

Perception and Adoption of Islamic Insurance in Malaysia: An Empirical Study

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Abstract: The main purpose of the study is to examine the Malaysian customers' willingness to adopt Islamic insurance services as well as the factors that may influence their behaviour. A total of 200 questionnaires were randomly distributed to Malaysian customers. The data analysis was done through Structural Equation Modelling and t-test. The findings indicate that the Malaysian customers are willing to adopt Islamic insurance services, and their decision is depending on two factors i.e. compatibility and awareness. The findings have great implications to the theory, to the policy makers and regulations as well as to the practitioners.

Key words: Malaysia • Takaful • Islamic Insurance • SEM • T-test

INTRODUCTION

The source of Islamic insurance "takaful" is directly from the original sources of Islamic law [1-4]. Its primary aim is to serve as alternative to the *Shari'ah* prohibited forms of conventional insurance [1-7]. The general acceptability and perceptions of consumers about takaful can be measured through policies sold by the companies. Such findings have been established in researches on banking customers [8, 9]. Previous studies such as Alpen Capital [5] showed variability between the sales of general and family takaful. Where higher acceptability is recorded for general takaful, this was attributed to regulatory influence such as compulsory motor, health takaful etc. required by the governments across the Muslims countries. Bashir and Haj Mail [10] evaluated consumers' perceptions of Islamic insurance industry in the Brunei. The result of their survey revealed that policyholders always encounter problems during claims time. In addition, the industry is less efficient due to few products. In essence, the industry performance is less than the expectation of the customers. Maysami and Williams [11] conducted similar survey to ascertain whether acceptability of takaful industry in Singapore is from religious perception.

Hussain and Pasha [6] discussed the conceptual and operational paradigm differences between conventional insurance and Islamic insurance. They concluded that these major differences are the key to success of Islamic insurance industry across the globe. Alpen Capital [5] alluded to the sharing of responsibility between the shareholders and policyholders as the exclusive difference between conventional insurance and takaful. However, it criticized the less incentives system for policyholders in the industry particularly in the Gulf Cooperation Countries as well as less profitability and vague accounting and accountability procedures.

The takaful operations in Malaysia are dated back as three decades ago. The Islamic financial industry continuously growing with special reference to takaful funds stood at RM7.6 billion [12]. With 12 local and 1 international takaful and retakaful companies, takaful industry in Malaysia like others elsewhere issues policies under two broad business lines of general and family takafuls through mudharabah or wakalah modes (forms) of contract [3, 13, 14].

Malaysia is a Muslim majority with 60.4% out total population of 28.3 million. Optimistically, initial expectation is takaful to dominate the conventional insurance in the Muslims countries Malaysia inclusive,

contrarily; the industry is yet to maximize its full potential which has been attributed to low penetration [13, 5]. The low penetration is assumed to relate to one of the follows: The customers are not interested in takaful, they did not find any difference between takaful and insurance, takaful is more expensive than insurance, the industry lacks expertise, the employees are not customer friendly, lack of needed policies etc.

Some of the above assumptions have been investigated by some previous studies such as Salleh and Kamaruddin [12] examines the potentials of the takaful agents in Malaysia an effort to improve the distribution channel. Similarly, overview of Malaysia takaful industry by Mokhtar [15] revealed future betterment for the industry. Likewise, BNM [16] revealed major key developments such as strengthening regulatory framework, which has been criticized by Alpen Capital [5] as policies against conventional insurance and SandP [17] undue advantage over insurance companies. Other keys indicated are product dynamism, international expansion, broadening of retakaful sector etc. Accordingly, Annuar and Abu Bakar [3] studied issues on Malaysia takaful industry's accounting choice and problem. They found there is lack of standardize accounting policy between two companies compared. Abdul Kader, Adams and Hardwick [17] studied cost efficiency of takaful industries across selected 10 countries Malaysia inclusive.

However, other researches such as Abdul Wahab, Lewis and Hassan [18], Al-Shubayli [19] found there are inappropriateness about Wakalah and Mudharabah models available in the industry due to *Shari'ah* principles violations and others mentioned earlier, thus, they suggested the link between Wakalah and Waqf model.

