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Driving and Restricting Factors of the Behavior Intention of the Digital Fishery Platform Adoption in New Normal: Combine UTAUT-IRT Model

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Abstract

The purpose of this study was to build a Combine UTAUT-IRT Model and examine how the influence of UTAUT factors on behavior intention, the influence of IRT factors on innovation resistance, and how the influence of innovation resistance on behavior on intention to use digital fishery platforms. Data was collected through online distribution of questionnaires in Jakarta, Indonesia. The number of samples collected and used was 120 samples. The analysis technique uses SEM-PLS. The result is the performance expectancy, effort expectancy and social factors influence the behaviour intention to use the platform, but the facilitating condition do not. Value Barrier and Image Barrier influence innovation resistance to use the platform, but use barrier, risk barrier, and traditional barrier do not. Then, innovation resistance influence behaviour intention to use the platform negative and significant. The novelty of this research is the development of the Combine UTAUT-IRT Model and for the first time tested to investigate the intention to use a the platform. The results of this study can be the basis for the development of a digital fishery platform that can connect fishermen and end users in a peer-to-peer manner.

Keywords

UTAUT, IRT, Combine UTAUT-IRT, E-Fishery, Digital fishery platform.

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Introduction

Indonesia is the largest archipelagic country which has an area of approximately 3.25 million km2 of marine waters which stores abundant marine wealth, especially the fisheries sector. The export value of Indonesian fisheries continues to increase, and reaches IDR 73,681,883,000 in 2019 (Pratama, 2020; Purwanto, Sjarief, & Anwar, 2021b). The problem is precisely the low level of fish consumption among the Indonesian people. Maximum sustainable yield of Indonesian fish resources, according to Ministerial Decree No. 50/KEPMEN-KP / 2017 is 12,541,438 tons per year, but fish consumption in Indonesia is only 50.69 kg per capita per year in 2018. The relatively high price of fish for end users is one of the causes of low fish consumption in Indonesia. The poor national fish distribution system is one of the main causes of fish prices which are relatively more expensive for end users as a result of the long distribution chain and games of middlemen (Khalil, Khalil, & Rusydi, 2019; Purwanto, Sjarief, & Anwar, 2021a)

Digital platforms can be a solution to poor distribution systems because consumers and fishermen can make transactions directly through digital platforms. A number of platforms were built by companies that actually only replace the role of conventional middlemen. As a result, seafood prices are still relatively high. That is why, a digital peer to peer platform that really connects fishermen and consumers directly through a digital platform is important to be held. This study seeks to measure the degree of acceptance and rejection of consumers in Jakarta and examine the factors that influence it.

Based on this problem statement, this study will: (1) Test the influence of UAUT factors on the acceptance of digital platforms among consumers in Jakarta. (2) Test the influence of the influence of Innovation resistance theory factors on resistance to digital platforms among consumers in Jakarta. (3) Examine the effect of resistance on digital platform acceptance among consumers in Jakarta. The results of this research will be the basis for policies to build a marketplace or peer to peer platform that will help Jakarta consumers to access seafood directly from fishermen through a digital platform.

Literature Review

Unified Theory of Acceptance and Use of Technology (UAUT)

UTAUT is developed by (Venkatesh, Thong, & Xu, 2012). They conducted the critical review of the previous eight models, and then compared the eight models empirically, formulated the UTAUT model, and finally they validated UTAUT modal empirically (Purwanto & Loisa, 2020; Ridhwan & Purwanto, 2020). First, Theory of Reasoned Action (TRA) by (Davis, Bagozzi, & Warshaw, 1989), especially to get better understanding of people reason to accept or reject use computers at the time. Second, Technology Acceptance Model (TAM) by (Davis, 1989) as extension of his TRA. Third, motivational model by (Davis, Bagozzi, & Warshaw, 1992). Fourth, the Theory of Planned Behavior is adapted by (Ajzen, 1991) psychology science on human behavior. Actually (Ajzen, 1991) adapted TRA and included perceived behavioral control into the model and rename the model is Theory of Planned Behavior, Fifth, the Combined TAM and TPB (C-TAM-TPB) model by (Taylor & Todd, 1995). Sixth, Model of PC Utilization (MPCU) by (Thompson, Higgins, & Howell, 1991) to predict PC utilization behaviour model. Seventh, IDT by (Moore, 1987) who investigated the factors of usage of IT utilization and the factors are voluntariness, attitude toward adoption and subjective norm. Eight, the Social Cognitive Theory that was developed by (D. Compeau, Higgins, & Huff, 1999; D. R. Compeau & Higgins, 1995).

