

THE ACCEPTANCE OF MOBILE TRAVEL APPLICATIONS: A RESEARCH WITH THE INTEGRATION OF TECHNOLOGY ACCEPTANCE MODEL

¹Mohammed IRAQI HOUSSAINI

¹MBA Student, Institute of Social Sciences, Istanbul Aydin University, Istanbul, Turkey

ABSTRACT

This paper aims to present the changes in consumer's lifestyle not only in terms of the consumption but also in terms of behaviour and habit. These examples illustrate the value of mobility to address the evolutions of consumer behaviour to which researchers and marketing practitioners are now confronted. The applications offered by Smartphone's are representative of the ubiquitous paradigm of mobility. They allow to interact virtually (almost) everywhere and all the time and can influence the physical behaviour of the consumer. Considering that fact, there are relationships between physical and virtual behaviour of the consumer.

To analyze the impact of e-commerce in tourism industry, and the rapid growth of technologies, by using TAM (Technology Acceptance Model) that allow us to understand how technology it's perceived by costumers. Current work on the acceptance of mobile services is still rare and has several limitations. This research is mainly based on the TAM and its derivatives. The research adapted a descriptive analytical approach which depends on data collection, analysis using SPSS, Stata and interpretation of the results to determine the hypothesized relationships, to show the influences of each variables to another, starting with the perceiving of ease of use the mobile services to perceiving trustworthiness, by the analysis the result of the relations, and how it can affect costumer behaviour.

Keywords: Technology Acceptance Model, Perceived Ease of Use, Perceived Usefulness, Mobile Applications, E-Commerce.

1. INTRODUCTION

The new information and communications technology have led to major changes in the consumer society. Internet and Social Networks are now anchored in the consumer habits, which are increasingly addicted to this technology. Tourism is one of the sectors that have been the

most heavily impacted by the evolution of tools, uses and digital contents, now distinguishing e-tourism (tourism and web), m-tourism (mobile tourism via Smartphone's or tablets) and social tourism (the use of social networks for tourism). Numerical uses are multiplying and creating new practices, new needs and new modes of consumption. However, it has some limitations as some information may not be correct, outdated, portrayed and we have seen several online fraud case too [1]. Recent studies show that Smartphone and their applications have the potential to help travellers by providing them with easy access to information at any time and almost anywhere [2].

The concept of this study was to develop a comprehensive framework introducing the uses of e-commerce on tourism sector and how mobile applications promote tourism destinations, it concern the impact of provider with customer (B2C), with an empirical study explaining the factors influencing tourist acceptance of mobile devices. First, an extensive literature review was conducted in technology acceptance model. Second, a tourist acceptance model for mobile applications with a questionnaire was conducted illustrating the determinants of tourist acceptance of mobile applications. Third, the proposed model was tested using structural equation modelling (SEM). Finally, discussion on results including limitations and recommendations for the next studies.

2. LITERATURE REVIEW

2.1. E-Commerce in tourism and hospitality industry:

The information and communication technologies (ICT) and tourism are two of the most important sectors of the global economy. The e-commerce market share, compared to the traditional trade is constantly increasing the part of sales growth in e-commerce through an increase approaching twenty percent (20%) in the last five years. Expanding economic opportunity particularly through core business and hybrid mechanisms, in addition to strategic sustained and targeting can benefit to the tourism companies, ranging from enhancing the customer experience to decreasing costs and improving access to finance [3].The tourism sector involves providing services to people traveling to and staying in areas outside their usual environment for less than a year, either for leisure or business. Among services including tourism is services such as transport, accommodation, restaurants, cultural and leisure activities [4]. According to Jolly & Dimanche [5], tourism is an ideal industry for implementing e-commerce solutions and marketing tourism services online. E-commerce has completely changed the tourism value chain [6]. For tourism businesses, the internet offers the opportunity for easy availability of information to a large number of customers with relatively low cost and book online, it also provides a tool for communication between tourism services suppliers, intermediaries and final consumers [7].

Electronic commerce offers new distribution channel for the world market of goods and services and presents opportunities to create new businesses that provide goods services based on knowledge [8]. Using specific search engines such as Expedia or Edreams, the potential travelers can identify and evaluate products according to their preferences and requirements [9].

For example, the rapid expansion of low-cost carriers such as EasyJet and Ryanair, as well as the availability of package holidays and hotel deals with low prices compared to the prices can the person have after contacting a hotel, is longer possible travel arrangements with lower prices. Despite these benefits, organizations and their customers still lack an understanding of the value of mobile applications [10]. For Darren Huston, the CEO of Booking.com, the concept is "in perfect harmony with the changing lifestyles and multi-media uses of today's consumers".

