



Evaluating Behavioral Intentions of Tourists in e-Tourism

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ABSTRACT

Tourism is one of the major sources of income for many countries and with the advent of internet, using this new channel (internet) for providing different services of tourism, i.e., e-tourism, is growing rapidly. This is also the case in Iran, but it is clear that focusing on technology alone can't lead the business to success. The key point of successful business in e-tourism is to concentrate on the customers and their behavior for having a better relationship with them. This study is intended to develop a model based on Decomposed Theory of Planned Behavior (DTPB) that considers influential factors to predict and evaluate intention of tourists and travelers while using e-tourism services and websites, such as www.expedia.com and www.priceline.com. The influential factors are studied and investigated through a survey with 259 responses. Structural Equation Modeling (SEM) has also been utilized for testing relevant hypotheses to either include or thwart specific factors which drive people to use e-tourism services provided in e-tourism websites. The results show that "Subjective Norm" and "Perceived Behavioral Control" significantly affect Iranian customer's intention to use e-tourism (i.e., the websites which offer tourism services). In this research we not only worked on evaluating a model and the relationship between constructs, but also tried to find specific factors that drive people to use e-tourism. So, besides DTPB factors, we found that Curiosity has more effect on tourist intention. The findings have implications for Iranian tourism companies to predict the behavior of tourists when they are using the e-tourism, and also develop the CRM methods in e-tourism websites.

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1 Introduction

"A revolutionary transformation accelerated by technological advances formed the world-wide economy of 20th century. The quick development of Information and Communication Technologies (ICTs) and the global expansion of Internet changed industrial struc-



tures all over the world” [1]. Hence, its influence on daily operations is pervasive such as searching, learning, health, working, shopping, etc. Among industries, tourism is not exempt; particularly when tourism has emerged even more robust than black gold industry. Nowadays because of the value of time tourists can't start a trip without any planning [2]; they need some information about their destination and how to get there. Tourism is a business based on information [3], and looking for information has a significant effect on the various aspects of decision made by tourists. For example, people plan for traveling with buying online tickets, reserving hotels, and renting cars, which are all entailed in e-tourism. There are several definition of e-tourism, but perhaps the best is given by Buhalis. He defines e-tourism as “E-tourism is the digitization of all the processes and value chains in the tourism, travel, hospitality and catering industries” [3]. The Internet has entirely changed the value chain of tourism, i.e., creation, marketing, distribution and consumption [4]. Thus, several firms have offered online tourism services and claimed that these services are far better than those of travel agencies. Since e-tourism is a new technology, its success needs the support of travel agencies, the government and people, especially in a country such as Iran. According to the Internet World State reports issued in December 2011, number of Iranian Internet users was 35,000,000 (46/9 % of Population), which indicates a leap in internet usage. However our research has shown that Iranian internet users are not inclined to use and utilize tourism services offered in e-tourism websites[5]. Consequently raising consumer intent to adopt e-tourism in Iran is important and therefore in this work we set to identify significant factors that influence tourist's intention towards using e-tourism services and websites in Iran.

In order to attract tourists, e-tourism companies should understand their customers and identify elements of their behavioral intention. In essence, it is necessary to recognize the factors that affect tourists' intention. This study will provide information on key factors that influence and affect tourist's intention toward the use of online tourism. There exist several theoretical and behavioral models, such as Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Innovation Diffusion Theory (IDT) and Decomposed Theory of Planned Behavior (DTPB), which are proposed to explain and predict behavior and intention toward use of technology.

We have chosen DTPB for the base of our study for two reasons. First, DTPB is an evolution of TRA and TPB. Secondly, DTPB is a decomposed model which encompasses both TAM and IDT. We have added several key factors to our base model that drive people to use e-tourism such as Curiosity and

Perceived Enjoyment.

2 Literature Review

Various theoretical approaches have been used to evaluate the determining factors of acceptance and intention toward use of new information technology [6]. These models are based on the Theory of Reasoned Action (TRA) [7] and on the Theory of Planned Behavior (TPB) [8]. The intention determinants are based on beliefs, Attitudes, Subjective Norm, and perceptions of behavioral control. The other model that also uses behavioral intention or behavior itself as dependent variables is Innovation Diffusion Theory (IDT), however the determinants are usually established according to the characteristics of the new technology [9]. In the following we look into the main features of the theoretical models which are used in the researches directed to study intention toward new technologies. These models are TRA, TPB and Decomposed TPB (obtained from TPB and IDT), which are primarily adapted from Taylor and Todd [10]. In addition we define some factors related to intention toward using e-tourism websites in particular.

2.1 Theory of Reasoned Action

The Theory of Reasoned Action (TRA) was developed by Martin Fishbein and Icek Ajzen (1975). The TRA has been used widely in technology adoption research as well as perception and prediction of behavioral intention. According to this theory, the intention of performing a special behavior is identified by a personal and a social factor [7]. The personal factor is represented by attitude towards the behavior and the social factor is represented by Subjective Norm [7]. In other words a person's voluntary behavior is predicted by her attitude toward the behavior and how she thinks that other people would evaluate her if she performed the behavior. A person's Attitude, combined with subjective norms, forms her behavioral intention. The TRA model is shown in Figure 1.