In the UTAUT model, (Venkatesh, Morris, Davis, & Davis, 2003) proved that Performance expectancy, Effort expectancy, Social Influence, and Facilitating Condition are factors of acceptance of innovation technology, and in the UTAUT2 model (Venkatesh et al., 2012) added two other factors, namely Hedonic Motivation and Habit. Many researchers use the UTAUT model to examine the factors that influence the intention to use various innovative technologies in different countries. The uniqueness of this research is adopting UTAUT as part of the model and testing it in the context of platform acceptance that has not been tested by previous researchers.

Testing of the UTAUT model in the context of receiving computer-assisted audit techniques and tools (CAATTs) has been carried out by (Mahzan & Lymer, 2014). In the context of acceptance of online tax filling, it has been carried out by (Carter, Shaupp, Hobbs, & Campbell, 2011). In the context of e-learning acceptance has been carried out by (Arif, Ameen, & Rafiq, 2018; Buabeng-Andoh & Baah, 2020; Gunasinghe, Abd Hamid, Khatibi, & Azam, 2019; Lwoga & Komba, 2015; Thongsri, Shen, Bao, & Alharbi, 2018),. In the context of acceptance of mobile libraries, it has been carried out by (Chang, 2013; Wu & Wu, 2019). In the context of receiving e-government services, this has been carried out (Alam, Hu, Hoque, & Kaium, 2019). In the context of receiving m-health services, this has been carried out (Alam et al., 2019). Research related to the acceptance of digital payment platforms has been carried out by (Giovanis, Assimakopoulos, & Sarmaniotis, 2019; Gupta, Manrai, & Goel, 2019; Kuciapski, 2017; Odoom & Kosiba, 2020; Rahi, Mansour, Alghizzawi, & Alnaser, 2019; Sivathanu, 2018; Sobti, 2019; Tarhini, El-Masri, Ali, & Serrano, 2016). However, as far as searching in the database of reputable journal publishers, no research has been found on the intention of marketplace acceptance that connects fishermen and end consumers in a peer-to-peer manner, using either the UTAUT, TAM or other information technology acceptance measurement models.

Innovation resistance theory (IRT)

(Ram, 1998) developed Innovation resistance theory (IRT). The factors that influence the rejection of innovation in the model include Usage Barrier, Value Barrier, Risk Barrier, Traditional Barrier, and Image Barrier. When a new innovation appears that is different from the current system, habit, and practice, individuals tend to reject the innovation, and it is called a Usage Barrier (Ram, 1998). Innovation values related to monetary value and performance are considered as Value Barriers. This is also related to the opinion of innovation users whether the innovation provides added value to their performance or not (Ram, 1998). Risk Barrier is the level of risk associated with the use of innovation that is perceived by users, and this risk is related to the losses that will be suffered by innovation users (Ram, 1998). Traditional Barriers in the use of innovation technology are related to barriers to norms, traditions, habits and behaviors that are considered contrary to family, community or group norms and society's disapproval leads to resistance to innovation (Ram, 1998). Meanwhile, Image Barrier is generally generated by various types of information, rumors and stereotypes. For example, negative perceptions of the image of innovation can occur because media coverage gives negative attention to a particular innovation which causes public rejection of that innovation (Ram, 1998).

Research that has tested IRT has mainly been carried out in the context of resistance to mobile banking by(Chemingui, 2013; Laukkanen & Kiviniemi, 2010; Thakur & Srivastava, 2013), IRT has never been used to investigate the digital fishery platform acceptance in previous studies.

Combine UTAUT-IRT Model

This study combines UTAUT and IRT to: (1) examine the effect of Unified Theory of

Acceptance and Use of Technology (UAUT) factors on the acceptance of digital platforms among consumers in Jakarta. (2) Testing the influence of the influence of Innovation resistance theory factors on resistance to digital platforms among consumers in Jakarta. (3) Examining the effect of resistance on digital platform acceptance among consumers in Jakarta. The UTAUT-IRT Combine The model can be derived into the following research hypotheses:

H1: Performance expectancy has a positive and significant effect on the consumers intention to use digital platforms.

H2: Effort expectancy has a positive and significant effect on the consumers intention to use digital platforms.

H3: Social Influence has a positive and significant influence on the consumers intention to use digital platforms.

H4: Facilitating Condition has a positive and significant influence on the consumers intention to use digital platforms.

H5: Usage Barrier has a positive and significant influence on the consumers resistance to use digital platforms.

H6: Value Barrier has a positive and significant effect on the consumers resistance to use digital platforms.