Table 1 reflects the importance of the oline buying for the tourism and hospitality industry.

Table 1: Digital travel sales by region.

	2014	2015	2016	2017	2018	2019
Digital travel sales (billions)						
North America	\$160,31	\$179,02	\$192,36	\$202,13	\$211,41	\$220,06
Western Europe	\$140,45	\$151,73	\$161,97	\$171,07	\$178,76	\$185,52
Asia-Pacific	\$116,11	\$193,12	\$163,85	\$189,69	\$214,87	\$242,57
Latin America	\$24,92	\$29,97	\$ 36,26	\$ 42,44	\$48,31	\$ 55,26
Middle East & Africa	\$ 20,33	\$23,97	\$28,12	\$32,87	\$38,33	\$ 44,63
Central & Eastern Europe	\$8,85	\$9,71	\$10,62	\$11,66	\$13,10	\$ 14,30
Worldwide	\$470,97	\$533,52	\$593,18	\$649,85	\$704,77	\$762,34
Digital travel sales growth (% change)						
Latin America	31,90%	20,30%	21,00%	17,00%	13,80%	14,40%
Asia-Pacific	22,80%	19,80%	17,80%	15,80%	1,30%	12,90%
Middle East & Africa	18,00%	17,90%	17,30%	16,90%	16,60%	16,40%
North America	9,80%	11,70%	7,40%	5,10%	4,60%	4,10%
Central & Eastern Europe	16,90%	9,70%	9,40%	9,80%	12,40%	9,10%
Western Europe	9,40%	8,00%	6,70%	5,60%	4,50%	3,80%
Worldwide	14,10%	13,30%	11,20%	9,60%	8,50%	8,20%
Digital travel sales share (% of total)						
North America	34,00%	33,60%	32,40%	31,10%	30,00%	28,90%
Western Europe	29,80%	28,40%	27,30%	26,30%	25,40%	24,30%

Asia-Pacific	24,70%	26,10%	27,60%	29,20%	30,50%	31,80%
Latin America	5,30%	5,60%	6,10%	6,50%	6,90%	7,20%
Middle East & Africa	4,30%	4,50%	4,70%	5,10%	5,40%	5,90%
Central & Eastern Europe	1,90%	1,80%	1,80%	1,80%	1,90%	1,90%

Source: eMarketer. Digital travel sales by region, (2015).

The use of e-commerce services for market travel expenses represents about one-third of the total volume of e-commerce transactions worldwide digital travel sales exceed \$ 533 billion by 2015, An increase of 13.3% compared to 2014. Sales will rise steadily through 2019 , worldwide digital travel sales will top \$762 billion.

2.2. Constructs of Technology Acceptance Model and Information Adoption Model:

NICTs (new information and communication technologies) have taken a considerable place in society. Among all the facets of the problem, a retirement to the attention: how to explain a technology is accepted or rejected by the users? From the outset, everyone agrees that there is no single factor in acceptance or rejection, but many factors.

TAM examines adoption in terms of perceived ease of use and perceived usefulness on the basis of behavioral intentions and beliefs about the system [11]. Its objective is to provide an explanation of the determinants of acceptance that is general while remaining parsimonious and theoretically justified. According to the TAM, Perception of Usefulness (PU) and Perception of Ease of Use (PEOU) are the determinants of attitudes toward the use of innovations [12]. Perceived Usefulness is defined as "the degree to which a person believes that the use of a particular system could improve his or her performance at work". The Perceived Ease of Use is defined as "the degree to which a person believes that the use of a particular system will be effortless" [12].

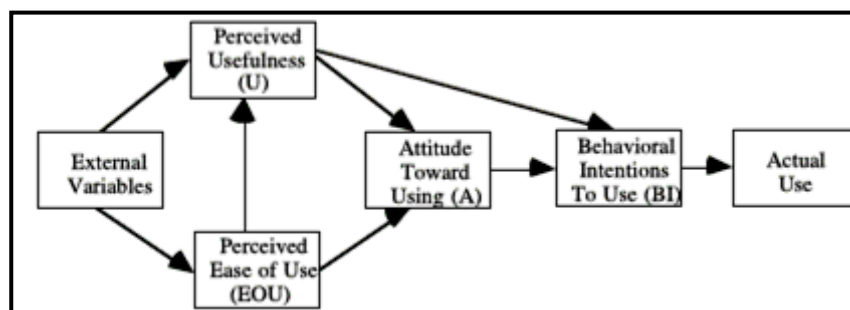


Figure 1: Technology Acceptance Model (Davis et al, 1989).

