# The Acceptance and Behavior Towards E-Insurance

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# ABSTRACT

The expansion of ICTs (information and communication technologies) and the intensification of competition have induced firms to sell online. Insurance companies, for instance, have been urged to rely on such new technologies to be able to strengthen their presence on the market. This research used the technology acceptance model (TAM) and the theory of planned behavior (TPB) to study the factors that influence the e-insurance adoption. This study gathers data through a face-to-face administered survey involving insured persons. The hypotheses and the model were tested using AMOS co-variance-based structural equation modeling. The findings showed that perceived ease of use, subjective norms, perceived behavioral control, and attitude are the predominant predictors of the intention to buy insurance online. Those findings provide decision-makers in insurance companies with information useful in designing online offerings, creating a positive attitude towards e-insurance, and attracting customers.

#### **KEYWORDS**

E-Insurance, Perceived Behavior Control, Perceived Ease of Use, Perceived Usefulness, Subjective Norms, TAM/TPB

## INTRODUCTION

Regarding the complexity of insurance services and customer's feelings of the need for professional support, the online technologies provide insurance companies the opportunity of customizing their offers thanks to a wide array of interactive Internet-based tools. For instance, e-insurance customers might obtain several insurance services at home, such as purchasing policies, requesting quotes, calculating coverages, and performing simulations in a personalized way (Ettis & Haddad, 2019). E-commerce is a development springboard that offers benefits to firms and consumers. The Internet provides benefits in terms of cost, energy, and time (Toukabri et al., 2015).

E-insurance is a topic that has been little studied (Ettis & Haddad, 2019; Pahuja & Chitkara, 2016). Moreover, the studies were conducted in Western countries and there is a paucity of such research in emerging market economies. The limited number of investigations of e-commerce adoption in the MENA region was related to e-banking, telecom services, and government agencies when they omitted the e-insurance sector (Alzahrani, 2019; Hamad, Elbeltagi & El-Gohary, 2018). This research, focus on the MENA market region to elucidate the determinants of e-insurance acceptance.

DOI: 10.4018/IJEBR.2021040102

This article, originally published under IGI Global's copyright on April 1, 2021 will proceed with publication as an Open Access article starting on March 11, 2024 in the gold Open Access journal, International Journal of E-Business Research (IJEBR) (converted to gold Open Access January 1, 2022) and will be distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/ licenses/by/4.0/) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

In 2017, the MENA insurance marketplace reaches a growth in premiums about 5%, which attaint 39.29 billion USD (Swiss Re Institute sigma No 3/2019). Specifically, according to the report of FTUSA (2018), the premiums of the insurance industry in Tunisia has increased in 2016 by 10.65%. Within, the paid claims recorded an increase of 2.78%. The result for the year improved in 2017 with a surplus of more than 61%. The consolidated balance sheets were released in 2017 a profit rise of 61.4%. In the same vein, in Saudi Arabia, insurance is an important branch of the economic and monetary market (Toukabri et al., 2016). The growth rate of the insurance gross written premiums in Saudi Arabia reached 8.50% in 2019 (Aljazira capital, 2019), and the contribution of the insurance sector to non-oil GDP is 2% (Albilad capital, 2017). Also, a revolution is expected in the sector with the new law authorizing women to drive. United Arab Emirates (UAE), Saudi Arabia and Morocco remained at the highest of the classification in the MENA region. Then, these three countries detent 68.6% of the total premium, when Qatar occupies fourth with a market share of 8.74%. Moreover, the UAE and Saudi Arabia consist of the largest insurance markets in the Middle East contracted in 2018 (Swiss Re Institute sigma No 3/2019).