In this theory Attitude means the aggregation of weighed beliefs about a particular behavior. The weighs represent favorable or unfavorable evaluation of performing the behavior [7]. A person's attitude towards a behavior is determined by her salient beliefs and their evaluations. Attitude is a multidimensional concept with cognitive, affective and behavioral components [7]. The cognitive part refers to knowledge about an object, e.g. knowing that e-tourism is a convenient choice for traveling and having a good plan for trip. The affective component refers to extent of likes or dislikes of an object. Finally, the behavioral part relates to the behavioral intention and covert/overt activities toward the object (e.g. e-tourism). A person's cognition and effect of an object influence her



behavioral attitude toward the object.

According to Fishbein and Ajzen, Subjective Norms relate to “perceived pressures on a person to perform a given behavior and the person’s motivation to comply with those pressures” [7]. So, subjective norms indicate how the customer is influenced by the perception of some significant referents (e.g., family, friends, and colleagues, among others) of her behavior [11]. Social pressure can lead to perform (not perform) a behavior [12]. Several studies pointed out that subjective norms influence behavioral intention of consumers [13–15]. Many researchers have suggested that Subjective Norm is formed by both interpersonal and external sources’ impacts [16]. Internal impact refers to the influence by friends, family, and relevant in a social network, whereas external impact means the influence of mass media, such as television, newspapers, and the Internet [17]. In conclusion suggestions and information provided by friends, family members, mass media and tourism agencies greatly influence adopting the Internet as the main communication channel for tourism purposes.

The TRA has been used as the basis to test several technologies spanning a variety of subject areas, including e-commerce, e-banking, etc [18–20]. Based on this theory we define the following hypotheses:

H1: Attitude towards using e-tourism will be positively related to intention to use.

H2: Subjective Norms towards using e-tourism will be positively related to intention to use.

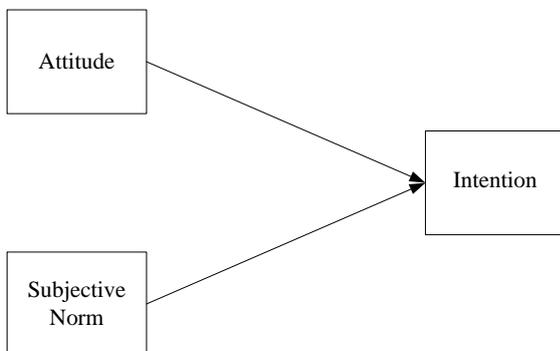


Figure 1. Theory of Reasoned Action

2.2 Theory of Planned Behavior

The Theory of Planned Behavior (TPB) is an extension of the TRA [12]. In social psychology, TPB is the common model that has been used in many diverse fields. It has been greatly used to describe human behaviors, and the intention to perform some actions or intentions to use a particular technology [21]. Recently the TPB has been used to predict online behavior such as the use of electronic services through the Internet [16].

Because of the limitations in TRA model, in particular direct behavior over which a person has perfect volitional control, TPB was introduced [12]. The TPB model not only emphasizes personal “attitude” toward behavioral intention as well as the effect of external factors on the subjective norm, but also argues that actions are determined by intentions which are affected by Perceived Behavioral Control (PBC). Perceived Behavioral Control refers to the perception of internal and external opportunities, resources, and power to control constraints on performing the behavior. The PBC was joined the model to account for situations where individuals lack complete control over their behaviors [8, 12]. The determinants of intention (Attitude, Subjective Norm, and PBC) are established by the structure of the underlying (attitudinal, normative and control) beliefs. The PBC is composed of Control beliefs that refers to the perceived difficulty (or ease) and that may affect behavior, and perceived facility conditions [12].

For our empirical case of e-tourism, the control beliefs refers to understanding how to perform transactions via electronic tourism (Self-Efficacy) [22]. Facility refers to externally based resource constraints, such as time, money and resources.

Based on the above explanation and TPB construct relations, the following hypothesis has been proposed:

H3: Perceived Behavioral Control will positively influence intention to use e-tourism web sites.

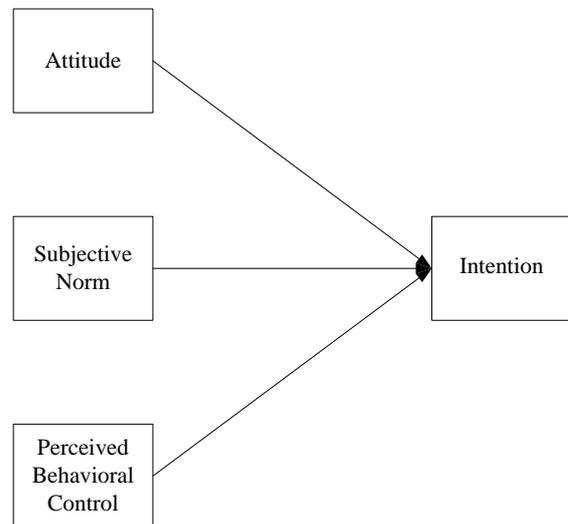


Figure 2. Theory of Planned Behavior

2.3 Decomposed Theory of Planned Behavior

In the context of information technology, Taylor and Todd in 1995 utilized the advantages in both concepts from Innovation Diffusion Theory (IDT) and Theory of Planned Behavior. They introduced a model known as



the Decomposed Theory of Planned Behavior (DTPB) to describe consumer behavior on a more extensive basis [23].