H7: Risk Barrier has a positive and significant impact on the consumers resistance to use digital platforms.

H8: Traditional Barrier has a positive and significant influence on the consumers resistance to use digital platforms.

H9: Image Barrier has a positive and significant influence on the consumers resistance to use digital platforms.

H10: Resistance has a negative and significant effect on the consumers resistance to use digital platforms.

Based on these hypotheses, a conceptual framework can be built as shown in Figure 2.1.

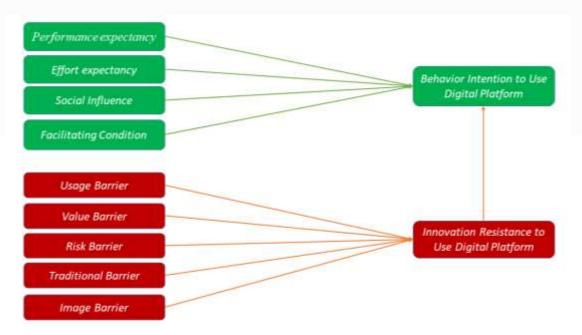


Figure 2.1. Conceptual Framework

Methods

Population and sample

The population is the fishery consumers in Jakarta. This study uses non-probability sampling by convenience sampling. The collected and used sample is 120 samples.

Data collection

Questionnaire share to Jakarta people by online use Google form. The questionnaire sharing is collected in Jakarta, Indonesia. The 120 samples are collected and processed by SmartPLS 3.0. In addition to collecting questionnaire data, this study also collects data from mass media news related to the behavior of Jakartans using digital platforms to shop, especially shopping for basic necessities, including sea-caught fish.

Instruments Measurement

This study adapted instrument measurement developed by (Venkatesh et al., 2003) for the Performance expectancy, Effort expectancy, Social Influence, and Facilitating Condition, and Behavioral intention variables. The performance expectancy consisted of 4 items, but PE4 was removed because the loading factor was <0.70. Effort expectancy consists of 4 items and 1 item, namely EE3 is removed because it has a loading factor of <0.70. Social Influence consisting of 4 items and 1 item (SI3) is removed because it has a loading factor of <0.70. Facilitating Condition consisting of 4 items and 1 item (FC1) is dropped because the loading factor is <0.70. Behavioral intention consists of 6 items and 1 item ((BI3) is deleted because the loading factor is <0.70. This study adapted instrument measurement developed by (Ram, 1998) for Usage Barrier, Value Barrier, Risk Barrier, Traditional Barrier, and Image Barrier, and Innovation resistance variables. Usage Barrier consisting of 5 items and 1 item (UB5) is dropped because the loading factor is <0.70. The Value Barrier consists of 3 items. The Risk Barrier consisting of 5 items and 1 item (RB1) was dropped because it had a loading factor <0.70. Traditional Barrier consists of 2 items, Image Barrier consists of 3 items, and Innovation resistance consists of 3 items and 1 item (IR1) is dropped because the loading factor is <0.70.

Analysis technique

This study applied Structural Equation Modelling analysis technique. The SmartPLS 3.0 is used as tool to run the collected data. This study applied reflective measurement models, which Internal consistency reliability is indicated by Composite reliability value higher than 0.70 (Purwanto & Loisa, 2020; Tjiu & Purwanto, 2018) and the Indicator reliability is indicated by indicator loadings value, higher than 0.70 (Purwanto & Budiman, 2020). Then the validity testing base on the convergent and discriminant validity. The convergent validity indicated by the average variance extracted (AVE) value, higher than 0.50 (Octari & Purwanto, 2017; Purwanto & Mutahar, 2020) . Fornell-Larcker criterion and an indicator's loadings are used to measure the discriminant validity (Hair, Ringle, & Sarstedt, 2011; Karno & Purwanto, 2017).

Result of the structural evaluation is interpreted from R² values and the path coefficients'

significance by bootstrapping using (Hair et al., 2011). Criteria of R^2 values in the Table 1. Critical t-values for a two-tailed test are 1.96 (significance level = 5 percent) is used as the measurement the hypothesis testing in this study (Hair et al., 2011; Purwanto, 2016).

Table 1:Criteria of R² values

	Substantial	Moderate	Weak	
R ² values	0.75	0.50	0.25	

Result

Reliability and Validity Testing

Outer evaluation consists of analysis of internal consistency reliability is indicated by composite reliability, the indicator reliability, the convergent and discriminant validity. Table 2 shows that all the indicators loading of all items are higher than 0.70, so all indicators meet the indicator reliability requirements. Composite reliability value of all variables is higher than 0.70, so each variable has met the internal consistency reliability, as well as Cronbach's Alpha value. The AVE value of all variables is higher than 0.50 so that all constructs have met the convergent validity.

