of use when it comes to movie tickets booking apps. . Social image (H5) (0.530) doesn't influence much on the user intention towards the use of movie ticket booking apps on smart phones. Perceived trust (H6) (1.579) has a minimal influence towards the use of movie tickets booking apps, the value is little lesser than the standard deviation (1.96) which says the users get little influenced by the trust they perceive to decide the final intention of using it.

Perceived risk (H7) (1.345) has a negative influence towards the attitude (negative significance of -0.149) and so the use of movie tickets booking apps which says the users don't get influenced to use any such apps on their smart phone when the perceived risks are exist.

Attitude (H8) (3.936) has a positive influence towards the intention of using movie tickets booking apps on smart phones. Attitude shares the positive significance of 0.366 towards the users intention to use of such movie tickets booking apps on their smart phones which says the attitude the users carry towards such apps impact them towards the intention of using such apps on their smart phones.

Subjective norm (H9) (0.397) doesn't influence much on the user intention towards the use of movie ticket booking apps on smart phones.

Hypothesis Testing	T-Test Value	Factor Loadings	True/False
H1	1.901	0.248	False
H2	7.939	0.638	True
H3	0.709	0.087	False
H4	0.546	0.078	False
H5	0.530	0.049	False
H6	1.579	0.172	False
H7	1.345	-0.149	True
H8	3.936	0.366	True
H9	0.397	-0.042	False

Table 2: T-Test to find the significance

Any value ≥ 1.96 (Standard deviation) is significant.

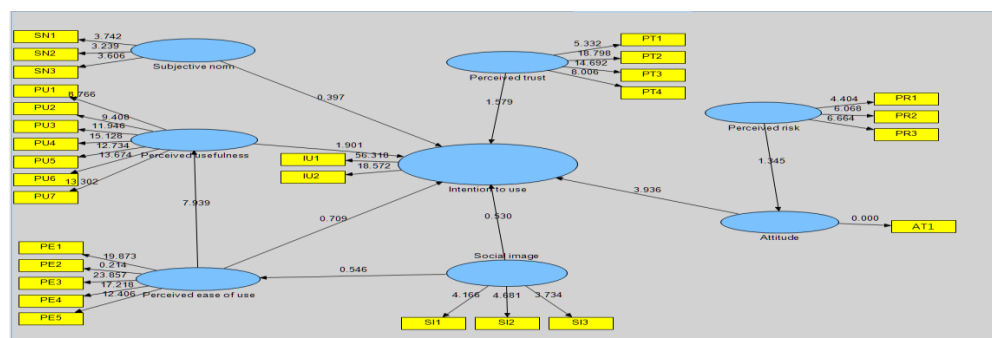


Fig.4 T-test

V. CONCLUSION

The results obtained from the study clearly shows that perceived usefulness and perceived risk have a minimal impact over the user intention towards the use of movie tickets booking applications on mobile devices. It also shows the attitude towards the actual intention of using such apps on smart phones gets affected when the perceived risk exists. From the study we made, Attitude has a higher impact over other factors to influence the intention of using movie tickets booking apps on smart phones. The movie tickets booking apps companies can analyze and make use of the user's interest to be sustained and to be remained innovative in the rapid competitive environment. This following study can be taken over for the increased sample size, particular involvement of specific age groups and different geographical locations for the future works to check whether the impacting factor(s) would get changed if the determinants varied.