Taylor and Todd explained that the decomposed model of the TPB has better illustrative power than the previous two, which is TPB and TRA [10, 23, 24]. According to their studies DTPB has clearer and easier relationships among belief structures via decomposition of beliefs. Adoption of this model in different situations and in managerial aspects is more pertinent since it leads to decomposition of main factors and identification of particular factors that connect to intention and use of a new technology [25]. Therefore, because our empirical study is on e-tourism (a technological innovation in Iran) the DTPB model provides a more satisfactory description of intention toward its use.

According to decomposition of beliefs, Taylor and Todd indicated that on the basis of the IDT, the attitudinal belief is decomposed into three noticeable attributes, Relative Advantage, Complexity and Compatibility. These are factors of innovation that affect intention and adaptation [9, 10].

Relative Advantage (RA) refers to the rate of comparison among the innovation (e.g. e-tourism) and the other industries. In other words RA is used to indicate the extent to which an innovation is perceived better than the other industries via providing comparable benefits (such as economical and pictorial benefits, improvement, performance, convenience and satisfaction) [9]. Therefore, relative advantages of an innovation positively influence consumer attitude to cultivate tendency towards the innovation. As noted, electronic tourism allow tourists to search information about their destinations and compare different services of tourism without consuming a lot of money or time. And hence, it provides tremendous advantage and convenience to users.

Compatibility shows the degree to which the innovation is perceived as being compatible with the values, needs and experiences of individuals who adopts the innovation [9]. Intention toward an innovation is usually accrue when it is compatible with the job responsibilities, life style and value system of the individual [26]. Therefore, compatibility with an innovation positively influences consumer attitude which nurtures tendency towards innovation. For instance M.niina and et.al indicated that compatibility between mobile ticket services and consumer behavior lead to intention towards this industry and its adaptation [27]. Furthermore, study L.chen and et.al introduced compatibility as a positive influence on consumer attitude towards intention to use online stores [28]. As noted, electronic tourism is compatible with profile of the modern-day tourists, who are familiar with internet and its use through their life and hence this compati-

bility influences their attitude towards use it.

Complexity refers to the degree of difficulty to understand and use the innovation [9]. If an innovation for potential consumer is easy to learn and understand, there will be more possibility of intention towards using it. Therefore, Complexity has negative relationship with attitude and it is a significant factor in the outcome decision of innovations intention [29].

According to the DTPB, Attitude, Subjective Norm and Perceived Behavioral Control are the three constructs that determine behavioral intention. In above we described three factors that refer to the Attitude and in follow we want to decompose normative beliefs and perceived behavioral control.

Some studies have indicated that the decomposition of normative beliefs is proper to understand the relationship among effective factors for intention toward using technologies[30]. And as mentioned in explanation about TRA, this belief consists of internal and external factors.

Perceived Behavioral Control breaks down in two components. The first one is Facilitating Conditions, which refers to the availability of physical and technological resources (time, internet access, and etc), needed to perform a special behavior. In fact, if access to the internet applications related to tourism services for tourism is more feasible, tourists will prefer to use internet services for their travel. The second component is "Self-Efficacy", which relates to the ability and confidence to behave successfully in using technology [12, 13]. A person with self-efficacy skills in using computers and the Internet is more likely to use e-tourism. The DTPB model is shown in Figure 3.

According to this theory the hypotheses formulated are as follows:

H1a: Relative Advantage will be positively related to Attitude towards using e-tourism.

H1b: Compatibility will be positively related to Attitude towards using e-tourism.

H1c: Complexity will be negatively related to Attitude towards using e-tourism.

H2a: Social Influences are positively related to Subjective Norm.

H3a: Self Efficacy will be positively related to Perceived Behavioral Control towards intention to using e-tourism.

H3b: Facility Condition will be positively related to Perceived Behavioral Control towards intention to using e-tourism.

2.4 Curiosity

Curiosity is a tendency, considered as an innate emotion and natural intention by many people, which leads to a desire for performing some natural inquisitive behaviors. These behaviors include exploring, investigating, learning, and discovering a new object



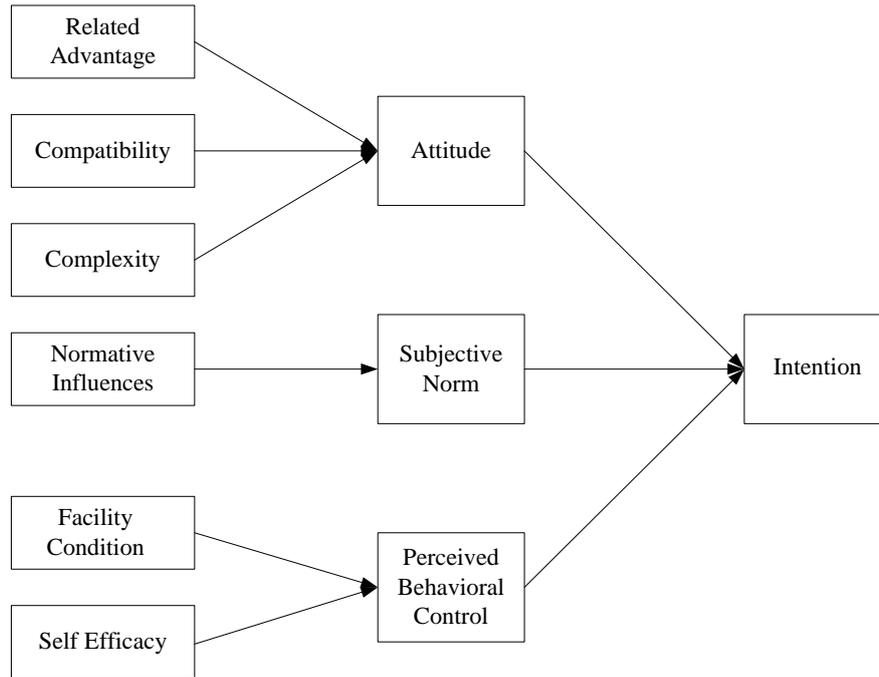


Figure 3. Decomposed Theory of Planned Behavior

and gathering information about it. This construct means having a tendency in investigating novel ideas about new sciences and technologies. The emotion can refer to a specific field of study or general courses [31].

