Measurement Quality of E-zakat Continuance Intention Instrument: Malaysian Context

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Abstract
The need to obtain instruments that have validity and reliability is something that is mandatory in social science research. The study of the adoption of technology during the covid19 season which focuses on the use of technology for religious purposes is very lacking. Therefore, this study aims to test the validity and reliability of e-zakat acceptance instruments. The respondents of the study are users of the e-zakat system. Study data were collected using non-probability sampling techniques and 559 usable response were successfully collected. To test the validity and reliability, the data were analyzed using smartPLS 3 software. Findings prove that e-zakat acceptance instruments have a high level of validity and reliability.
Keywords: E-zakat, Malaysian, Quality.

Introduction
As the covid19 epidemic hit, the use of information technology became increasingly popular. The increasing use of information technology systems is due to the need for social incarceration. Muslims, however, need to continue their worship, especially the payment of zakat. The technology offered by the information system allows worship to continue even during the epidemic. E-zakat is a system developed in collaboration with the Pahang state government to make it easier for Muslims to pay zakat. However, if this system is not well received, then the system provider will suffer losses. Therefore, this study aims to identify the validity of acceptance measurement instruments in the state of Pahang

Literature Review
UTAUT
The original version of UTAUT comes from (Venkatesh et al., 2003). They analysed user acceptance literature and addressed eight influential models, comparing the eight models and their extensions empirically, formulating a unified model that combines elements across the eight models, and validating the unified model empirically. As the result, A unified model was developed, called the Unified Theory of Technology Acceptance and Use (UTAUT), with four core determinants of purpose and use and up to four main relationship moderators. First, performance expectancy is characterised as the degree to which a person believes that it will

enable him or her to achieve improvements in job performance by using the method. Effort expectancy is characterised as the degree of ease associated with the system's use. Social influence is mean the degree to which an person perceives that significant others believe that he or she should use the new system is known as social influence. Lastly, facilitating conditions are defined as the degree to which a person believes that there is an organisational and technological infrastructure to facilitate the system's use.

Study by Palau-Saumell et al (2019) aims to investigate the adoption by users of mobile restaurant search and/or reservation (MARSR) applications as part of their experience quality. The results support the need to expand and expand UTAUT-2 by combining perceived legitimacy and the response to social norms. Another study by Raza et al. (2019) seek to examine the factors which affect mobile banking (M-banking) acceptance in Islamic banks of Pakistan by using the modified unified theory of acceptance and use of technology (UTAUT) model. The empirical evidence indicates that all the variables have a substantial positive impact on the purpose that results in actual use, except for social influence.

Meanwhile, research by Thomas et al (2013) attempt to compare the effectiveness of updated versions of the Unified Theory of Acceptance and Use of Technology (UTAUT) model and determine the size and direction of the impacts of the UTAUT factors on behavioural intention to adopt mobile learning in higher education. This study is to understand mobile learning adoption in higher education in a developing world. The findings indicate that variations in culture and country level moderate the effects of UTAUT, so a clear implementation of the model irrespective of the context will lead to non-detection of important relationships and suboptimal promotion strategies for mobile learning.

In addition, research by Wang et al (2020) aims to build and empirically evaluate a model by combining the Unified Theory of Technology Acceptance and Use (UTAUT) and Task-Technology Fit (TTF) models to understand how HWDs are adopted by consumers. The findings showed that performance expectancy, effort expectancy, facilitating conditions, social influence, and task-technology favourably into the behavioural intention of consumers to use HWDs, and together accounted for 68.0% of its variance.

Methodology
To meet the objectives of the study, we managed to collect 559 data through non-probability sampling technique. This technique does not require sampling frames and it is easier to implement. Since this study was conducted during the Covid19 season, we decided to use an online platform for the distribution of questionnaires. Questionnaires were distributed for two weeks and collected after the sample size was sufficient. Sampling size was determined with the help of G*power software which is a minimum of 129 respondents. All research instruments are adapted from previous studies such as performance expectancy, effort expectancy, facilitating condition (Venkatesh et al., 2003) except the Maqasid variables that we developed ourselves.