Despite the explosive growth of insurance transactions over the last years, the e-insurance share remains below expectations and the insurance industry has been slow to use e-commerce to rise e-insurance adoption and an insufficient sales amount is actually being spent online in these countries. The explaining factors are various. E-insurance adoption is still an emerging issue and governments' encouragements are in their beginning. The regulation of e-insurance is missing or has not yet been implemented. More importantly, most insurance companies do not deliver any real online value for customers, interfaces are poorly designed, less interactive, less trustworthy, and complicated. Very few companies show an e-insurance strategy. The significant importance of the insurance industry in the MENA market is persuasive to take advantage of the new information and communication technologies.

This paper explores factors affecting e-insurance adoption. This research builds on the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB) to propose a theoretical model to explain customers' intention to use e-insurance services. Accordingly, the influencing effects of perceived usefulness, perceived ease of use, subjective norms, perceived behavior control, and attitude are examined. This paper contributes to the existing literature by providing insights into the role of these factors in an e-insurance context. The findings will provide recommendations to insurance vendors on how to increase customers' use of online insurance services than conventional offline services.

We begin by exposing the theoretical background of the study. Next, we present the research model and provide supporting literature to the hypotheses and relationships of the model variables. After, we present the methodology and discuss the results. Then, we provide managerial implications. Finally, we expose the research limitations and suggestions for research.

## BACKGROUND

It is obvious that the Internet facilitates communication and transaction between companies and their target market (Alba et al., 1997; Forsythe & Shi, 2003). Nevertheless, Chiang & Dholakia (2003, p. 178) recognized that "In addition to making a product purchase decision (transaction), consumers must often decide on a shopping medium, which best satisfies their information needs and wants". Insurance services are complex in nature, therefore, the Internet can broadly contribute to satisfying such needs and wants.

The acceptance of the new technology online weighs on the consumer's perception of the transactions on the Internet compared to shopping in-store. For instance, Forsythe & Shi (2003) consider that there are many factors affect perceived benefits and risks of shopping online or instore. Several users of the Internet do not buy online since they feel the transactions online are precarious, uninhibited, difficult to use and insecure (Gefen et al., 2003). From there, several models and background theories were proposed to understand the factors affecting consumer adoption of e-shopping, e-banking, and e-payment. The most popular are the Technology Acceptance Model (TAM) (Davis, 1989), Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003), Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975), and Theory of planned behavior (TPB) (Ajzen, 1985).

This research attempts to understand the e-insurance adoption by focusing on constructs from the Technology Acceptance Model (TAM) (Davis, 1989) and the Theory of planned behavior (TPB) (Ajzen, 1985). These two theories are widely used to test acceptance of many technologically based systems such as e-banking (Lee, 2009), mobile banking (Giovanis et al, 2019), online auctions (Bosnjak et al., 2006), and social media for transactions (Hansen, Saridakis, Benson, 2017).

## THE TECHNOLOGY ACCEPTANCE MODEL (TAM)

The TAM is the first model that appreciates the worker's acceptance of ICT's at work (Davis, 1989). This model is founded on social psychology. The TAM requires causal linkages between two key beliefs (perceived usefulness and perceived ease of use on the one hand, and the attitude, intention toward actual technology-adoption behavior on the other.

In the TAM, perceived usefulness is defined as the degree to which the person believes that the use of technology will increase the performance (Davis et al., 1989). Perceived ease of use is defined as the degree to which the person believes that the use of technology requires no effort (Davis et al., 1989). These variables influence the attitude of the user of the technology. Attitude is "the degree of evaluative affect that an individual associated with using the target system" (Davis, 1993, p. 476). The behavioral intention is influenced by attitude and perceived usefulness.

Vijayasarathy (2004) confirmed the TAM's ability to measure online shopping behavior. Even so, the TAM remains limited and needs to be extended. That's why Legris et al. (2003) and Venkatesh & Davis (2000) judged it necessary to add other fields to cover the environment variables. Moreover, to make up for the variety of user task environments, Meuter et al. (2000, p. 50) described the Self-Service Technology (SST) as "technological interfaces that enable customers to produce a service independent of direct service employee involvement". Therefore, Curran & Meuter (2005) advanced the SST to cover the TAM by comprising the need for interaction and risk, in the context of SST adoption. Likewise, several works have confirmed the validity of the TAM (Sejin & Leslie, 2009). Previously, the literature demonstrated the parsimony of this model in several technology-related circumstances (O'Cass & Fenech, 2003).