Absolutely previous studies have done a lot, nevertheless, there are yet enough to be covered. Importantly, is the focus of this research i.e. measuring various reported achievements of Malaysian takaful industry through the takaful participants' satisfactions and perceptions about the services of takaful industry in Malaysia. This research will contribute to the growing literatures aims to standardize the industry. Similar, survey had been conducted by Tahir and Abu Bakar [20] on the performance and quality of Malaysian Commercial banks by examining the customers' satisfaction about their services and perceptions. Additionally, diffusion of innovation theory has been commonly adopted in measuring perceptions of the customers towards products or services of entities [9, 8, 21, 22, 23]. However,

to the best knowledge of the researchers, there are no published surveys on customers' perceptions on takaful industry in Malaysia.

Research Model: The new products' adoption has been widely studied during the recent few decades. This has consequently contributed in the establishment of a number of attitudinal and behavioural models, including theory of reasoned action [24], theory of planned behaviour [25], decomposed theory of planned behaviour [26], technology acceptance model [27], innovations' diffusion theory [28], etc.

The above models were all extensively applied in the previous studies, especially regarding new technologies [22, 29, 30, 31, 23, 21, 9]. Nevertheless, Rogers' model of innovations' diffusion is considered as the most widely tested and implemented [32]. Hence, the current study is based on the latter model.

According to Rogers [28], innovation is an idea, practice, or object that is perceived as new by an individual or other unit of adoption. On the other hand, diffusion is process that an innovation needs to spread through communications channels over time among people in the community.

The model originally consisted of five main dimensions i.e. relative advantage, compatibility, complexity, trialability, and observability. Nevertheless, these dimensions were further adapted by the subsequent researchers, whereby some of the above dimensions were replaced by others that are more relevant [26, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 29]. In this context, Thambiah, Eze, Tan, Nathan and Lai [44] suggested that uncertainty and customers' awareness are important dimensions in the study of Islamic banking and financial services. This was further supported by Abdullah and Abdul Rahman [45] as well as Rammal and Zurbruegg [46]. Similarly, Echchabi and Olaniyi [29] identified social influence as a significant factor in determining the adoption of Islamic banking services. Thus, the final model shown in Figure 1 below includes five main independent variables i.e. uncertainty, relative advantage, compatibility, social influence and awareness. Accordingly, the following hypotheses are posited:

H₁: Uncertainty has a negative influence on the adoption of Islamic insurance in Malaysia.

H₂: Relative advantage has a positive influence on the adoption of Islamic insurance in Malaysia.

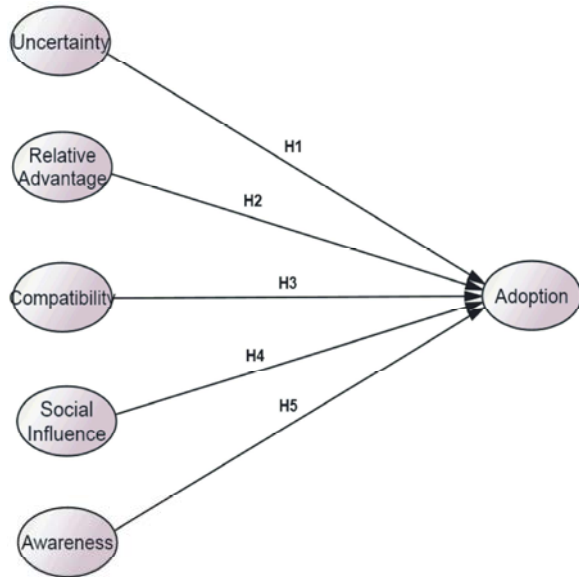


Fig. 1: Research model

H₃: Compatibility has a positive influence on the adoption of Islamic insurance in Malaysia.

H₄: Social influence has a positive influence on the adoption of Islamic insurance in Malaysia.

H₅: Awareness has a positive influence on the adoption of Islamic insurance in Malaysia.

H₆₆: The Malaysian customers are indifferent in adopting Islamic insurance services.