REFERENCES

- [1] Davis, "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of," vol. 13, no. 3, pp. 319–340, 1989.
- [2] "India to have 530M smartphone users in 2018: study," 2017. .
- [3] F. Muñoz-Leiva, S. Climent-Climent, and F. Liébana-Cabanillas, "Determinants of intention to use the mobile banking apps: An extension of the classic TAM model," *Spanish J. Mark. - ESIC*, vol. 21, no. 1, pp. 25–38, 2017.
- [4] G. A. Ajuwon and S. O. Popoola, "Influence of Internet Accessibility and Demographic factors on utilization of Web-based Health Information Resources by Resident Doctors in Nigeria," *Afr. J. Med. Med. Sci.*, vol. 43, no. Suppl 1, pp. 61–71, 2014.
- [5] S. Amaro and P. Duarte, "An integrative model of consumers' intentions to purchase travel online," *Tour. Manag.*, vol. 46, pp. 64–79, 2015.
- [6] N. Mohd Suki and N. Mohd Suki, "Flight ticket booking app on mobile devices: Examining the determinants of individual intention to use," *J. Air Transp. Manag.*, vol. 62, pp. 146–154, 2017.
- [7] V. Venkatesh and F. D. Davis, "A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field," *Manage. Sci.*, vol. 46, no. 2, pp. 186–204, 2000.
- [8] H. bumm Kim, T. (Terry) Kim, and S. W. Shin, "Modeling roles of subjective norms and eTrust in customers' acceptance of airline B2C eCommerce websites," *Tour. Manag.*, vol. 30, no. 2, pp. 266–277, 2009.
- [9] N. M. Suki and N. M. Suki, "Exploring the relationship between perceived usefulness, perceived ease of use, perceived enjoyment, attitude and subscribers' intention towards using 3G mobile services," *J. Inf. Technol. Manag.*, vol. XXII, no. 1, pp. 1–7, 2011.
- [10] J. B. White, R. Tynan, A. D. Galinsky, and L. Thompson, "Face threat sensitivity in negotiation: Roadblock to agreement and joint gain," *Organ. Behav. Hum. Decis. Process.*, vol. 94, no. 2, pp. 102–124, 2004.
- [11] Y. Bao, K. Z. Zhou, and C. Su, "Face Consciousness and Risk Aversion: Do They Affect Consumer Decision-Making?," *Psychol. Mark.*, vol. 20, no. 8, pp. 733–755, 2003.
- [12] C.-P. Lin and A. Bhattacharjee, *Extending technology usage models to interactive hedonic technologies: A theoretical model and empirical test*, vol. 20, 2010.
- [13] C. López-Nicolás, F. J. Molina-Castillo, and H. Bouwman, "An assessment of advanced mobile services acceptance: Contributions from TAM and diffusion theory models," *Inf. Manag.*, vol. 45, no. 6, pp. 359–364, 2008.
- [14] C. L. Corritore, B. Kracher, and S. Wiedenbeck, "On-line trust: Concepts, evolving themes, a model," *Int. J. Hum. Comput. Stud.*, vol. 58, no. 6, pp. 737–758, 2003.
- [15] & C. J. K. McKnight, D. H., V. Choudhury, "Developing And Validating Trust Measure for E-Commerce: An Integrative Typology," *Inf. Syst. Res.*, vol. 13(3), pp. 334–359, 2002.
- [16] I. Wen, *Online Travelers' Decision Makings: A New Equation Model to Evaluate Impacts of Website, Search Intention, and Trust*, vol. 12, 2010.
- [17] Y. D. Wang and H. H. Emurian, "An overview of online trust: Concepts, elements, and implications," *Comput. Human Behav.*, vol. 21, no. 1, pp. 105–125, 2005.
- [18] R. A. Bauer, "Consumer behavior as risk taking," in *43rd National Conference of the American Marketing Association*, 1960.
- [19] P. Gerrard and J. B. Cunningham, "The diffusion of Internet banking among Singapore consumers," *Int. J. Bank Mark.*, vol. 21, no. 1, pp. 16–28, Feb. 2003.
- [20] A. Herrero Crespo and I. Rodríguez Del Bosque, "The influence of the commercial features of the Internet on the adoption of e-commerce by consumers," *Electron. Commer. Res. Appl.*, vol. 9, no. 6, pp. 562–575, 2010.
- [21] A. Herrero and H. San Martín, "Effects of the risk sources and user involvement on e-commerce adoption: application to tourist services," *J. Risk Res.*, vol. 15, no. 7, pp. 841–855, Aug. 2012.
- [22] I. Fishbein, M., & Ajzen, *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. 1975.
- [23] F. Liébana-Cabanillas, F. Muñoz-Leiva, and J. Sánchez-Fernández, "Influence of age in the adoption of new mobile payment systems," *Rev. Bus. Manag.*, vol. 17, no. 58, pp. 1390–1407, 2015.
- [24] I. AJZEN, R. Netemeyer, and M. Van Ryn, "The Theory of Planned Behavior," *Organ. {Behavior} {Human} {Decision} {Processes}*, v, vol. 50, no. JANUARY 1991, pp. 179–211, 1991.
- [25] C. Liao, J. L. Chen, and D. C. Yen, "Theory of planning behavior (TPB) and customer satisfaction in the continued use of e-service: An integrated model," *Comput. Human Behav.*, vol. 23, no. 6, pp. 2804–2822, 2007.
- [26] M. A. Al-hawari and S. Mouakket, "Do offline factors trigger customers' appetite for online continual usage?: A study of online reservation in the airline industry," *Asia Pacific J. Mark. Logist.*, vol. 24, no. 4, pp. 640–657, Aug. 2012.
- [27] Ajzen and Fishbein, "Understanding attitudes and predicting social behavior.pdf," *Journal of Organizational Behavior and Human Decision Process*. 1980.
- [28] V. Venkatesh and H. Bala, "Technology Acceptance Model 3 and a Research Agenda on Interventions Subject Areas: Design Characteristics, Interventions, Management Support, Organizational Support, Peer Support, Technology Acceptance Model (TAM), Technology Adoption, Training, User A," *Decis. Sci.*, vol. 39, no. 2, pp. 273–315, 2008.
- [29] I.-L. Wu and J.-L. Chen, *An extension of Trust and TAM model with TPB in the initial adoption of on-line tax: An empirical study*, vol. 62, 2005.
- [30] T. C. E. Cheng, D. Y. C. Lam, and A. C. L. Yeung, "Adoption of Internet Banking: An Empirical Study in Hong Kong," *Decis. Support Syst.*, vol. 42, no. 3, pp. 1558–1572, 2006.
- [31] V. S. Lai and H. Li, "Technology acceptance model for internet banking: An invariance analysis," *Inf. Manag.*, vol. 42, no. 2, pp. 373–386, 2005.
- [32] P. Y. K. Chau and P. J. H. Hu, "Investigating healthcare professionals' decision to accept telemedicine technology: an empirical test of competing theories," *Inf. Manag.*, vol. 39, pp. 297–311, 2002.
- [33] B. J. Corbitt, T. Thanasankit, and H. Yi, "Trust and e-commerce: A study of consumer perceptions," *Electron. Commer. Res. Appl.*, vol. 2, no. 3, pp. 203–215, 2003.
- [34] M. J. Kim, N. Chung, and C. K. Lee, "The effect of perceived trust on electronic commerce: Shopping online for tourism products and services in South Korea," *Tour. Manag.*, vol. 32, no. 2, pp. 256–265, 2011.
- [35] V. Bhatiasavi and C. Yoopetch, "The determinants of intention to use electronic booking among young users in Thailand," *J. Hosp. Tour. Manag.*, vol. 23, pp. 1–11, 2015.
- [36] Manuel, Bibin, "UNDERSTANDING FACTORS INFLUENCING ONLINE PURCHASE OF APPARALS,"
- [37] Ramesh, Meeniga, "Factors that Influence Intentions to Purchase Online Exclusive Products,"