# THE THEORY OF PLANNED BEHAVIOR (TPB)

The TPB was established as a postponement of the TAM (Fishbein & Ajzen, 1975 and Ajzen, 1985). Moreover, Ajzen (1991) mentioned that the TPB integrates three constructs that are Attitude, Subjective Norms (SN) and Perceived Behavioral Control (PBC) to explain the consumer's intention. Attitude is the affective positive or negative feeling toward the evaluation of the implementation of a behavior (Fishbein & Ajzen, 1975). Subjective norms refer to "the person's perception that most people who are important to him think he should or should not perform the behavior in question" (Fishbein & Ajzen, 1975, 302).

The theory of planned behavior (TPB) tends to complete the limits of the theory of reasoned action (Fishbein & Ajzen, 1975, 302) considering the behavior is under the control of the individual and the intention is the only determinant of behavior (Cao & Zhang, 2004). It has been used to understand the consumer's behavior. After that, the TPB has been developed into the Extended Theory of Planned Behavior (ETPB) (Shih & Fang, 2004).

The TPB model relevance has been approved in psychology (Ajzen & Madden, 1986) and marketing literature (Taylor & Todd, 1995). The behavior being a function of attitude, behavioral control, and social norms is a well-accepted relationship in consumer research.





# **RESEARCH MODEL AND HYPOTHESES**

#### **Research Model**

Relying on a combination of TAM and TPB, we propose the following conceptual model (Figure 1). The model tests the relationships between constructs depicted in seven hypotheses. These constructs consist of perceived usefulness, perceived ease of use, subjective norms, and perceived behavioral control as independent variables. Attitude towards e-insurance and intentions to use e-insurance as the dependent variables.

## **Hypotheses About TAM Constructs**

The acceptance of transactions by the Internet depends on many variables. On one hand, the literature demonstrated that consumers prefer online purchasing to evade employees or other customers (Meuter et al., 2000). On the other hand, researchers see that consumers choose a physical channel to be certain about their payment and the quality of their acquisitions (Pavlou, 2003; Kleijnen et al., 2009). Didier & Alastair (2007) and Forsythe & Shi (2003) noticed that the attitude towards the perceived risk and benefit of shopping on the Internet influence online shopping behavior.

The TAM model and other empirical studies (Davis, 1989; Dishaw & Strong, 1999) have clearly supported the relationship between perceived usefulness and the intention of using technology. So we could expect that the perceived usefulness will positively influences the attitude toward the use of e-insurance services.

The relationship between perceived usefulness and perceived ease of use of technologies and their effects on attitude has been proven in several empirical investigations (Venkatesh & Davis, 2000; Venkatesh & Bala, 2008). Also, it has been proven that the easier the system to use, the more useful it will be (Davis, 1989; Kesharwani & Bisht, 2012).

Within the TAM, the intention is a function of attitude and perceived usefulness (Alsajjan & Dennis, 2010). Previous researchers have attempted to explain intentions by attitude (Yang & Jolly, 2009; Venkatesh et al., 2003; Yang & Yoo, 2004; Hausman & Siekpe, 2008). Lin & Lu (2000), Gefen et al. (2003) and Fusilier & Durlabhji (2005) showed that attitude increases positive or negative feelings about behaviors. If consumers tend to take up a skeptical attitude towards e-insurance, they might avoid searching for information about these products online and buying them via the Internet. Therefore, the following hypotheses are proposed:

H1: Perceived usefulness positively influences the intention to use e-insurance.