Table 2.Composite and Indicator Reliability and Convergent Validity

Construct	Items	Indicator Loading*	Cronbach's Alpha*	Composite Reliability*	(AVE)**
Behaviour Intention			0,883	0,914	0,681
	BI1	0,825			
	BI2	0,817			
	BI4	0,853			
	BI5	0,825			
	BI6	0,805			
Performance Expectancy			0,714	0,839	0,636
	PE1	0,731			
	PE2	0,758			
	PE3	0,894			
Effort Expectancy			0,726	0,844	0,643
	EE1	0,807			
	EE2	0,808			
	EE4	0,790			
Social Influence			0,780	0,872	0,695
	SI1	0,865			
	SI2	0,885			
	SI4	0,743			

Facilitating			0,804	0,883	0,717
Condition	500	0.000			
	FC2	0,823			
	FC3	0,890			
	FC4	0,824			
Use Barrier			0,919	0,943	0,804
	UB1	0,900			
	UB2	0,882			
	UB3	0,895			
	UB4	0,911			
Value Barrier			0,849	0,908	0,767
	VB1	0,885			
	VB2	0,851			
	VB3	0,891			
Risk Barrier			0,893	0,924	0,752
	RB2	0,870			
	RB3	0,841			
	RB4	0,890			
	RB5	0,866			
Traditional Barrier	KDJ	0,000	0,794	0,906	0,828
madilional barrier	TD 1	0.000	0,794	0,906	0,020
	TB1	0,893			
	TB2	0,927			
Image Barrier			0,803	0,883	0,716
	IB1	0,844			
	IB2	0,853			
	IB3	0,843			
Innovation			0,851	0,930	0,869
Resistance					
	IR2	0,915			
	IR3	0,949			

^{*} Threshold > 0.70; ** Threshold > 0.50

The results of the discriminant validity test can be seen in Table 3 which shows that based on the Fornell-Larcker criterion AVE of each latent variables higher than squared correlation with other latent constructs.

Table 4 show that an indicator's loading higher than all of its cross loading, so the discriminant validity is met.

Table 3. Fornell-Larcker Criterion

	ВІ	EE	FC	IB	IR	PE	RB	SI	ТВ	UB	VB
ВІ	0,825										
EE	0,634	0,802									
F	0,385	0,500	0,846								
С											

IB	_	-	_	0,846							
	0,187	0,324	0,169								
IR	-	-	-	0,582	0,932						
	0,331	0,295	0,150								
PΕ	0,556	0,673	0,398	-	-	0,798					
				0,313	0,213						
RB	0,028	-	-	0,513	0,337	-	0,86				
		0,194	0,260			0,205	7				
SI	0,590	0,406	0,339	-	-	0,319	0,05	0,833			
				0,047	0,121		6				
TB	-	-	-	0,495	0,489	-	0,51	-	0,91		
	0,310	0,314	0,099			0,319	3	0,141	0		
UB	0,080	-	-	0,554	0,341	-	0,52	0,118	0,39	0,89	
		0,169	0,167			0,171	3		4	7	
V	-	-	-	0,635	0,565	-	0,52	-	0,64	0,50	0,87
В	0,279	0,339	0,071			0,331	7	0,044	0	7	6