MATERIALS AND METHODS

In the current study, the data has been collected using questionnaire, which was randomly distributed to the individual customers in Malaysia. The study does not only cover the main cities in Malaysia, but the other small cities as well. It is worth noting that Malaysia is a panacea of a wide range of languages, cultures, races, etc, hence the authors ensured that the sample studied reflects this variety in the Malaysian population. The target sample size in this study was 200 respondents calculated based on the following formula:

$$SS = \frac{(Z^2) \times (p) \times (1 - p)}{C^2}$$

SS = Sample Size

Z = Z-value

P = Percentage of population.

C = Confidence interval

Out of these 200, only 168 were returned and properly filled, which results in a response rate of 84%. The questionnaire contains two main sections. The first one is designed to collect information about the constructs of the innovations diffusion theory [28], the items under this section are measured using seven points likert scale (1=Strongly disagree and 7=Strongly agree). The second part is meant to collect information about the demographic variables of the respondents, including gender, age, education level, type of employment, etc.

The questionnaire was made in English and was distributed as such. This is because English is the second language in the country and majority of Malaysian people can speak English fluently. The data analysis is subsequently done through Structural Equation Modelling (SEM) and t-test.

The demographic profile of the respondents indicate that 56 per cent of the respondents are male, while 44 per cent are female, 12.5 per cent of them are married, while 87.5 per cent are single. With regards to age grouping, the results indicate that 76.2 per cent are between 20 and 30 years, 14.9 per cent are less than 20 years old, 5.4 per cent are between 31 and 40 years, 3 per cent are between 41 and 50 years, while the remaining 0.6 per cent are more than 50 years old. For the level of education, 71.4 per cent of the respondents are holding a Bachelor's degree, 14.3 per cent are holding Masters' degree, 8.9 per cent are holding a diploma, 3 per cent of them are holding a PhD degree, while the remaining 2.4 per cent are holding a professional diploma.

RESULTS

Descriptive Analysis: The mean values in Table 1 provide hindsight on the perception and adoption willingness of the customers. The results indicate that the customers perceive they have sufficient awareness of Islamic insurance, indicated by the high mean value of 4.783. Similarly, the mean value for adoption indicates the customers' willingness to shift to Islamic insurance, particularly in three time spans i.e. one year, two years and three years. In addition, the customers seem to positively perceive the compatibility of the Islamic insurance with their social and religious values, financial needs, as well as their lifestyle.

In terms of relative advantage, the customers perceive the relative advantage of the Islamic insurance compared to the conventional one. This is in terms of punctuality in paying claims, knowledge, competence and friendliness of personnel, efficiency if service providing, as well as social prestige.

Table 1: Descriptive analysis and reliability measures

Constructs	Mean	Std. Deviation
Uncertainty	3.692	1.192
Relative advantage	4.672	0.953
Compatibility	4.883	1.041
Social Influence	4.619	1.071
Adoption	4.842	1.124
Awareness	4.783	1.174

Table 2: Reliability measures

Constructs	Cronbach	AVE
Uncertainty	0.853	0.636
Relative advantage	0.829	0.522
Compatibility	0.879	0.675
Social Influence	0.866	0.662
Adoption	0.913	0.657
Awareness	0.924	0.766

On the other hand, the customers suggest that there is a social influence on their decision making, mainly by the spouse, close friends, parents, siblings, as well as media. Finally, the customers seem to disagree with the uncertainty dimension of the Islamic insurance practices. It is noteworthy that these preliminary results will be further tested for significance in the following sections.

Validity Measures: In applying SEM, the validity of the model is a very important component. In general, this is measured through confirmatory factor analysis (CFA), whereby one of the main objectives is to assess construct validity of a given model. The latter is the extent to which a set of measured items reflect the latent construct those items are designed to measure. Construct validity is made of four main components i.e. convergent validity, discriminant validity, face validity as well as nomological validity.

Convergent validity means that the items measuring a specific construct should share a high proportion of common variance. There are several tools to assess convergent validity of the model. According to Hair *et al.* [47], the most popular of which are average variance extracted (AVE), factor loadings, as well as reliability measures (e.g. Cronbach Alpha). The authors suggest that an AVE value as well as a factor loading of 0.5 and above is acceptable. This requirement is met since all the factor loadings are greater than 0.5, and the AVE values are at least 0.522. Likewise, the Cronbach Alpha values below are acceptable since they are greater than the threshold of 0.6 suggested by Hair *et al.* [47]. Hence, it can be concluded that the model has convergent validity.