- H2: Perceived usefulness positively influences attitude towards the use of e-insurance.
- H3: Perceived ease of use positively influences the perceived usefulness of e-insurance.
- H4: Perceived ease of use positively influences attitude towards the use of e-insurance.

H5: Attitude positively influences the intention to use e-insurance.

#### Hypotheses About TPB Constructs

Subjective norm is included as a direct determinant of behavioral intentions in the TPE theory (Fishbein & Ajzen, 1975). Yang & Jolly (2009) found that intentions are related to subjective norms. It is reasonable to consider if consumers believe that their family and friends might approve a behavior, they should adopt it to gain social recognition and belonging.

In the TPE theory, the perceived behavioral control stimulates the behavior (Fishbein & Ajzen, 1975). Taylor & Todd (1995) asserted that there is a significant relationship between subjective norms and intention and attitude. Furthermore, Venkatesh & Davis (2000) tested the impact of social norms on the intention to use the Internet. Featherman & Pavlov (2003) asserted that social risks decrease the likelihood of the purchase of the product or service.

Therefore, the intention of using e-insurance services might be a function of attitudinal, behavioral control, and social norms. The idea that social norms and perceived behavioral control have a weak or insignificant effect on intended e-insurance behavior appears to be unreasoned. Then, the two last hypotheses are formulated as follow:

**H6:** Subjective norms positively influences the intention to use e-insurance.

H7: Perceived behavioral control positively influences the intention to use e-insurance.

## METHODOLOGY

## **Data Collection and Sampling**

A questionnaire was conducted to collect data. The questionnaire was administrated face-to-face to respondents before they leave their insurance company. The objective is to obtain the immediate, real, and non-retrospective opinion of subjects while the experience of insurance services purchasing is taken place. Besides, the face-to-face administration allowed the participants to demand support if they did not understand how to answer a question. The questionnaire consists of scales measuring the constructs of the research model and socio-demographic variables. A convenience sampling method was used to constitute the sample.

#### **Measurement Scales**

As shown in Table 1 the questionnaire comprises six scales. The first two scales gathered information relating to perceived usefulness and perceived ease of use, wherewith respectively enclose four items and six items. These scales were adopted from Davis (1989). The third scale measures the subjective norm, adopted from Zolait (2010) with its six-items. The fourth scale assesses the perceived behavioral

#### Table 1. Measurements

Constructs	Scale				
Subjective norm Shih & Fang (2004)	<ol> <li>Most people, who are important to me, would think that I should use e-insurance to get insurance services.</li> <li>The people who influence my decisions would think that I should use e-insurance.</li> <li>Most people who are important to me would think that I should try out the insurance's website to get access to the company's e-insurance.</li> <li>The people who influence my decisions would think that I should try out the company's website to get access to the insurance services.</li> <li>Most people who are important to me would think that using e-insurance is a good idea.</li> <li>Most people who are important to me would think I should use e-insurance.</li> </ol>				
Perceived behavior control Taylor & Todd (1995)	<ol> <li>I would be able to use e-insurance.</li> <li>I have the resources necessary to make use of e-insurance.</li> <li>I have the knowledge necessary to make use of e-insurance.</li> <li>I have the ability to make use of e-insurance.</li> <li>Using e-insurance would be entirely within my control.</li> </ol>				
Perceived ease of use Davis (1989)	<ol> <li>Learning to operate e-insurance would be easy for me</li> <li>I would find easy to get e-insurance to do what I want it to do</li> <li>My interaction with e-insurance would be clear and understandable</li> <li>I would find e-insurance to be flexible to interact with</li> <li>It would be easy for me to become skillful at using e-insurance</li> <li>I would find e-insurance easy to use.</li> </ol>				
Perceived usefulness Davis (1989)	<ol> <li>I think that using the e-insurance would enable me to accomplish my tasks more quickly.</li> <li>I think that using the e-insurance would make it easier for me to carry out my tasks.</li> <li>I think the e-insurance is useful.</li> <li>Overall, I think that using the e-insurance is advantageous.</li> </ol>				
Attitude Kang et al. (2006)	<ol> <li>Foolish/wise</li> <li>Useless/wise</li> <li>Waste of time/wise use of time</li> <li>Valuable/worthless</li> <li>Good/bad</li> </ol>				
Intention to use e-insurance Chin et al. (2003)	<ol> <li>I presently intend to use e-insurance regularly: (Seven-point scale using extremely likely, quiet, slightly, neither, slightly, quiet, extremely unlikely)</li> <li>My actual intention to use e-insurance regularly is: (Seven-point scale using extremely strong, quiet, slightly, neither, slightly, quiet, extremely weak)</li> <li>Once again, to what extent do you at present intend to use e-insurance regularly? (Eleven-point scale from 0 to 10 with anchors Definite No, Definite Yes)</li> </ol>				