The specificity and simplicity of TAM is based on the assumption that perceived utility and perceived ease of use are two key beliefs in the prediction of intent to use. These two beliefs are assumed and demonstrated to be independent [13]. Hence the perceived utility corresponds to the intensity of the belief expressed by an individual regarding the potential benefit of the use of the technology in terms of improving its performance in a professional or organizational context.

Then, the perceived ease of use indicate to the intensity of the user's belief that the use of the technology requires little or no effort. These two beliefs affect the attitude toward the use of technology, which in turn affects the intention of use. The latter finally predicts the actual use of the system. However, even if the TAM is derived from the TRA (Theory of Reasoned Action), it loses the trace of this filiation, from the moment when, having identified some limits to the original model, excludes the attitude [12].

The information adoption model (IAM), was formely created in an effort to better fathom hwo people from intentions toward accepting knowledge about specific ideas, behavior, or technology [14]. [15]. Not many scholars have probed the experiences of travelers adoption of information from online reviews [16]. For Sussman and Siagle [15], explored that people receiving different suggestions and recommendations from their e-mail.

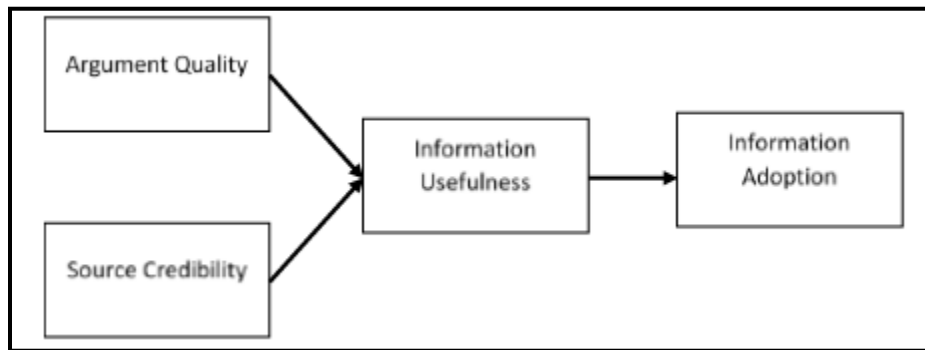


Figure 2: Information Adoption Model (Sussman & Siegal, 2003).

Thus IAM is important to know how the complexity of the choices. Travelers tend to cherry-pick among several information sources based on their travel plans or their information requirement [17]. This construct constitutes a theoretical substitute for the concept of relative advantage developed in the theory of adoption [18]. The relative advantage is degree until innovation is perceived as offering a superior advantage to the practice that it supersedes.

3. RESEARCH MODEL, HYPOTHESIS:

Adapting the study and analysis by using TAM (technology acceptance model) and IAM (information adoption model). This part of the study collected from theory and hypotheses, based on Davis research [12], to present the influence of each component, perceived ease of use maintain to have a positive impact on perceived usefulness and behavioural intention to use information, the hypothesis are as follow:

H1: Perceived ease of use MTA positively influences the perceived usefulness MTA for travel planning.

Several studies in information systems have investigated the relationship between perceived ease of use and perceived usefulness. Most of this research has shown that perceived ease of use is a history of perceived usefulness [12], [19], [20], [21]. Szajna [19], indicates that the relationship between these two variables is significant when adopting information technology. Based on its theoretical contributions, assuming in this research that even perceived usefulness for MTA would be influenced by perceived ease of use.

H2: Perceived ease of use of MTA positively influences the behavioural intention to use information from MTA.

Very often using smart phones are cited as barriers to online shopping [22]. Inability to use the Internet, difficult access, complexity of technology and discomfort with the use of computers is barriers to internet adoption [23]. Difficulty of use can create an unfavourable attitude towards the use of the internet.

Klopping et al [24], have shown that ease of use and perceived utility are the first determinants of attitudes toward the use of online stores. In an information system, some research has empirically verified that ease of use is a direct determinant of attitudes.

H3: Perceived usefulness of MTA positively influences the behavioural intention to use information from MTA for travel planning.

The notion of usefulness refers to that of perceived benefit [25] and positive consequences of behaviour [12]. In consumer behavioural patterns in general, perceived consequences influence behaviour either directly or most often through an indirect effect through attitudes [26].

H4: Perceived trustworthiness of MTA positively influence the perceived usefulness of MTA for travel planning.