Table 3: Discriminant validity comparison

Elements	Chi square	DF
Baseline model	881.181	473
Restricted model	943.885	474
Change	62.704	1

The second validity measure is discriminant validity, which refers to the extent to which each construct in the model is distinct from the other constructs. There are various ways of assessing discriminant validity of the model. According to Hair *et al.* [47] the most important of which is to set the correlation between any of the constructs to 1, and compare the fit indices for the two models i.e. baseline model and restricted model. discriminant validity is confirmed if the difference between the fit of the two models is significant. Table 3 below shows the Chi square as well as the degree of freedom for both the baseline and the restricted model. it is noticeable that the difference in the Chi square value is 62.704, while the difference in the degrees of freedom is 1. By comparing this Chi square difference with the Chi square value extracted from the Chi square Table for a degree of freedom of 1 and a confidence margin of 0.05 i.e. 3.84 in this case, it can be concluded that the Chi square difference test is significant. Thus, the model has discriminant validity. Besides these two validity measures, face validity and nomological validity have also been confirmed by consulting the experts in this field, as well as the previous studies.

Measurement Model: Validation of the measurement model is a necessary step to hypothesis testing through SEM. The measurement model's fit indices shown in Table 4 indicate that the Chi square value is 881.181, the degree of freedom is 473, the normed Chi square is 1.863, RMSEA is 0.072, and CFI value is 0.893. In general these indices are considered acceptable based on Browne and Cudeck [48], Hu and Bentler [49] as well as Kim and Forsythe [50]. Thus, the measurement model in Figure 2 is valid and hypothesis testing can be conducted.

Structural Model: The structural model in Figure 3 as well as the model summary in Table 5 show a Chi square value of 881.181, a normed Chi square of 1.863, an RMSEA of .072 and a CFI value of 0.893 which is good and acceptable model fit based on Browne and Cudeck [48], Hu and Bentler [49] as well as Kim and Forsythe [50].

The findings indicate that uncertainty does not have a significant impact on adoption. This contradicts with the findings of Tan and Teo [34], Teo and Pok [35], Fisher and

Table 4: Measurement model fit indices

Model	NPAR	CMIN	DF	P	CMIN/DF	RMSEA	CFI
Default model	88	881.181	473	.000	1.863	.072	.893
Saturated model	561	.000	0				1.000
Independence model	33	4353.286	528	.000	8.245	.208	.000

Table 5: Structural model fit indices

Model	NPAR	CMIN	DF	P	CMIN/DF	RMSEA	CFI
Default model	88	881.181	473	.000	1.863	.072	.893
Saturated model	561	.000	0			.208	1.000
Independence model	33	4353.286	528	.000	8.245		.000

Table 6: Total effects

	Awareness	Social Influence	Compatibility	Rel. Advantage	Uncertainty
Adoption	.652	.107	.253	-.025	-.090

Table 7: One sample t-test

Test Value = 4						
					95% Confidence Interval of the Difference	
	T	Df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Adp1	10.707	167	.000	1.09685	.8946	1.2991
Adp2	10.113	167	.000	1.08476	.8730	1.2965
Adp3	7.298	167	.000	.79512	.5800	1.0102
Adp4	5.305	167	.000	.57565	.3614	.7899
Adp5	4.858	167	.000	.53363	.3168	.7505
Adp6	7.964	167	.000	.83524	.6282	1.0423
Adp7	9.049	167	.000	.97530	.7625	1.1881
Oadopt	9.708	167	.000	.84236	.6711	1.0137