control by mean of the five items scale of Taylor & Todd (1995). Moreover, these previous scales were a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The fifth scale gathers information about the attitude towards e-insurance by the five-item scale of Kang et al. (2006). The sixth scale evaluates the intention to use e-insurance by means of the three items scale of Chin et al. (2003). The scales measuring the attitude and intentions were seven-point semantic differential scales. Nominal scales were also used to collect basic information about respondents' socio-demographic characteristics such as gender, age, education, and occupation. The research scales

are shown in the appendix. Before administration, the questionnaire was pre-tested and validated with 20 subjects belonging to the sample.

# RESULTS

#### Sample Composition

A total of 280 valid questionnaires were obtained after removing incomplete responses and missing data. 43% are female and 57% are male. Most respondents were aged between 25 years and 44 years (77.6%). The important number of interviewees is highly educated with a university-level (82.5%). Also, the occupations of respondents were high-level managers (16.5%), intermediate level managers (17.5%), intellectual occupations (18.6%), independents (16.8%), and student (10.2%). In the sample, 87% has a computer at home and 82% has an Internet connection at home. Nevertheless, 81% of the subjects did not have experience using e-insurance (Table 2).

Demographics/ e-insurance use	Percent (%)
Gender	
- Female	43.2
- Male	50.8
Age	
- 19-24	09.1
- 30-34	20.4
- 35–39	14.7
- 4044	12.3
- 45-49	06.0
->50	07.3
Education level	
- High school	04.6
- Undergraduate	13.0
- Graduate	59.7
- Master	12.6
	10.2
Occupation	
- High-level managers	16.5
- Intermediate level managers	17.5
- Interfectual occupations (leachers)	16.0
- Worker	08.1
- Student	10.2
- Other	12.3
Computer at home	
- Yes	87.4
- No	12.6
Internet connection at home	
- Yes	81.8
- No	18.2
E-insurance use	
- Yes	18.6
- No	81.4
E incurrence contribute use	
- Subscribe via the Internet to a contract of insurance	06.9
- View and manage its insurance contracts	06.3
- Request quotes	02.2
- Perform simulations	03.2
- Changing the clauses of a contract	01.3
- Purchase an insurance policy	01.2
- Report a sinister	02.2

#### Table 2. The survey sample composition (N=280)

#### **Measurement Model Analysis**

The proposed model was tested with IBM SPSS AMOS following the two-step procedure specified by Anderson & Gerbing (1988). First, the measurement model was examined to assess the convergent and discriminant validity based on the latent constructs and their respective observed variables. Second, the structural model was examined to investigate its strengthen and test the relationships of the hypotheses.

The confirmatory factor analysis exhibited a good fit-indices better than the cut-off values recommended (Hair et al., 2010) (Chi-square = 587.559; df = 294; RMSEA = 0.060; CFI = 0.961; NFI = 0.926; AGFI = 0.834; TLI = 0.954). Cronbach's alpha scores of the scales were greater than 0.70 (Nunnally, 1978) showing strong internal reliability. All indicator factor loadings were significant and exceeded the threshold of 0.50. The Composite Reliability (CR) of all the constructs exceeded 0.70. The Average Variance Extracted (AVE) by each construct surpassed the recommended value of 0.50 and CR was above the AVE for all the constructs. Therefore, the conditions of the convergent validity were met (Fornell & Larcker, 1981; Hair et al., 2010) (see Table 3).