In the literature, one can find evidence showing the relationship between curiosity and intention. For example, Dijk and Zeelenberg find that curiosity can motivate consumers to even buy a bundle of products without knowing its content [32]. Furthermore, Aziz and Slaiman find that curiosity is a factor that can affect the intentional behavior of travelers [15].

Accordingly we propose the following hypothesis:

H4: Curiosity will be positively related to intention towards using e-tourism websites.

2.5 Perceived Enjoyment

Perceived Enjoyment is a fundamental dimension of online shopping [33], especially in e-tourism where it causes to motivate customers. Some users accept e-tourism industry simply due to the amusing process and also based on their interests and hobbies. Enjoyment is a mental construct which is discovered as a positive effect on behavioral amusements. Therefore, this construct was added to the model to gain more understanding of the individual's behavior. In addition; when an individual has a favorable feeling toward using e-tourism, this feeling leads to curiosity and a sustained behavioral intention towards using it.

These days, using the internet for Iranian users is a phenomenon and it can be amusing. While the users are doing their daily routines, there is a variety of different websites on tourism that they can visit as well.

There are pictures and films of spectacular landscapes and residing hotels, favorable music, commercial logos, etc, which can drive users attention and offer pleasant feeling [33]. Davis et al. have shown that both external and intrinsic elements are effective on user's motivation to use information systems. Intrinsic elements refer to feelings such as enjoyment [34]. According to this theory the hypothesis formulated as follows:

H5: Perceived Enjoyment will be positively related to Curiosity towards using e-tourism websites

The estimated model is shown in Figure 4.

3 Research Methodology

We examined research hypotheses in the context of e-tourism websites. To investigate the effects of factors on intention towards using e-tourism website, we used a questionnaire survey.

3.1 Questionnaire design

In this study we used a questionnaire survey to test our theoretical model. In order to customize appropriate questionnaire we performed several phases. First in considering Decomposed Theory of Planned Behavior, we extracted various items from questionnaires in the literature of tourism and intention. Then several interviews with experts in tourism about factors were conducted. Finally we found and validated some key factors, in addition DTPB's factors, which derived people toward the use of e-tourism. These factors are Curiosity and Perceived enjoyment. The questionnaire was prepared in two languages, English and Persian