One of the factors preventing consumers from buying online is the issue of security and privacy [27]. It has been established that trust is a determinant of the attitude towards purchasing via the internet.

H5: Perceived trustworthiness of MTA positively influences the behavioural intention to use information from MTA for travel planning.

On the web, trust-based behaviour involves sharing personal information, making purchases, or using information provided by the web-site [28]. Some research identifies trust as the factor that stimulates purchases through the Internet. Jarvenpaa and Tracktinsky [29]. show the influence of confidence on purchasing intentions. Kollock et al [30], also showed that confidence influences purchasing intentions directly or indirectly through the reduction of perceived risk.

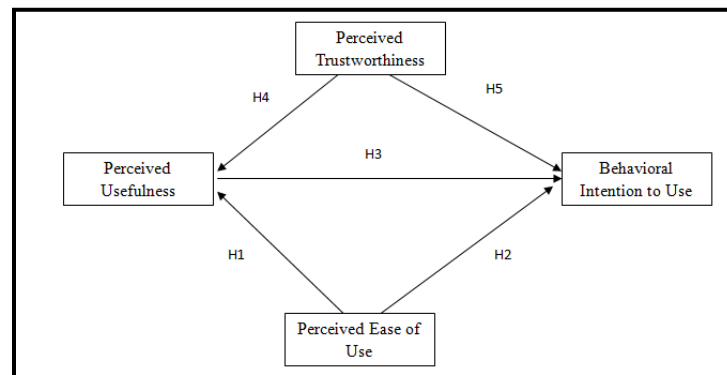


Figure 3: Proposed model for mobile travel applications

4. METHODOLOGY

In order to test the study hypotheses and confront them with reality, a survey-questionnaire was necessary. The choice of the questionnaire was motivated by the very purpose of the research which aims to understand a relatively new phenomenon, how the tourists / travellers use their smart phones to meet the needs in an experiment touristic. In this sense, it seemed to us that the survey was the perfect observation mode to the research envisaged in so far as it reveals not the causes but the mechanisms, this study is deducting from TAM (technology acceptance model) theory already exist in literature, but its application in tourism is limited.

In consequence to collect a good examination of the impact of Mobile Travel Application on trip planning, performing a survey with sample of travellers who use Smartphone's (MTA).

The scale items and constructs were based in several studies on general marketing literature in tourism and information systems. Perceived ease of use (PEOU) and perceived the usefulness

(PU), with 5 items each were used from Davis [12]. Behavioral intention to use information (BITUI), with 5 items, based on Ayeh research [31], Davis [13] and Venkatesh [32]. The scales for perceived trustworthiness (PT), with 5 items, from research carried out by Ohanian [33]. The Likert scale can also be used to measure people's attitudes.

In answering a question in the Likert questionnaire, respondents indicate their degree of agreement or disagreement on a symmetrical agreement-disagreement scale for a series of statements. Thus, the range captures the intensity of their feelings for a given element. The research confirms that data from Likert elements (and those with similar rating scales) become significantly less accurate when the number of scaling points exceeds five or more [34].

Table 2: List of construct and scale items

Scale Items	Source
Factor 1: Perceived ease of use (PEOU)-7 point Likert scale	
Overall ,I find Mobile Travel Application easy to use (PEOU1)	Davis et al. (1989)
It is easy to learn how to use MTA (PEOU2)	Davis et al. (1989)
It is easy to use MTA to find relevant information needed for travel planning (PEOU3)	Davis et al. (1989)
It is easy for me to access Mobile Travel Application (signup,signin,login,setting) (PEOU4)	Davis et al. (1989)
Mobile Travel Application is easy to use to plan my trips (PEOU5)	Davis et al. (1989)
Factor 2: Perceived the usefulness (PU)-7 point Likert scale	
Mobile Travel Application helps me to improve my travel plans (PU1)	Davis et al. (1989)
Mobile Travel Application helps me to plan my trips more efficiently (PU2)	Davis et al. (1989)
Mobile Travel Application make my travel planning easier (PU3)	Davis et al. (1989)
Mobile Travel Application make it easier to reach travel related decisions (PU4)	Davis et al. (1989)
Overall, i find MTA useful for travel planning (PU5)	Davis et al. (1989)
Factor 3: Behavioral intention to use information (BITUI)-7 point Likert scale	
I hesitate to download Mobile Travel Application for travel information (BITUI1)	Ayeh et al., (2013)
I wish to use travel advice from Mobile Travel Application (BITUI2)	Davis et al. (1989)
I expect to use the content of Mobile Travel Application to plan my future trips (BITUI3)	Ayeh et al., (2013)
I make changes to all or parts of my existing travel plans after using the content of MTA (BITUI4)	Ayeh et al. (2013)
I intend to use the content of Mobile Travel Application for my travel planning process (BITUI5)	Venkatesh et al., (2003).
Factor 4: Perceived trustworthiness (PT)-7 point Likert scale	
Travelers who share their experiences on Mobile Travel Apps they are Dependable (PT1)	Ohanian (1990,1991).