Table 4 shows the results of the discriminant validity. For each construct, the square root of the Average Variance Extracted was greater than the correlations between the construct and any other

Constructs	Reliability (Cr	ronbach Alpha)	Composite Reliability (CR)	Average Variance Extracted (AVE)	
Subjective norm	0.964		0.971	0.847	
Perceived behavior control	0.881		0.884	0.717	
Perceived ease of use	0.936		0.934	0.703	
Perceived usefulness	0.903		0.921	0.744	
Attitude	0.904		0.913	0.678	
Intention to use e-insurance	0.905		0.908	0.767	
Model Fit		Chi2 = 587.559; ddl = 294; p = 0.000; CMIN/DF = 1.999; GFI = 0.871; AGFI = 0.834; PGFI = 0.677; RMSEA = 0.060; NFI = 0.926; RFI = 0.912; IFI = 0.962; TLI = 0.954; CFI = 0.961			

#### Table 3. Reliability and validity of measurement scales (N = 280)

Table 4. Discriminant validit	v of the constructs	(Correlation	coefficient	matrix: N = 280)

Constru	ucts	MSV	ASV	AVE	SN	РВС	PEOU	PU	A	I
Subjective nor	rm (SN)	0.236	0.121	0.847	0.920					
Perceived beh control (PBC)	navior )	0.669	0.302	0.717	0.229	0.847				
Perceived ease (PEOU)	e of use	0.669	0.387	0.703	0.303	0.818	0.838			
Perceived user (PU)	fulness	0.605	0.365	0.744	0.431	0.642	0.778	0.863		
Attitude (A)		0.262	0.175	0.678	0.193	0.385	0.449	0.476	0.823	
Intention to us e-insurance (I)	se I)	0.397	0.298	0.767	0.486	0.477	0.605	0.630	0.512	0.876
Model Fit         Chi-deux = 587.559; ddl = 294; p = 0.000; CMIN/DF = 1.999; GFI = 0.871; AGFI = 0.834; PGFI = 0.677; RMSEA = 0.060; NFI = 0.926; RFI = 0.912; IFI = 0.962; TLI = 0.954; CFI = 0.961										

Note: MSV: Maximum Shared Variance; ASV: Average Shared Variance; The diagonal elements show the square root of the Average Variance Extracted; the off-diagonal elements show the correlations between the constructs.

construct in the model. Therefore, the criteria for the discriminant validity of Fornell & Larckers (1981) was met. The Maximum Shared Variance (MSV) and Average Shared Variance (ASV) was less than AVE for all the constructs. This confirms again the discriminant validity of the model (Hair et al., 2010).

#### Structural Model Evaluation and Hypotheses Testing

The structural model was tested by conducting a path analysis using the maximum likelihood estimation. The exogenous variables were perceived ease of use, subjective norms, and perceived behavioral control. The endogenous variables were perceived usefulness, attitude towards e-insurance, and behavioral intention to use e-insurance.

Table 5 and Figure 2 present the results of the structural model. The overall goodness-of-fitindices was satisfactory. Chi-square was 877.812 with 302 degrees of freedom. The CMIN/DF (2.907), AGFI (0.789), NFI (0.890), TLI (0.912), CFI (0.924), and RMSEA (0.083) were relatively well within recommended guidelines (Hair et al., 2010).