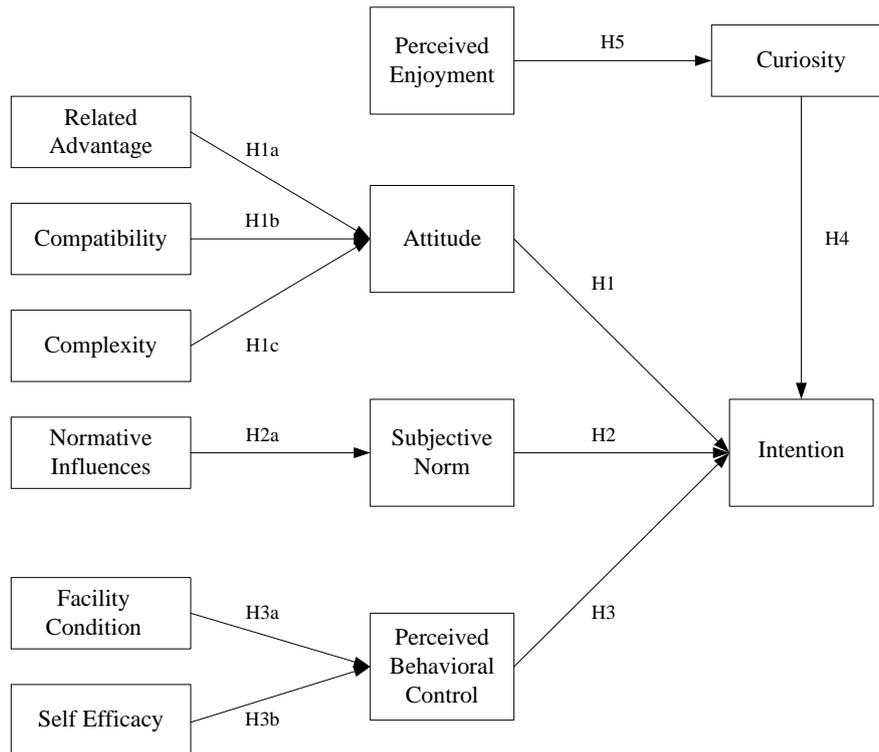


Figure 4. The estimated structural model

with two parts. The first part had questions related to constructs of our research model and second part indicated demographic questions about the respondent that participate in our survey. For measuring the constructs, and to maintain the consistency with prior study, we based our work on the previous researches in the context of e-commerce and online shopping [35, 36]. According to our model and the previous studies, the Attitude construct was measured by four items [29], the Subjective Norms construct was composed of four items [23, 37], the Perceived Behavioral Control was evaluated by three items [10, 23], and the Relative Advantages construct was assessed by five items [9, 10, 23]. Similarly the Compatibility and Complexity were each divided into three items [9, 23]. The Social Influence was evaluated by four items [6, 15]. Each of Self Efficacy and Facility Condition are derived by two items [23, 38]. The intention was evaluated by two items. All of the constructs that described are adapted by Taylor and Todd via DTPB model (1995a, 1995b). In addition, Perceived Enjoyment was composed by three items that it was accepted by moon [39]. Finally the Curiosity construct was composed into two items which we find according to our interview with tourists and e-tourism experts. For all items in this part of questionnaire we used 5-point Likert scale ranging from (1) “strongly disagree” to (5) “strongly agree”. The demographic part contains seven questions about sex, education, occupation, using internet and e-tourism.

3.2 Pilot test

A pilot test was conducted to recognize ambiguous questions. Then, a pre-test was done with 30 respondents for which we used Cronbach’s alpha to measure the data reliability. We employed factor analysis to measure convergence in items of each factor. Cronbach’s alpha for all constructs displayed in Table 1 (note that values above 0.7 are accepted [40]). Then a factor analysis was conducted to test whether the items produced the predicted number of factors and also, and whether each items was loaded on its proper factors. The result of this experiment shown that all items of each construct were highly related and the items of different factors had low cross loading on other constructs. Therefore it concluded good convergent and discriminate validities.

3.3 Data collection

The population of this study was the potential travelers in Iran, and data collection was done physically. The purpose of this research is to explain and predict user intention and utilization of e-tourism websites. The respondents were asked to analyze any tourism related website of their own choice. Surveys distributed between 420 people in hotels, airline, entertainment places, etc. From the collected responses this numbers Returned questionnaires with incomplete or invalid answers were eliminate, and 259(61.6%) valid and complete responses were received. (note that A sam-



ple size of 150 and above is deemed sufficient for scale development [35].) In terms of demographics, 56.8% of the respondents were male, about 37.8% of them were between 18 and 24 and 34% were between 25 and 34 years of age. About 57.5% of the sample population had a Bachelor's degree, 34.1% were unemployed and 24.3% were student. About 95.4% had experience of using internet more than one hour in a week. Approximately 45% of them used e-tourism websites.

4 Data Analysis

Analyzing the collected data was done in two-step. First, we apply measurement model to measure convergent and discriminate validities. Then, we tested the causal structure of the proposed model using the Structural Equation Modeling (SEM) technique supported by linear structural relation (LISREL 8.54).

4.1 Measurement Model

Convergent validity is used to evaluate the extent to which some measures that theoretically should be related to each other are actually observed to relate to each other. To remain consistent with prior studies, we used factor loading, Composite Reliability (CR), and the Average Variance Extracted (AVE) measures to examine the convergent validity of the measurement items. The results are shown in Table 1. All items have factor loadings above 0.5; they ranged from 0.57 to 0.89.

“The CR of potential variables in this study model indicates the inner consistency of facet indicators. High reliability stands for high-inner consistency of these indicators”. Fornell and Larcker suggest a CR value of more than 0.7 [19]. As Table 1 shows, the CR value of each variable is more than 0.7, indicating an excellent inner consistency of the model. “The average variance extracted (AVE) of potential variables reflects the average variance explain ability of each measuring variable for the potential variables. The higher the AVE, the higher the benefit of potential variables will be”. As shown in Table 2, the AVE values of this study model are higher than 0.5, the standard value suggested by Fornell and Larcker. Besides, the discriminate validity is determined by verifying that the average variance of each variable is greater than the relationship value of each pair of variables by 0.5 [41, 42]. The average variance of the variables in this study is greater than the relationship value of each pair of variables, indicating sufficient discriminate validity.

Therefore, all three requirements for convergent validity (factor loading, Composite Reliability, and the Average Variance Extracted) were demonstrated. We also used Cronbach's alpha to measure internal consistent reliability of each construct. The Cronbach's alpha for all constructs of proposed model presented

in Table 1.

Discriminate validity describes the extent to which a construct is truly distinct from other constructs. Regarding to discriminate validity, the square root AVE estimates in each construct should be larger than correlation coefficients between the construct and any other constructs. In Table 2 diagonal values indicate square root AVE of each construct and other values are correlation significance between two constructs. All diagonal values are greater than other values. Therefore, discriminate validity is demonstrated.

We assessed the overall goodness-of-fit using the chi-square test. The chi-square test assesses the adequacy of a hypothesized model in terms of its ability to reflect the variance and covariance of the data. Since it is sensitive to sample size, other fit indices (namely *GFI*, *AGFI*, *CFI*, *NFI*, and *RFI*) were considered in conjunction with the chi-square. These statistics, which are shown in Table 3, proposed that our research model has obtained an adequate model fit. The other fit indices, except *AGFI*, indicated that our proposed model obtained an adequate model fit. The low *AGFI* values may have been due to the small sample size used[43].

4.2 Hypotheses testing and Path analysis

All hypotheses presented in the research were tested using the Structural Equation Modeling (SEM) approach. Hypothesized relationships were also simultaneously tested via path analysis. Figure 5 and Table 4 show the path coefficients in the research model.