Table 4.Cross Loadings

	BI	EE	FC	IB	IR	PE	RB	SI	TB	UB	VB
BI1	0,825	0,539	0,348	=	-	0,431	0,051	0,481	-	0,139	=
				0,133	0,306				0,221		0,275
BI2	0,817	0,514	0,237	-	-	0,462	0,113	0,546	-	0,132	-
DIA	0.053	0,571	0.255	0,075	0,165	0.472	_	0.440	0,315	0.007	0,184
BI4	0,853	0,571	0,355	- 0,257	0,303	0,473	0,073	0,449	- 0,236	0,006	- 0,258
BI5	0,825	0,407	0,271	-	-	0.392	0,073	0,418	-	0,115	-
2.0	0,020	0, 10,	0,2,	0,122	0,269	0,0,2	0,002	0,110	0,272	0,110	0,155
BI6	0,805	0,563	0,364	_	-	0,518	-	0,524	-	-	-
				0,178	0,316		0,026		0,238	0,044	0,263
EE1	0,418	0,807	0,353	-	-	0,674	-	0,285	-	-	-
FF0	0.400	0.000	0.400	0,357	0,323	0.570	0,214	0.007	0,245	0,268	0,351
EE2	0,499	0,808	0,490	- 0,330	- 0,272	0,572	- 0.223	0,226	- 0,290	- 0,180	- 0,296
EE4	0,581	0,790	0,357	- -	-	0,414	0,223	0,439	0,270	0,100	0,270
	0,001	0,7 70	0,007	0,128	0,142	0,111	0,055	0, 107	0,222	0,001	0,193
FC	0,288	0,344	0,823	-	-	0,319	-	0,267		-	0,072
2				0,051	0,035		0,189			0,137	
FC	0,388	0,471	0,890	-	-	0,332	-	0,277	-	-	-
3	0.000	0 445		0,205	0,201	0.047	0,247	0.005	0,097	0,132	0,131
FC	0,283	0,445	0,824	- 0.152	- 0.101	0,367	-	0,325	- 0 175	- 0 1/1	- 0,099
4 IB1				0,153 0,844	0,121 0,497		0,218 0,357	_	0,175 0,408	0,161 0,308	0,099
וטו	0,220	0,270	0,111	0,044	0,477	0,208	0,007	0,164	0,400	0,500	0,001
IB2	-	-	-	0,853	0,542	-	0,574		0,427	0,622	0,514
	0,071	0,266	0,260	.,	-,-	0,299	.,	-,		-,-	.,-
IB3	-	-	-	0,843	0,425	-	0,347	0,013	0,423	0,462	0,576
	0,199	0,289	0,031			0,288					
IR2	-	-	-	0,497	0,915	-	0,338	-	0,414	0,339	0,469

	0,235	0,270	0,178			0,193		0,035			
IR3	-	-	-	0,580	0,949	-	0,297	-	0,490	0,303	0,574
	0,367	0,279	0,110			0,203		0,174			
PE1	0,347	0,378	0,309	_	_	0,731	_	0,133	_	_	-
				0,091	0,111		0,138		0,189	0,067	0,217
PE2	0,411	0,555	0,284	_	_ `	0,758	_ `	0,289	_	_ `	_
				0,306	0,066	·	0,123		0,153	0,141	0,237
PE3	0,543	0,641	0,357	_	_	0,894	-	0,314	_	_	_
	-,-	-,-	.,	0,316	0,291	-,-	0,215	-,-	0,381	0,181	0,323
RB	0,023	_	_	0,453	0,388	_	0,870	0,078	0,483	0,520	0,511
2	0,020	0,173	0,220	0, .00	0,000	0,157	0,00	0,0.0	0, .00	0,020	0,0
- RB	0,085	-	-	0,469	0,214	-	0,841	0,032	0,416	0,497	0,438
3	0,000	0,164	0,183	0, .0,	0,2	0,201	0,0	0,002	0, 0	0, ., ,	0, .00
RB	_	-	-	0,454	0,267	-	0,890	0,009	0,430	0,390	0,454
4	0,026	0,185	0,285	0, 10 1	0,20,	0,215	0,0.0	0,007	0, 100	0,070	0, 10 1
RB	0,027	-	-	0,403	0,238	-	0,866	0,060	0,428	0,378	0,390
5	0,027	0,147	0,207	0, 100	0,200	0,147	0,000	0,000	0, 120	0,070	0,070
SI1	0,496	0,383	0,370	_	_	0,359	0,032	0,865	_	0,025	_
•	0, 170	0,000	0,070	0,042	0,064	0,007	0,002	0,000	0,122	0,020	0,017
SI2	0,567	0,329	0,251	-	-	0,236	0,042	0,885	-	0,106	-
0.2	0,007	0,027	0,201	0,059	0,236	0,200	0,012	0,000	0,180	0,100	0,086
SI4	0,390	0,304	0,226	-	0,044	0,200	0,074	0,743	-	0,185	0,009
317	0,070	0,004	0,220	0,010	0,044	0,200	0,07 4	0,740	0,024	0,100	0,007
TB1	_	_	_	0,371	0,402	_	0,377	_	0,893	0,249	0,553
	0,348	0,279	0,032	0,07 1	0,402	0,179	0,077	0,155	0,070	0,247	0,000
TB2	-	-	-	0,518	0,482	-	0,543	-	0,927	0,451	0,608
102	0,228	0,292	0,140	0,010	0,402	0,384	0,040	0,106	0,727	0,401	0,000
UB	0,116	-	-	0,422	0,282	-	0,411	0,118	0,306	0,900	0,351
1	0,110	0,097	0,138	0, 122	0,202	0,116	0, 111	0,110	0,000	0,700	0,001
UB	0,001	-	-	0,494	0,303	-	0,454	0,077	0,344	0,882	0,467
2	0,001	0,164	0,177	0, 1, 1	0,000	0,150	0, 10 1	0,077	0,011	0,002	0, 10,
UB	0,053	-	-	0,560	0,309	-	0,475	0,111	0,406	0,895	0,507
3	0,000	0,206	0,185	0,000	0,007	0,221	0,470	0,111	0,400	0,070	0,007
UB	0,118	-	-	0,503	0,327	-	0,526	0,118	0,354	0,911	0,484
4	0,110	0,135	0,101	0,000	0,027	0,125	0,020	0,110	0,004	0,711	0,404
VB	_	-	-	0,540	0,526	-	0,515	0,068	0,534	0,517	0,885
1	0,199	0,310	0,143	0,040	0,020	0,329	0,010	0,000	0,007	0,017	0,000
VB	-	-	0,035	0,492	0,440	-	0,367	_	0,591	0,314	0,851
2	0,314	0,293	3,000	J, 1, Z	3, 1.10	0,264	3,007	0,196	3,3,1	3,011	3,00.
VB	-	-	_	0,631	0,514	-	0,488	-	0,563	0,482	0,891
3	0,231	0,288	0,063	3,001	3,014	0,274	5, 100	0,013	3,000	5, 102	3,571
	٠,_٠.	5,200	2,300			٠,_, ١		5,5.5			