Moreover, Table 5 illustrate the seven hypothesized relationships between the latent constructs were statistically significant. As expected, perceived usefulness has a significant and positive effect on the intention to use e-insurance ( $\beta = 0.366$ ; t-value = 5.857; p < 0.001) and attitude towards e-assurance ( $\beta = 0.318$ ; t-value = 3.258; p < 0.01). Therefore, the hypotheses H1 and H2 were accepted. Perceived ease of use has a significant and positive effect on the perceived usefulness of e-insurance ( $\beta = 0.779$ ; t-value = 12.558; p < 0.001) and attitude towards e-assurance ( $\beta = 0.204$ ; t-value = 2.075; p < 0.05). Hypotheses H3 and H4 were supported. The intention to use e-insurance was positively determined by the attitude towards e-assurance ( $\beta = 0.296$ ; t-value = 4.803; p < 0.001), subjective norms ( $\beta = 0.302$ ; t-value = 5.815; p < 0.05), and perceived behavioral control ( $\beta = 0.105$ ; t-value = 1.983; p < 0.05). Accordingly, hypotheses H5, H6, and H7 were supported.

The variance in the perceived usefulness accounted for 60.6% by the perceived ease of use (R2 = 0.606). The variance in the attitude towards e-assurance accounted for 24.3% by the perceived usefulness and the perceived ease of use (R2 = 0.243). The variance in the intention to use e-insurance accounted for 42.7% by the perceived usefulness, attitude towards e-assurance, subjective norms, and perceived behavioral control (R2 = 0.427) in Table 5 and Figure 2.

# CONCLUSION

The results exhibited a significant and positive effect of the perceived ease of use on the perceived usefulness, which in turn positively influences the attitude and the customer's intentions to use e-insurance. Perceived ease of use and perceived usefulness have also a positive direct effect respectively on the attitude and intentions to use e-insurance. So, if the customer considers using e-insurance as easy to operate and requiring limited effort, his or her predispositions and intentions to use it will increase. This result is coherent with the large body of research based on the TAM and conducted on internet banking (e.g. Kaur & Malik, 2019; Kesharwani & Bisht, 2012) and m-banking adoption (e.g. Baptista & Oliveira, 2016; Siyal et al., 2019).

Moreover, the results show that the intention to use e-insurance was positively influenced by the customer's attitude towards e-insurance, subjective norms, and perceived behavioral control. Therefore, the more the customers value e-insurance services, are aware of the social importance of using e-insurance among people who are important to them, and perceive the skillfulness of using the service, the more they will be disposed to use e-insurance. These results are consistent with the stream of research based on the TPB model in the field of e-banking (Baptista & Oliveira, 2016; Giovanis & Athanasopoulou, 2017; Khasawneh & Irshaidat, 2017).

These findings have theoretical and managerial implications. From a theoretical point of view, the significant results provide evidence that combining the constructs of the TAM model and TPE theory to explore e-insurance adoption is fruitful. The TAM constructs cover the technical and system-based

Path	Hypotheses	Standardized Regression Weights	Standard Error	Critical Ratio t-value	Testing		
Perceived usefulness $\rightarrow$ Intention to use e-insurance	H1	0.366	0.070	5.857***	Accepted		
Perceived usefulness $\rightarrow$ Attitudes	H2	0.318	0.107	3.258**	Accepted		
Perceived ease of use → Perceived usefulness	Н3	0.779	0.050	12.558***	Accepted		
Perceived ease of use $\rightarrow$ Attitude	H4	0.204	0.088	2.075*	Accepted		
Attitude $\rightarrow$ Intention to use e-insurance	Н5	0.296	0.063	4.803***	Accepted		
Subjective norms $\rightarrow$ intention to use e-insurance	Н6	0.302	0.051	5.815*	Accepted		
Perceived behavior control $\rightarrow$ Intention to use e-insurance	H7	0.105	0.043	1.983*	Accepted		
Model Fit	Chi2 = 877.812; ddl = 302; p = 0.000; CMIN/DF = 2.907; GFI = 0.831; AGFI = 0.789; PGFI = 0.664; NFI = 0.890; RFI = 0.872; IFI = 0.925; TLI = 0.912; CFI = 0.924; RMSEA = 0.083.						
Squared Multiple Correlations (R <sup>2</sup> )	Perceived usefulness = 0.606; Attitude = 0.243; Intention to use e-insurance = 0.427						