In this research, the Intention to use e-tourism website was predicted by Attitude ($\beta = 0.12, p < 0.05$), Subjective Norm ($\beta = 0.35, p < 0.001$), Perceived Behavioral Control ($\beta = 0.32, p < 0.01$) and Curiosity ($\beta = 0.49, p < 0.001$); these variables explained 55% of the variance of Intention ($R^2 = 0.55$). Attitude was predicted by Relative Advantages ($\beta = 0.42, p < 0.001$), Compatibility ($\beta = 0.26, p < 0.01$) and Complexity ($\beta = 0.05, p > 0.05$) so *H1c* was rejected; these variables together explained 49% of the variance of Attitude ($R^2 = 0.49$). Also Subjective Norm was predicted by Social Influence ($\beta = 0.87, p < 0.001$); these variable explained 76% of the variance of Subjective Norm ($R^2 = 0.76$). In addition Perceived Behavioral Control was predicted by Facility Condition ($\beta = 0.92, p < 0.001$) and Self Efficacy ($\beta = 0.31, p < 0.01$); these variables together explained 53% of the variance of Perceived Behavioral Control ($R^2 = 0.53$). Finally Curiosity was predicted by Perceived Enjoyment ($\beta = 0.88, p < 0.001$); these variable explained 74% of the variance of Curiosity ($R^2 = 0.74$). Therefore, all of hypotheses were supported except of *H1c*.

In order to obtain deeper scrutiny, we assess direct, indirect and total effects of variables on Intention to use e-tourism websites. According to the indirect ef-



Table 1. Convergent validity and construct reliability

Construct	Questionnaire items	Factor loading	t-Value	Composite reliability (CR)	Average variance extracted	Cronbach alpha
Attitude	ATT1	0.9	16.89	0.8516	0.5974	0.848
	ATT2	0.9	14.32			
	ATT3	0.64	11.28			
	ATT4	0.60	10.35			
Subjective Norm	SN1	0.67	5.03	0.8343	0.5594	0.821
	SN2	0.82	5.20			
	SN3	0.80	5.20			
	SN4	0.69	5.00			
Perceived Behavioral Control	PBC1	0.81	5.27	0.7918	0.5317	0.720
	PBC2	0.70	4.82			
	PBC3	0.67	5.85			
Relative Advantage	RA1	0.86	7.34	0.8663	0.5704	0.735
	RA2	0.89	6.03			
	RA3	0.88	11.18			
	RA4	0.80	12.58			
	RA5	0.93	12.04			
Compatibility	COM1	0.80	14.17	0.8236	0.6092	0.805
	COM2	0.80	13.99			
	COM3	0.74	11.60			
Complexity	CX1	0.70	10.99	0.7819	0.5451	0.700
	CX2	0.81	9.98			
	CX3	0.70	8.36			
Social Influences	SI1	0.84	7.34	0.7734	0.5226	0.717
	SI2	0.70	7.69			
	SI3	0.61	6.06			
Facility Condition	FC1	0.82	10.16	0.7580	0.5161	0.705
	FC2	0.61	7.31			
Self Efficacy	SE1	0.83	11.74	0.8064	0.6481	0.722
	SE2	0.80	11.03			
Curiosity	CUR1	0.84	6.32	0.8070	0.6492	0.791
	CUR2	0.77	6.09			
Perceived Enjoyment	PE1	0.79	8.00	0.8139	0.5934	0.72
	PE2	0.78	9.59			
	PE3	0.74	10.50			
Intention	INT1	0.75	7.05	0.8079	0.6510	0.817
	INT2	0.86	7.18			



Table 2. Discriminant validity

Construct	ATT	SN	PBC	RA	COM	CX	SI	FC	SE	CUR	PE	INT
ATT	0.772											
SN	0.262	0.747										
PBC	0.132	0.298	0.729									
RA	0.545	0.336	0.236	0.755								
COM	0.432	0.438	0.318	0.407	0.780							
CX	0.031	0.122	0.228	0.114	0.122	0.738						
SI	0.108	0.466	0.197	0.186	0.233	0.081	0.722					
FC	0.236	0.337	0.480	0.226	0.339	0.081	0.280	0.718				
SE	0.182	0.312	0.391	0.235	0.351	0.212	0.157	0.285	0.805			
CUR	0.254	0.278	0.041	0.183	0.212	0.041	0.164	0.088	0.265	0.805		
PE	0.242	0.152	0.028	0.126	0.154	0.041	0.081	0.097	0.194	0.499	0.770	
INT	0.369	0.424	0.195	0.333	0.344	0.055	0.151	0.248	0.392	0.384	0.241	0.806

Table 3. Summary of fit indices.

Fit Indices	Structural Model	Recommended Value
RMSEA	0.054	< 0.08
X^2	1182.64	
Df	698	
X^2/Df	1.6943	< 2.5
CFI	0.93	> 0.9
IFI	0.94	> 0.9
GFI	0.82	> 0.8
NFI	0.87	> 0.9
NNFI	0.93	> 0.9
RMR	0.045	< 0.05

fects of variable listed in Table 5. Direct, indirect and total effects - estimates, It is noteworthy that Perceived Enjoyment, Facility Condition, Social Influence and Self Efficacy have high indirect effect on Intention to use e-tourism websites.