Hypothesis Testing

Inner evaluation or structural model menunjukan bahwa R^2 value of Behaviour Intention construct is 0,579 and R^2 value of Innovation Resistance is 0,423, so the endogenous latents construct in the structural model is moderate (see Table 5.

Table 5. R Square

R Square R Square Adjusted

Behaviour Intention to Use	0,579	0,560	
Innovation Resistance	0,423	0,398	

Table 6 show the result of hypothesis testing. The H1 is accepted because its T-statistics value is 2,252 higher than 1.96 and its P-value is 0,024 less than 0.05. So the performance expectancy proven influence the behaviour intention to use the platform positive and significantly. H2 is accepted because its T-statistics value is 2,930 higher than 1.96 and its P-value is 0,003 less than 0.05. So, effort expectancy proven influence behaviour intention to use the platform positive and significantly.

H3 is accepted because its T-statistics value is 3,958 higher than 1.96 and its P-value is 0,000 less than 0.05. So, social influence proven influence behaviour intention to use the platform positive and significantly. H6 is accepted because its T-statistics value is 1,984 higher than 1.96 and its P-value is 0,047 less than 0.05. So, value barrier proven influence innovation resistance to use the platform positive and significantly. H9 is accepted because its T-statistics value is 3,467 higher than 1.96 and its P-value is 0,001 less than 0.05. So, image barrier proven influence innovation resistance to use the platform positive and significantly. H10 is accepted because its T-statistics value is 2,254 higher than 1.96 and its P-value is 0,024 less than 0.05. So, innovation resistance proven influence behaviour intention to use the platform negative and significantly. It show that when the innovation resistance decrease, than behaviour intention to use the platform will increase.

Path Coefficients

Нур	otheses	Original Sample (O)	T Statistics	P Values	Result
H1	Performance Expectancy -> Behaviour Intention to Use the Platform	0,198	2,252	0,024	Accept ed
H2	Effort Expectancy -> Behaviour Intention to Use the Platform	0,297	2,930	0,003	Accept ed
Н3	Social Influence -> Behaviour Intention to Use the Platform	0,386	3,958	0,000	Accept ed
H4	Facilitating Condition - > Behaviour Intention to Use the Platform	0,003	0,047	0,962	Rejecte d
H5	Use Barrier -> Innovation Resistance	-0,039	0,375	0,708	Rejecte d
Н6	Value Barrier -> Innovation Resistance	0,262	1,984	0,047	Accept ed
H7	Risk Barrier -> Innovation Resistance	-0,071	0,704	0,481	Rejecte d
Н8	Traditional Barrier -> Innovation Resistance	0,184	1,532	0,126	Rejecte d
Н9	Image Barrier -> Innovation Resistance	0,382	3,467	0,001	Accept ed
H1 0	Innovation Resistance to Use Digital Platform -> Behaviour Intention to Use the Platform	-0,154	2,254	0,024	Accept ed

The H4 is rejected because its T-statistics value is 0,047 less than 1.96 and its P-value is 0,962 higher than 0.05. So, facilitating condition is not proven influence behaviour intention to use the platform. H5 is rejected because its T-statistics value is 0,375 less than 1.96 and its P-value is 0,708 higher than 0.05. So, use barrier is not proven influence innovation resistance to use the platform. H7 is rejected because its T-statistics value is 0,704 less than 1.96 and its P-value is 0,481 higher than 0.05. So, risk barrier is not proven influence innovation resistance to use the platform. H8 is rejected because its T-statistics value is 0,704 less than 1,532 and its P-value is 0,126 higher than 0.05. So, traditional barrier is not proven influence innovation resistance to use the platform.