Travelers who share their experiences on Mobile Travel Apps they are Honest (PT2)	Ohanian (1990,1991).
Travelers who share their experiences on Mobile Travel Apps they are Reliable (PT3)	Ohanian (1990,1991).
Travelers who share their experiences on Mobile Travel Apps they are Sincere (PT4)	Ohanian (1990,1991).
Travelers who share their experiences on Mobile Travel Apps they are Trustworthy (PT4)	Ohanian (1990,1991).

A survey in English was published by using Google Form, an online survey was preferred than classic paper one, by saving time and tracking easily the respondent's. As the cost of computer hardware and software continues to decrease, and the popularity of the Internet increases, more segments of society are using the internet for communication and information [35].

Once the period ended, all responses were grouped in an excel file and then analyzed by using statistical analysis tools such as SPSS 24.0 (Statistical Package for the Social Sciences). In addition to analyze the multivariate data known as structural equation modelling (SEM) the use of Stata software, was paramount and making modelling easiest with Stata platform. Structural equation modelling encompasses a broad array of models from linear regression to measurement models to simultaneous equations, is not just an estimation method for a particular [36].

5. RESULTS

Among 230 questionnaires sent, 170 people were able to answer correctly and continue the questionnaire until the end. The result obtained from the participants was divided between the users and the non users of the MTA, but on 170 responses only 35 persons who did not use MTA for planning their trips. Consequently, 135 respondents are considered as MTA users. Therefore, in this research the statics analysis are based on the sample size of n=135.

Table 3: Summary of socio-demographic profile

		n=170		n=135	
		Freque ncy	Perce nt	Frequen cy	Per cen t
Do you own a Smartphone and using MTA?	Yes	135	79,4	135	100
	No	35	20,6	0	0
How long have you been using a MTA?	From 1 to 3 years	53	31,2	53	39,3
	From 3 to 6 years	59	34,7	59	43,7
	Less than 1 year	2	1,2	2	1,5
	More than 6 years	21	12,4	21	15,6

Gender:	Female	97	57,1	77	57,0
	Male	73	42,9	58	43,0
Age (years):	21 to 30	90	52,9	69	51,1
	31 to 40	46	27,1	40	29,6
	41 to 50	22	12,9	17	12,6
	51 to 60	4	2,4	4	3,0
	Under 20	8	4,7	5	3,7
Education:	College graduate	81	47,6	66	48,9
	High school	12	7,1	10	7,4
	Post-graduate	59	34,7	46	34,1
	Some college	18	10,6	13	9,6
What is your profession ?	Employee	70	41,2	51	37,8
	Independent	21	12,4	19	14,1
	Intermediate occupation	3	1,8	3	2,2
	Searching for a job	7	4,1	6	4,4
	Senior	26	15,3	22	16,3
	Student	37	21,8	29	21,5
	Unemployed	3	1,8	2	1,5
	Worker	3	1,8	3	2,2
What is your net monthly income (\$)	1400 to 1899	20	11,8	16	11,9
	1900 to 2500	25	14,7	22	16,3
	500 to 899	28	16,5	21	15,6
	900 to 1399	31	18,2	23	17,0
	Less than 500	36	21,2	27	20,0
	Over than 2500	30	17,6	26	19,3
How long you are using Internet	Four to six years	59	34,7	45	33,3
	Less than one year	1	0,6	1	0,7
	More than six years	100	58,8	81	60,0
	One to two years	1	0,6	1	0,7
	Three to four years	9	5,3	7	5,2
Using your smartphone per hours	11–20 hours	43	25,3	32	23,7

On average, how many leisure trips do you make per year?	6–10 hours	99	58,2	79	58,5
	Less than one hour	2	1,2	2	1,5
	Over 20 hours	4	2,4	4	3,0
	Two to five hours	22	12,9	18	13,3
	3 to 4	43	25,3	37	27,4
	5 and mores	31	18,2	28	20,7
	From 1 to 2	74	43,5	56	41,5
	Less than 1	22	12,9	14	10,4

There were more females than males and over 51% of the respondents were in the age of 21-30 years (Table1). Almost 90% of respondents were highly educated and about 30% were employees. In terms of mobile technology experience, approximately 83% of the respondents had used mobile travel applications for more than three years. Over 60% had used the internet for more than six years and over 58% using their Smartphone's more than six hours.