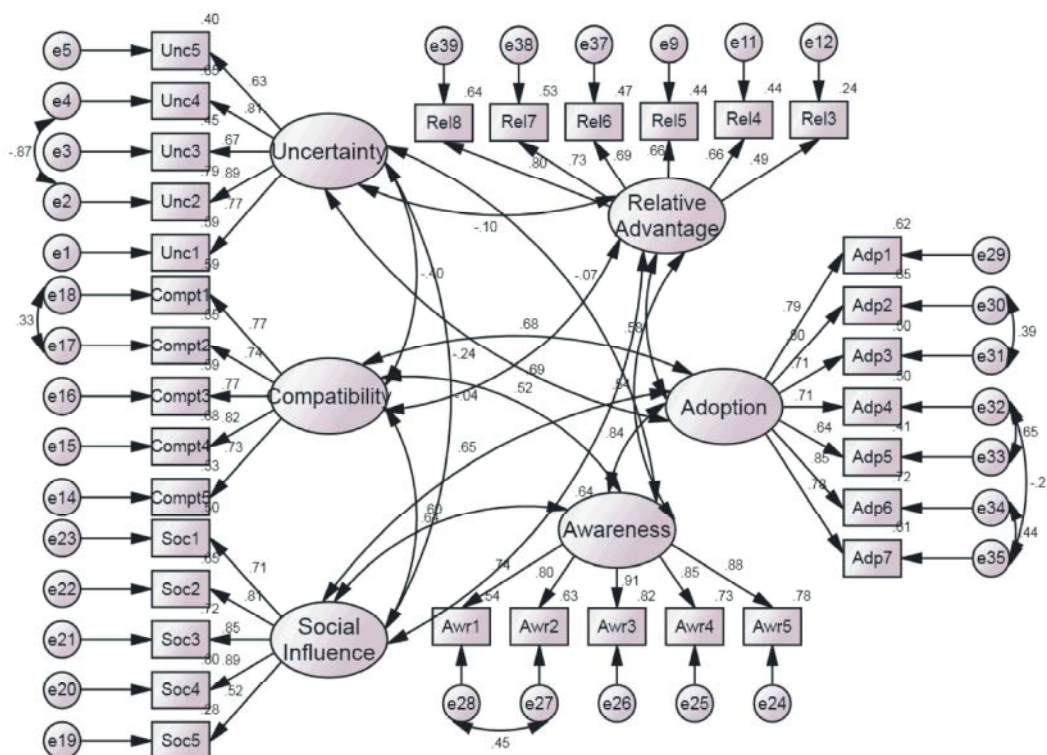


Fig. 2: Measurement model

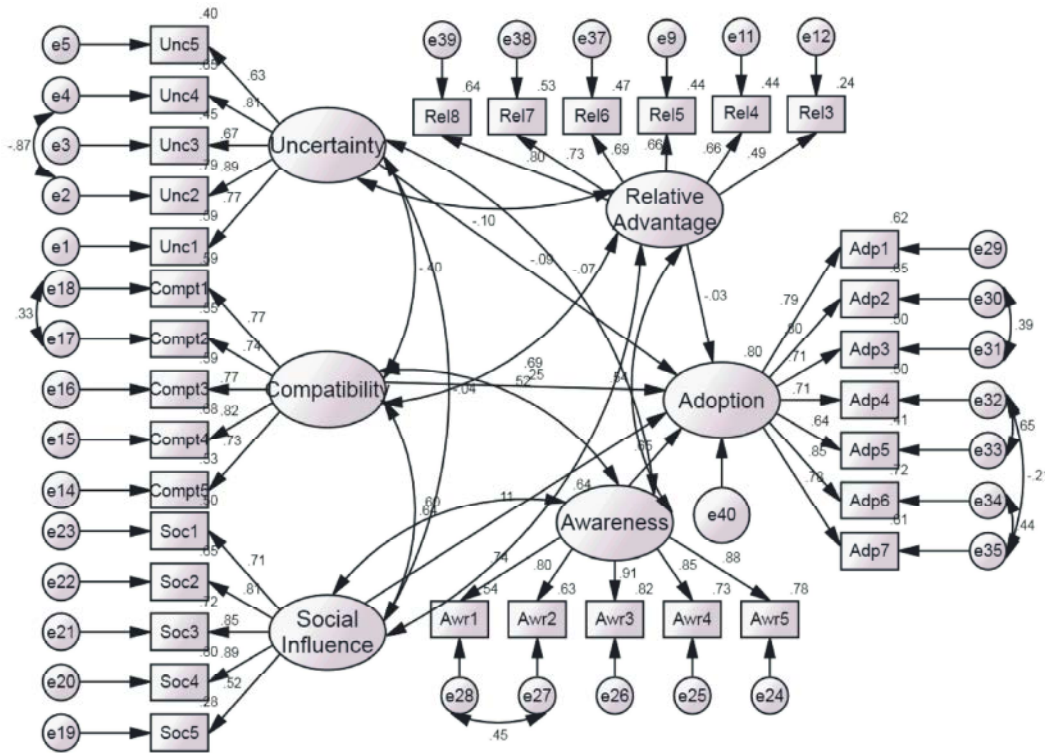


Fig. 3: Structural model

Chu [36], Nor [37], as well as Sharma and Bock [38]. This may be explained by the prejudice that the customers have about the amount of uncertainty involved in the insurance services, which might have made it an irrelevant dimension in selecting insurance policies. Hence, hypothesis 1 is rejected.