Discussion

This study proves that performance expectancy is the first factor in the intention of Jakarta consumers to use a digital fishery platform to shop for fresh fish. It is supported by changes in the spending patterns of Indonesians, especially consumers, in big cities like Jakarta. People are shifting from conventional shopping patterns to online shopping due to performance factors. Tempo.co reports that Country Industry Head Twitter Indonesia, Dwi Adriansah, said a change in shopping patterns in Indonesia is in line with demands to be more at home. The development of online banking services, campaigns on social media, and campaign breakthroughs from e-Commerce platforms are also driving forces. Fifty-nine percent of Twitter users in Indonesia shop online for products that are usually purchased directly (Widiyarti, 2020). This fact shows the potential and opportunities for selling fresh fish online in Indonesia. Thus the digital fishery platform will be the answer to the performance expectancy of the citizens of Jakarta. The results prove that effort expectancy is proved to significantly increase the Jakartans' behavior intention to use the digital fishery platform. Living in a capital city that is familiar with severe traffic jams every day, digital applications for online shopping, including buying fresh fish, are indeed beneficial for Jakarta residents. The proof is when the Ministry of Marine Affairs and Fisheries (KKP), as reported by Warta Kota, launched an online application to connect Jakarta fish consumers with Muara Baru Modern Fish Market online, and the Jakarta residents responded very well. The ease of using this application is one of their main factors in deciding to buy fish from the Muara Baru Modern Fish Market online, especially during the Covid19 pandemic (Baskhara, 2020). This research was conducted during the implementation of physical distancing restrictions as a prevention of the spread of the Covid-19 virus, which made people in Jakarta more comfortable staying at home rather than shopping at traditional markets. Fish is one of the basic daily needs. When they can buy online, it is very beneficial for them to avoid crowds in traditional markets. So, performance and effort expectancy factors are very influencing Indonesian consumers, especially Jakarta, to switch from conventional shopping to online shopping. As reported by CNBC Indonesia, the Covid-19 pandemic has impacted many things, including shopping styles, which were initially done in person or physically but have now begun to switch to digital (Hasibuan, 2020).

This study found that the social influence proved to influence the behavior intention to use digital fishery platforms. Indonesia is a country with high collectivistic culture. However, Jakarta is a metropolitan city, collectivistic still characteristic of its people. Recommendation from relatives, trend awareness has a significant impact on behavior among people. The tendency in societies with high collectivistic cultures is that they are quick to imitate the behavior exhibited by people who are considered influential in society. These influential people include community leaders, people who have good education, people who are considered more knowledgeable and have skills in using technology. When these influential people accept the digital platform, then others will tend to imitate or follow them. So, when someone knows others use the digital platform, it will influence someone to follow or create behavior intention to use the platform.

This study proves that the value barrier can significantly lead to innovation resistance to using the platform. Concerns on the quality or freshness of fish sold online can raise doubts for consumers to make purchases online. Therefore, a high-value barrier can reduce the intention to use a digital fishery platform. As CNBC Indonesia, Head of High Tech, Property & Consumer Good Industry MarkPlus Inc, Rhesa Dwi Prabowo, said that even forty-four percent of Jakarta people and its surroundings look for and buy products online. About sixty-six point three percent of respondents admit to having problems because they cannot ensure the quality of the product purchased. That is why seventy-eight point eight percent of respondents are still more comfortable buying necessities conventionally, and seventy-one point two percent of respondents are more

comfortable buying fresh food ingredients conventionally (Hasibuan, 2020). Thus, the high-value barrier can increase the resistance to the use of the digital fishery platform, as evidenced in the results of this study.

According to (Ram, 1998), image barriers are generally generated by various information, rumors, and stereotypes. Negative perceptions of the image of innovation can occur because media coverage gives negative attention to a particular innovation which causes public rejection of that innovation. For example, the 5G network has generated various rumors and conspiracy theories in the community. Even the latest news spreads narratives on social media that 5G technology is triggering the coronavirus pandemic. Although, according to theorists trying to connect the Covid-19 pandemic with 5G, it is considered absurd because Covid-19 is caused by a contagious virus and spreads in areas of the world that do not yet have 5G technology, still those who believe this hoax (CNN Indonesia, 2020). So do not be surprised if the image barrier has an impact on innovation resistance. And this study found that the image 10 barriers influence innovation resistance to use digital fishery platforms. This study found that the innovation resistance will decrease behavior intention to use digital fishery platforms. It is the logical relationship. When people reject innovation, they will not be interested in using the technology.