5 Discussion

This study explores the issues of customer’s intention to use e-tourism websites. We proposed a model based on DTPB for the e-tourism context. The results of this study help the practitioners and marketing managers to prepare strategic plans and design effective websites

with powerful CRM strategies to persuade customers to use e-tourism websites. Our results indicate that Attitude towards behavior; Subjective Norm, PBC and Curiosity have direct significant positive relationship with behavioral intention to use e-tourism. The direct positive relationship of Attitude, Subjective Norm and PBC is in line with the results of other researches [10, 12, 44–47].

From 11 hypotheses presented in this research, 10 were found significant. The R-square of 55% for intention to use e-tourism, R-square of 46% for Attitude, R-square of 76% for Subjective Norm, R-square of 53% for PBC and R-square of 74% for Curiosity toward use



Table 4. Path coefficients and significances of hypotheses

Hypotheses	Path Coefficient	T-Value	Support
<i>Attitude → Intention</i>	0.12	2.01	Yes
<i>Subjective Norm → Intention</i>	0.35	3.30	Yes
<i>Perceived Behavioral Control → Intention</i>	0.32	2.97	Yes
<i>RelativeAdvantages → Attitude</i>	0.42	4.95	Yes
<i>Compatibility → Attitude</i>	0.26	3.22	Yes
<i>Complexity → Attitude</i>	0.05	0.79	No
<i>SocialInfluences → SubjectiveNorm</i>	0.87	9.24	Yes
<i>FacilityCondition → Perceived behavior control</i>	0.92	5.23	Yes
<i>SelfEfficacy → Perceivedbehaviorcontrol</i>	0.30	2.29	Yes
<i>Curiosity → Intention</i>	0.49	3.97	Yes
<i>PerceivedEnjoyment → Curiosity</i>	0.88	7.48	Yes

Table 5. Direct, indirect and total effects estimates.

Predictors	Criterion variable		
	Intention		
	Direct Effects	Indirect Effects	Total Effects
Attitude	0.12		0.12
Subjective Norm	0.35		0.35
Perceived Behavioral Control	0.32		0.32
Relative Advantages		0.03	0.03
Compatibility		0.02	0.02
Complexity		0.01	0.01
Social Influences		0.29	0.29
Facility Condition		0.34	0.34
Self Efficacy		0.11	0.11
Curiosity	0.49		0.49
Perceived Enjoyment		0.44	0.44



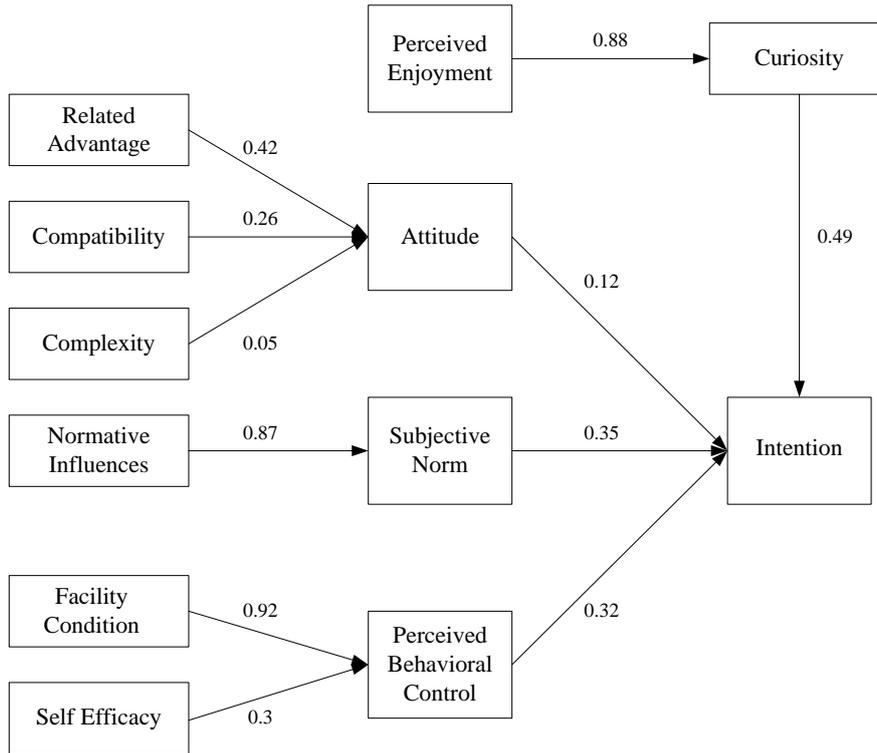


Figure 5. Research model (* p < 0.05, ** p < 0.01, *** p < 0.001)

e-tourism indicate the overall explanatory power of our research model. This implies that the added constructs to DTPB has formed a new model that indeed is competent to explaining a relatively high proportion of variation of intention to use e-tourism websites. Our results show that Curiosity has the most influence on intention. Curiosity is followed by Subjective Norm, Perceived Behavior Control, and Attitude as other important determinants of the e-tourism intention, respectively. This may be due to the fact that the e-tourism websites have been recently started operating in Iran; although, Internet has been introduced to this community more than two decades ago.

Our results indicate that Curiosity is the most effective factor to intention towards using e-tourism websites. This research shows that almost all respondents (95.4%) use Internet in their daily life, but not all of them have experience in using e-tourism. Therefore, through the use of Internet they are likely to encounter new technologies and receive new information. Providing useful information, advanced search-ability, price comparison, easy contact facilities, etc can elevate the curiosity tourists, hence they are more likely to use e-tourism. Curiosity is affected by perceived enjoyment. When users feel that use of e-tourism is a joy, they get curious about it. Preparing multi-media contents, good navigation, attractive pictures and videos can help design an enjoyable website.