#### Table 5. Results of Hypotheses Testing (N = 280)

Note: \*\*\*: p < 0.001; \*\*: p < 0.01; \*: p < 0.05

reasons behind e-insurance adoption and TPE constructs cover the individual and social reasons. This adds to a growing number of works that have proven the superiority of the combined model over the distinct use of TAM and TPB (Giovanis et al., 2019; Hansen et al., 2017).

From a managerial point of view, to increase e-insurance use, companies should build on the perceived ease of use, perceived usefulness, attitude, subjective norms, and perceived behavioral control in establishing appropriate marketing strategies and tactics. This might be achievable by effective communication campaigns to increase customer awareness about e-insurance services and their benefits. Associating e-insurance use with rewards programs and promotional incentives will improve the customer attitude toward e-insurance and subsequently their intentions to use the service. Enhancing the user interface and the availability of e-insurance services in mobile and computer platforms will contribute to the perceived ease of use and usefulness necessary to shape this attitude. However, focusing on the technical side might be not enough. Insurance companies should support the belief that using e-insurance is a socially valuable behavior by family members, friends, and belonging and reference groups. Social media marketing and viral marketing might be effective and inexpensive tools (Alrousan et al., 2020).

Customer purchases by the Internet when he finds instances of amusement, pleasure, and interactivity in the experience (Childers et al., 2002). Hence, as stated by Ettis & Haddad (2019) insurance companies should provide not only utilitarian values to customers but also hedonic, pleasurable, and entertaining experiences. Insurance services are perhaps cognitive in nature, but finding a way to make it emotional, recreational, and source of socialization is crucial. Website atmospherics factors and rich media tools might be helpful in this regard.

Therefore, insurance companies are invited to provide a utilitarian and agreeable commercial website that customers can enjoy through pleasurable and entertaining experiences. The experience of the policy-holder while visiting the website of his insurance company may lead him to adopt the Internet as a means for his future insurance purchasing. Moreover, the online customer of the insurance company may recommend his experience to others who would, in turn, use the Internet in

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#### Figure 2. Structural Model



their insurance transactions. That's why, in this huge and important emergent insurance market in the MENA region, this study commends arousing customers to use the Internet as the main means of shopping through attractive websites rather than relying on the classical channels. Predominately, Saudis have the financial ability, secured digital platforms, and experience with the easy use of the Internet in banking services, which are similar to insurance services in this respect. The perceived behavioral control is confirmed for the customers and affects positively the attitude and intention to adopt e-insurance. In sum, the use of e-insurance would enable Saudis to accomplish their tasks more quickly, more easily, and with advantageous offerings.

Our results have limitations that provide fertile ground for future research. Using a nonconvenience sample and increasing the sample size will enhance the external validity of the results. Enriching the conceptual model with other hedonic constructs such as enjoyment, flow, values, or emotions will improve the explanatory scope of the research. Integrating prior experience, personality traits, and culture as moderators will also add value to the conceptual model. Future research should further investigate e-insurance adoption by means of qualitative techniques to obtain a deeper understanding of the intervening dynamics. The Unified Theory of Acceptance and Use of Technology (UTAUT) and TAM3 are preferment models (Zainab et al., 2018 and Faqih et al., 2015) that has an ability to explain more than 70% of technology adoption as recommended by Waehama et al. (2014). Nevertheless, these models present some shortcomings (Venkatesh et al., 2008), might be used in future investigations to replicate and enlarge the scope of the current research.

# **Conflicts of Interest**

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

# **Funding Statement**

No funding was received for this work.

# **Process Dates:**

Received: August 31, 2019, Revision: February 19, 2020, Accepted: December 1, 2020

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