5.1. Assumption check:

In order to meet SEM assumptions, it is critical that the variables in the model should be normally distributed. Skew and kurtosis are two ways that a distribution can be non-normal, and they can occur either separately or together in a single variable.

The range of skew index (0,20 to 1,27) and kurtosis index (0,08 to 3,17) indicated that all variables in the model were normally distributed. Moreover, inspection of the correlation matrix revealed that all bivariate correlation among the constructs is under 0.90 that shows moderate level of multicollinearity.

The reliability analysis allows studying the properties of the scales of measurement and of the elements that constitute it. It is used to determine the importance to which the elements of a questionnaire are linked to one another and to provide a general index of the consistency or internal consistency of the scale as a whole.

It is appropriate to measure the sampling adequacy by the Kaiser-Meyer-Olkin coefficient (KMO) which evaluates the extent of the psychometric relation of the items.

Table 4: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,853
Bartlett's Test of Sphericity	Approx. Chi-Square	1426,276
	Df	190
	Sig.	0,000

Nunnally [37] recommends an Alpha (α) greater than 0.6 to decide on the reliability of the measurements. For the scale of measurement, in this study, Alpha equals 0,853. This value is greater than 0.6 indicating that the scale is fairly reliable, and Bartlett's test of sphericity (χ^2) =1426, 276.

Table 5: Reliability Statistics Cronbach's Alpha

Reliability Statistics		
	N of Items	Cronbach's Alpha
Perceived the usefulness	5	0,880
Perceived ease of use	5	0,883
Behavioral intention to use information	4	0,677
Perceived trustworthiness	5	0,813

The Cronbach alpha is generally used to determine the consistency of the set of questions in a psychological test. The value of the coefficient varying between 0.813 and 0.883, which is excellent, since it exceeds the required minimum threshold of 0.70 [37]. This tag is arbitrary, but widely accepted by the scientific community. Except for the behavioural intention to use information with slightly near to required minimum with 0.677, without including the item “I hesitate to download Mobile Travel Application for travel information” (BITUI1).

5.2. Structural Equation Model

The path diagram for the SEM model (Figure 4) present the direction and magnitude of the direct impact through the positive and negative signs of the path coefficients and the absolute value of the standardised coefficients.