The findings also indicate that relative advantage does not have significant influence on adoption. Hence, hypothesis 2 is rejected. This contradicts with the results of Taylor and Todd [33], Tan and Teo [34], Teo and Pok [35], Shih and Fang [39], Nor [37] as well as Puschel *et al.* [40]. It is worth mentioning that the main dimensions measuring relative advantage include punctuality in paying the customers' claims, the comparative advantage of instrument like mudarabah profit sharing compared to the conventional counterpart, knowledge, competence and friendliness of the insurance personnel, efficiency and speed of service delivery, as well as social prestige. Thus, these dimensions are not seriously considered by the customers while selecting the type of insurance policy to purchase.

On the other hand, compatibility has significant positive influence on adoption. Hence, hypothesis 3 is supported. This is in line with the findings of Tan and Teo [34], Fisher and Chu [36], Nor [37], Puschel *et al.* [40] and

To *et al.* [43]. Nevertheless, they contradict with the findings of Teo and Pok [35], Shih and Fang [39], Al-Majali and Nik Mat [41] and Beigina *et al.* [42]. Thus, compatibility of the Islamic insurance with the customers' religious and social values, lifestyle and financial needs is an important condition for their adoption.

Furthermore, social influence does not have a significant influence on adoption. Thus, hypothesis 4 is rejected. This contradicts with the findings of Taylor and Todd [33], Echchabi and Olaniyi [29], Al-Majali and Nik Mat [41], Puschel *et al.* [40], and Teo and Pok [35]. Hence it can be concluded that the decision to purchase either Islamic or conventional insurance policy is not subject to social groups influence.

Finally, the results indicate that awareness has a significant positive influence on adoption. This supports hypothesis 5. This is in line with the findings of Thambiah *et al.* [44], which is also in line with the findings of To *et al.* [43], Abdullah and Abdul Rahman [45] as well as Rammal and Zurbrugg [46].

In summary, out of the initial five variables, only two were found to have a significant influence on adoption of Islamic insurance services in Malaysia i.e. compatibility and awareness. These three variables explain 68.7 per cent of the variation in the dependent variable.

One Sample T-Test: In order to examine whether the Malaysian customers are willing to adopt Islamic insurance services, the one sample t-test is applied. The results in Table 2 below indicate the all the variables are significantly different than 4. The mean difference further implies that the customers are willing to adopt Islamic insurance services. Nevertheless, the mean difference is lower for items 4 and 5. This indicates that they have a preference for long term adoption i.e. 3 years and above. Thus, hypothesis 6 is rejected.

CONCLUSION

The objective of the current stud was two-fold i.e. to explore the willingness of the Malaysian customers to adopt Islamic insurance and to determine the variables that may influence it. The results indicate that the Malaysian customers are willing to adopt Islamic insurance services. On the other hand, the findings indicate that the main variables that influence the customers' decision are compatibility and awareness.

These findings have significant implications for the theory, for the policy makers and regulators as well as for the practitioners. Particularly, the study is an extension of the IDT to a different setting and to a different area of study that has been poorly studied previously; hence the study proves the applicability of this theory in this new context. Similarly, the current study provides hindsight to the practitioners and policymakers on the important dimensions to be emphasised to ameliorate the Islamic insurance in Malaysia and similar countries.

The current study has a number of limitations that should be taken into account in the future studies in this area. Firstly, the sample size is relatively limited, though accurately calculated, hence the results cannot be generalised to the whole Malaysian population. Thus, the future studies are recommended to select a larger and more representative sample size, in order to generalise the results to the whole country. The future studies are also recommended to extend these findings to other contexts and preferably using other models as well.

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