This study found that facilitating conditions were not proven to affect behavior intention to use digital fishery platforms. In the UTAUT model (Venkatesh et al., 2003), facilitating condition constructs are not correlated with behavior intention but with the use behavior constructs. When this study tries to relate it to behavior intention, the results are not proved to be significant. Empirically, in the context of the Indonesian people, these findings still make sense. According to a report from a survey conducted by a marketing company, We Are Social, as reported by CNN Indonesia. However, the quality of the internet in Indonesia ranks 44 out of the 46 countries surveyed; Indonesia is reportedly ranked first as a country with internet users who like to shop via e-commerce or online shopping in 2020 (C N N Indonesia, 2021). So, facilitating condition is not an important factor in behavior intention.

This study does not find evidence that use barriers will create resistance to use digital fishery platforms because the results are not proven to be significant. CNN Indonesia reports that Indonesia ranks first as a country with internet users who like to shop via e-commerce or online shopping in 2020 (C N N Indonesia, 2021). It means that use barriers are not a major problem for Indonesians. Thus, what encourages Indonesians to resist using a digital fishery platform is not a use barrier but rather the value barrier factor. They are still unsure whether the fish that will be bought online is fresh and high quality.

One of the questionnaire questions for this risk barrier construct is, "When making purchases via digital platforms, I am worried if I am suddenly losing my internet connection." As has been reported by CNN Indonesia, although the quality of the internet in Indonesia is 44 out of 46 countries surveyed, Indonesia is in the first place as a country that likes to shop via e-commerce or online shopping in 2020 (C N N Indonesia, 2021). Another questionnaire question for the risk barrier construct is related to the security of internet users' personal data that irresponsible people can misuse. However, it turns out that according to the analyst from Drone Emprit and Kernels Indonesia, Ismail Fahmi, Indonesians tend not to understand the leakage of personal data that can be misused by irresponsible peopl. It means that the risk barrier is not a factor that can influence resistance to shopping online. That is why Jakarta consumers do not resist using digital fishery platforms because of the risk barrier.

This study found no evidence that the traditional barrier affects the innovation resistance to use digital fishery platforms among Jakarta consumers. As reported by CNBC Indonesia, seventy-eight point eight percent of respondents are still more comfortable buying necessities. For buying fresh food ingredients, seventy-one point two percent of respondents are still more comfortable buying conventionally (Hasibuan, 2020). Especially concerning seafood, where the level of freshness and quality is very important for consumers. By buying directly at the fish market, they can choose the type of fish directly and the quality of the freshest fish they can choose from. That is why the traditional barrier does not affect the resistance to the use of the digital fishery platform. Still, the product purchased or the certainty of the quality of the fresh fish can affect their resistance.

Conclusion

The study shows that six hypotheses are proved significantly. They are H1, H2, H3, H6, H9, and H10.



The effect of the performance and effort expectancy, and social influence on behavior intention to use digital fishery platform is proved positive and significant. Then, the effect of value barrier and image barrier on innovation resistance to using the platform is positive and significant. Innovation resistance negative and significantly influences behavior intention to use the platform. Four hypotheses are not proved significantly. They are H4, H5, H7, and H8. Facilitating condition has not significantly affect on behavior intention to use the platform. Then, the use barrier, risk barrier, and traditional barrier are not proved to influence innovation resistance to use the platform. The limitation of this research is included: (a) data collection of this study is collected from respondents in Jakarta only, (b) although this study aims to measure the intention of adopting a digital fishery platform to cut the supply chain from fishermen to end-users, this research has only tested the intentions of potential consumers. Testing has not been carried out on the fishermen's side.

Base on the above limitation, the recommendation for future research is: (a) the future study can add data from other provinces in Indonesia. The future study can add the sample from Banten and West Java, Central Java, Yogyakarta, and East Java with big cities in Indonesia. The future study also can add samples from other cities out of Java Island. (b) The future study needs to test the conceptual framework by recruited fishers to be respondents. The behavior intention to use digital fishery platforms among fishers is needed since this study would find the basis of the digital platform development. The platform will connect fishers with the fishery end user peer-to-peer basis.

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