Data Analysis
The PLS analysis was conducted using the SmartPLS 2.0 software (Ringle et al., 2015). Testing the measurement model encompasses the examination of internal consistency (reliability) and convergent and discriminant validity of the instrument (Wixom & Todd, 2005). The

psychometric properties of the measurements were determined through examining the composite reliability of latent constructs, average variance extracted (AVE) by latent constructs from their indicators and correlations among latent constructs (Chin, 1998). The criteria for the constructs of measurement tests are: the composite reliability should be at least 0.70, AVE should be at least 0.5 and all items loadings should be greater than 0.5 (Fornell & Larcker, 1981). Table III depicts the assessment of the measurement models. The results indicate that composite reliability of all constructs were greater than 0.70, ranging from 0.892 to 0.942. Cronbach's a values of all constructs exceeded 0.7 and both measures suggested internal consistency of the measurement model (Nunnally & Bernstein, 1994). The analysis confirmed the adequate convergent validity of the measures, with AVE values surpassing the recommended level of 0.5, and the loadings exceeding the value of 0.5 (Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, 2014). (Hulland, 1999) suggested a cut-off value of 0.5 is sufficient especially when newly developed items are employed. Discriminant validity was assessed by comparing the AVE of each individual construct with shared variances between it and all the other constructs (Fornell & Larcker, 1981). This validity required a higher value of square root of the AVE of each construct than the correlation value between this construct and all other constructs. As shown in Table 1, the square root of the AVE (bold) scores for constructs of IA (0.903), AQ (0.732), IU (0.881), SA (0.898), SC (0.790), SP (0.857) and SS (0.825) were greater than the correlation scores between each construct and all other constructs. The analysis results indicated acceptable construct discriminant validity

Table 1
Measurement quality of the instrument

Construct	Items coding	Item loadings	AVE	CR	Cronbach α
PE	Pe1	0.90	0.80	0.94	0.92
	Pe2	0.91			
	Pe3	0.90			
	Pe4	0.86			
EE	Ee1	0.93	0.91	0.97	0.96
	Ee2	0.96			
	Ee3	0.96			
	Ee4	0.96			
FC	Fc1	0.94	0.88	0.94	0.87
	Fc2	0.94			
MAQASID	A1	0.87	0.77	0.96	0.95
	A2	0.91			
	A3	0.91			
	A4	0.88			
	A5	0.73			
	A6	0.91			
	A7	0.91			
INT	Int1	0.96	0.92	0.97	0.96
	Int2	0.95			
	Int3	0.96			

Table 2
Discriminant validity assessment

	EE	FC	INTENTION	MAQASID	PE
EE	**0.96**				
FC	0.76	**0.94**			
INTENTION	0.67	0.61	**0.96**		
MAQASID	0.74	0.65	0.61	**0.88**	
PE	0.80	0.70	0.69	0.85	**0.90**

Notes: Square root of AVE is shown on the diagonal of the matrix in bold

Discussion
Studies in the field of technology acceptance especially e-zakat during the covid-19 season are very lacking. The findings of this study prove that the instrument of receiving e-zakat has a high value of validity and reliability. This instrument proved to remain stable even during the Covid19 season. Therefore, we conclude that the UTAUT construct is a robust construct in any situation. These findings are expected to help future researchers in choosing the right instrument in their study especially in the context of information technology acceptance. The newly introduced construction of Maqasid also exhibits good measurement performance with high validity value and reliability. Future studies, may test this construct in different contexts. The findings of this study are in line with previous studies that use UTAUT such as study by Nysveen & Pedersen (2016) in the context of RFID-enabled services, telehealth services acceptance (Cimperman et al., 2016), open government data (OGD) usage (Saxena & Janssen, 2017), customer online shopping anxiety (Celik, 2016), adoption of payments banks (Gupta et al., 2019), clinician adoption of health information systems (Bawack & Kala Kamdjoug, 2018), digital piracy usage (Udo et al., 2016), ERP software adoption (Chauhan & Jaiswal, 2016) and animation and storytelling adoption (Suki & Suki, 2017).

Acknowledgments

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