This study indicates the relative importance of the

Subjective Norms and Social Influence on potential users with no prior experience. Accordingly, it is concluded that the use of e-tourism could be increased if the tourist perceive that the majority of influential relatives and friends expect her to use e-tourism. Even though information about e-tourism is available, yet it is incomplete in some aspect and consequently most Iranians do not use e-tourism in regular bases. With the incomplete information, potential consumers would tend to rely on information from referent group or individuals as a trusted information source about e-tourism. With positive information and social pressure potential consumers could be influenced by the referent group or individuals, and they are more likely to have behavioral intention to use e-tourism. In addition this finding about social influence has implication for marketers. It shows that marketing tools such as advertisements in media or press play important roles in forming the intention of the potential users of the e-tourism websites. The e-tourism websites are developed during recent years in Iran, such as www.tourismiran.com. Thereby, most of the passengers were even not aware that such a system exists or they prefer to use traditional tourism systems (tourism agencies). This suggests that efficient advertisement programs in press and media about the e-tourism would motivate tourists to use e-tourism.

Perceived Behavioral Control was found to be another important antecedent of the e-tourism intention.



This result was expected since tourists cannot use the e-tourism website if they do not have the resources and the knowledge necessary for using the website. The weights of facilitating condition towards PBC was more than the weight of Self Efficacy towards it (in absolute terms), indicating the importance of Facilitating Condition as compared to Self Efficacy. Nowadays many Iranians use Internet and most of them have confidence to use new internet technologies. In addition they should have access to computer, internet and payment cards in every situation that can be used for internet purchase. Correspondingly, the government and travel agencies can develop these resources and have a leader ship role in the improvement of e-tourism industry.

Attitude was found to have a significant positive impact on intention. In our study, only 45 percent of the respondents had already adopted e-tourism. So the other factors are more importance than positive attitude towards intention of using e-tourism. Among the antecedents of the Attitude, Relative Advantages had the strongest effect on Attitude. Relative Advantages is followed by Compatibility which also has significant positive effect on Attitude, but our study shows that the Complexities does not have significant effect on Attitude. Therefore and according to our results, we may infer that people understand the advantages of e-tourism; many have yet to try it. As a result, they are able to perceive that e-tourism is compatible with their individual lifestyles or values. Furthermore, they might not have felt that interaction with e-tourism websites is difficult or complex.

6 Conclusion

This study explores the intention towards using e-tourism and identifies affecting factors from a sample of Iranian tourists. There exist several studies that use DTPB model based on diffusion of innovations theory to discuss the intention towards E-tourism in comparison to traditional well-known TRA. The purpose of our study is to use and refine DTPB in order to investigate factors that motivate intention towards e-tourism. The findings of this research indicate that the DTPB model is a good predictor of behavior for inexperienced users of the e-tourism. Our results suggest that decomposing the belief structures into multi-dimensional structures improve our intellect of these relationships. From the commercial viewpoint, E-tourism has become more and more necessary and will be broadly accepted. Thus, how to incline customers towards e-tourism and build, maintain, and enhance customer relationships is an important issue in a competitive environment. In conclusion, these results have implications for research and practice. The results of this study indicate that it would be a

valuable strategy for marketers to reconsider how to educate potential customers and promote E-tourism websites. We examined Curiosity and Perceived Enjoyment as factors which influence intention towards using e-tourism, in addition to the DTPB model's factors. This model provides a good variance in the Subjective Norms, Perceived Behavior Control, Curiosity, Attitude and the Intention to use e-tourism. The results showed that customers' intention to use e-tourism websites depends on Curiosity, Subjective Norm, Perceived Behavior Control and Attitude (Respectively). E-tourism is a new technology in Iran and our results indicate that the Curiosity feeling of Iranians, the normative beliefs on their behavior and mass media have more profound effect on their intention towards using e-tourism. From the managerial point of view, Iranian Tourism Company should first focus on improving media coverage and advertisement as well as user incentives. These agencies should also identify the referent groups that influence the tourists' decision to use e-tourism websites.

There are some limitations in this research. First, e-tourism is a new technology in Iran; therefore, we investigated the predictor of intention to use e-tourism and not the actual use. Although previous research states that intention to use is the most impotent predictor of actual use, but we think the other factors may also influence the actual use. Therefore, we suggest that in further study one should consider the actual use of e-tourism websites. Approximately 45% of the variance in the behavioral intention remains unexplained. Future research should use more detailed model in cooperating additional significant factors, such as satisfaction and loyalty incentives, beyond those mentioned in this study for explaining user intention toward using e-tourism.

The respondents were selected randomly from tourists who had never experienced using e-tourism websites. So in future we can conduct studies to compare the adoption factors between the experienced and inexperienced users of the e-tourism websites. Despite this, since our study was not limited to respondents experienced with e-tourism, it was difficult to measure their efficacy and the facilitating conditions. Therefore further research is needed to understand the group differences for the relationship of PBC and intention adoption between pre-behavior and post-behavior users. Finally, the nature of networks that influenced the evolution of e-tourism may have an effect upon attitude, even on the adoption of e-tourism. This may provide a meaningful research area for the future.



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