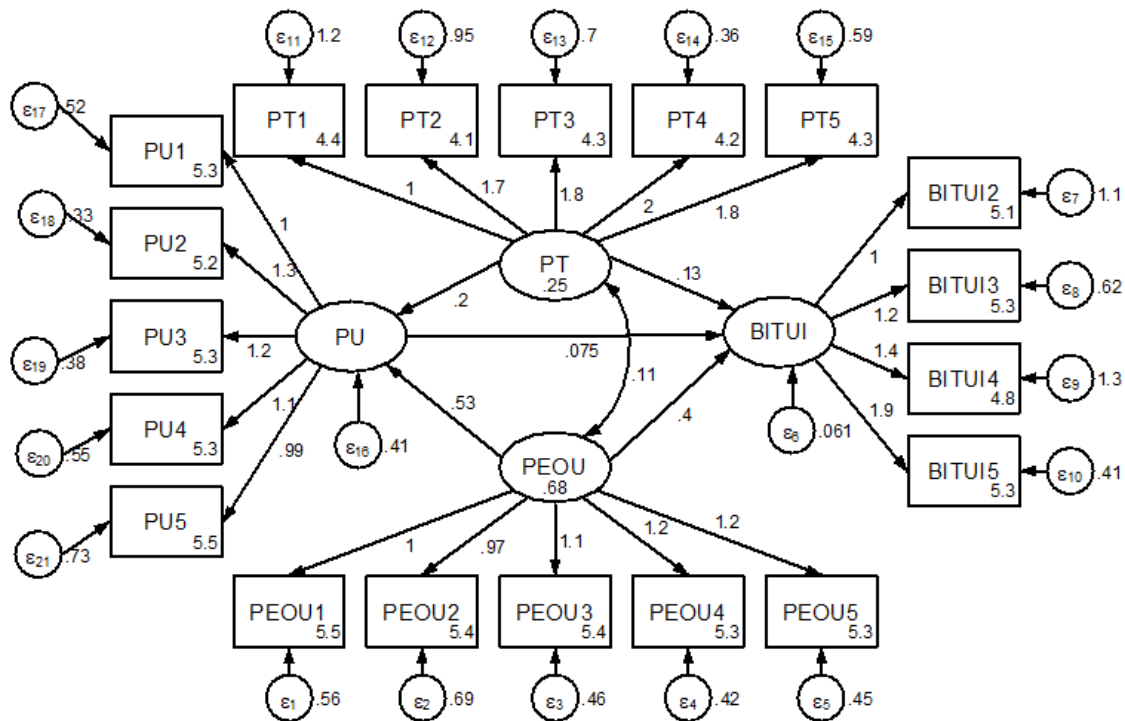


Figure 4: Structural Equation Model

Table 6: Summary of results of hypothesis testing using SEM

	Hypothesized Relationship	Standardized Estimate β	C.R	P value	Interpretation
H1	PU ← PEOU	0.530	5.340	0.000***	Significant
H2	BITUI ← PEOU	0.400	3.770	0.000***	Significant
H3	BITUI ← PU	0.075	1.220	0.221	Non-significant
H4	PU ← PT	0.200	1.340	0.180	Non-significant
H5	BITUI ← PT	0.897	1.470	0.141	Non-significant

Note***: Correlation is significant at the level $p < .001$, Perceived usefulness (PU), Perceived ease of use (PEOU), Behavioral intention to use information (BITUI), Critical Ratio (C.R) also known as t value (Data Analyzed with z test) scale: $< -1,65$ or $> +1,65$ ($< 0,10$); $< -1,96$ or $> +1,96$ ($< 0,05$); $< -2,58$ or $> +2,58$ ($< 0,01$).

Analysis of perceived ease of use:

H1: Perceived ease of using of MTA positively influences the perceived usefulness MTA for travel planning. The null hypothesis is rejected as Standardized Estimate (β) = 0.530 at p value $< .001$. In a previous study the null hypothesis was rejected, the perceived ease of use has significant difference for the usefulness of MTA for travel planning; these findings are similar to

the earlier research, for MTA users the ease for using application influence positively their perception for application utility. In fact, other factor can explain the acceptance of users who find things ease to use are not necessary predisposed to use them, downloading and using mobile application is easy that making user more prone to use them, with simplicity and comprehensible functions.

H2: Perceived ease of using of MTA positively influences the behavioral Intention to Use Information from MTA. The null hypothesis is rejected as Standardized Estimate (β) = 0.400 at p value < .001. In a previous study the null hypothesis rejected, these results are comparable to the findings of Davis [13]; Ayeh [31], the perceived ease of use has significant difference for the behavioral to use the information from MTA; these findings are similar to other that the influence got positive value that, it can be explained by the type of information the users are seeking for, when user check for a destination, hotel or room, from MTA the first reaction goes to comments, travelers experiences, rank and notation.

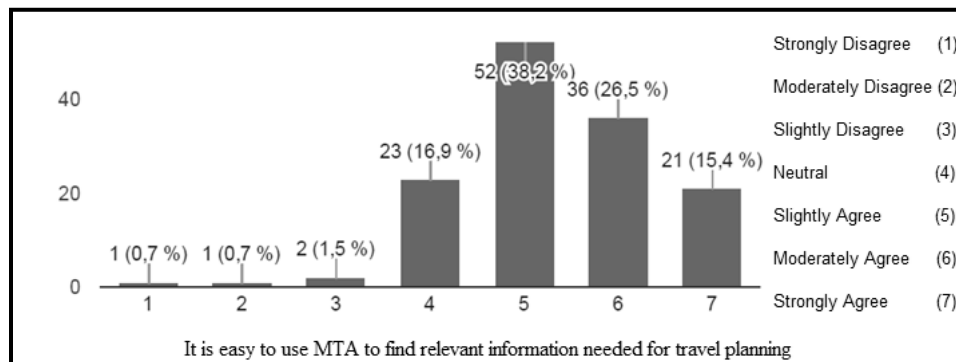


Figure 5: Differences in opinion- Perceived ease of use

Analysis of perceived usefulness:

H3: Perceived usefulness of MTA positively influences the behavioral Intention to Use Information from MTA for travel planning. The null hypothesis is not rejected as Standardized Estimate (β) = 0.075 at p value < 0.221. There is no significant difference in the population at the risk for the groups compared. It can be deduced that once a user considers MTA to be useful he is more willing to use the information provided on the applications to help their travel plans.

Analysis of perceived trustworthiness:

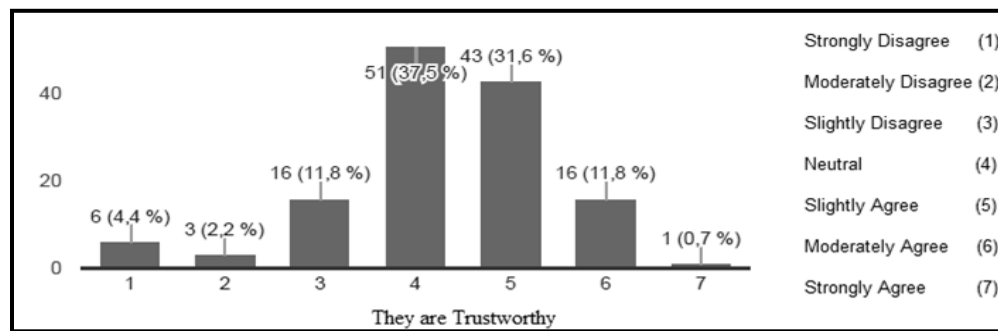


Figure 6: Differences in opinion- Perceived trustworthiness

H4: Perceived trustworthiness of MTA positively influences the perceived usefulness of MTA for travel planning. The null hypothesis is not rejected as Standardized Estimate (β) = 0.200 at p value < 0.180. The results can be due to the neutrality of the respondents due to their past experiences, and the trust is one of the components that can push the user to perceive the usefulness of MTA.

H5: Perceived trustworthiness of MTA positively influence the behavioral intention to Use Information from MTA for travel planning. The null hypothesis is not rejected as Standardized Estimate (β) = 0.130 at p value < 0.141.

6. CONTRIBUTIONS, LIMITATIONS AND RECOMMENDATIONS

Until recently, the adoption of ICT was not very accessible because of its cost. The development of a mobile application is difficult. From now on, the evolution of technologies makes it possible to give access to the information to a greater number of users.

6.1. Contributions:

This study defines what a MTA is, as a new term recently used also by Douglas et al., [38], to clear the definition the previous studies were just mentioning the ICT or IT and mobile services without focusing in the right term as an applications, this research helps the future studies to clearly understand MTA. Secondly these studies for the first time combine with technology acceptance model and m-commerce in tourism industry. Finally this research paper proves that perceived ease of use has a significant impact on behavioural intention to use the information, this study proves also that SEM (structural equation modelling) is useful in studying the MTAs and their impact on the users even though the correlation results has a non-significant relation.

6.2. Limitations and Recommendations:

The limits are related to the size of the sample and the validity of the scales. To reduce the limits and improve the knowledge for future researches. Because of the small size of the sample carrying out the exploratory factor analysis was not necessary. This analysis makes it possible to demonstrate a latent structure through so-called latent variables, or factors.

It then allows us to have better results in the confirmatory factor analyzes that validate the model and the hypotheses of the research. In addition, an exploratory factor analysis would have made usable the indicators eliminated in the studies, by a new scale or a new relationship.

The questionnaire was valid for a period of only one month, another limit in this research; the questionnaire was valid in English only, for future studies the questionnaire could be translated into several languages for a response facility. The type of question used, had no relation with a specific mobile travel application such as Booking.com, Hotels.com, eDreams applications.

7. CONCLUSION

The Research on the acceptance of mobile travel applications, led to the formulation of an original conceptual model for this research. The aim of this study was to show the impact of the MTA on travel planning and the perceive for each variable, with the application of the theories such as TAM by Davis [13], and IAM by Sussman & Siegal [15]. Combining the findings of previous work, it contributes, in part, to strengthening the results of the theories of the technology acceptance model. The results of the empirical study show that TAM can be considered as a valid tool for studying the factors that determine and influence the use of technology in the tourism industry, and more specifically the interaction of the consumer with the mobile application services. The concepts and variables chosen to the acceptance model of MTA are part of the most relevant concepts to explain the perceived of the ease of use, perceived usefulness, perceived trustworthiness and behavioural intention to use information of the respondents.

Without questioning the results obtained, the present work contains certain limits as mentioned previously. First, by conducting a survey of different users from different regions, and with an English survey as a foreign language in various countries. This characteristic of the sample certainly reduces the possibility of generalizing the conclusions drawn. Finally, without including participant demographic information in the analysis. In other words, socio-cultural elements have not been taken into account in the present work. Nevertheless, the model developed cannot claim to take account of all the possible determinants of the use of IT and also of the performance following the use, but only those that fall within the theoretical framework of this research and especially those compatible with mobile applications.

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