

THE DETERMINANTS OF A SUCCESSFUL IMPLEMENTATION OF E-RETRIBUTION PAYMENT SYSTEM: EVIDENCE FROM SLIPI MARKET OF JAKARTA

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ABSTRACT

Payment of market retribution using E-Retribution makes it easier for traders in the market to settle their obligations. This study aims to determine the factors that influence the success of implementing E-Retribution using the Delone & Mclean IS Success Model. The present study used primary data using a questionnaire. Respondents to this study were 96 traders who used E-Retribution at Slipi Market, West Jakarta, by selecting using a purposive sampling method. The data analysis method used is PLS-SEM. The findings demonstrated that system, information, and service quality substantially impacted user satisfaction. However, system quality did not impact use, but the information and service quality significantly impacted use. After then, net benefits were significantly impacted by both use and user satisfaction.

Keywords: E-Retribution, Delone & Mclean, Use, User Satisfaction, Net Benefits

INTRODUCTION

The COVID-19 pandemic has changed the payment method from cash to safer non-cash transactions by using electronic payments (Al-Dmour et al., 2021). In addition to ease of payment, electronic non-cash payments can increase revenue for the government (Olaoye & Atilola, 2018). The regional government of DKI Jakarta Province has also implemented electronic payments by imposing payment of market levies using e-retribution.

E-Retribution is a system the local Regional Government runs for online or electronic collection of regional retribution. Modernizing the information system for collecting fees includes transparency in the payment and reporting of regional retribution (Firdaus & Doloksaribu, 2022).

Apart from the pandemic period, the DKI Jakarta Provincial Government has been using electronic retribution payment technology since 2014, through governor regulation no. 11 of 2014, as a legal umbrella and encourages people to use e-retribution.

However, is the E-Retribution that has been implemented able to meet the needs of the community, and what factors influence the success of implementing the E-Retribution? The object of this research is the Slipi market in Jakarta. The basis for selecting the Slipi market as the object of study because the market is one of the pilot markets to be revitalized and is a traditional market where traders still trade conventionally by interacting with customers directly (Utari et al., 2021). Traders use technology sparingly in these transactions. So, using electronic systems such as E-Retribution is something new for them.

This research goal is to analyze the factors that influence the successful implementation of E-Retribution using the Delone & Mclean model.

System quality, information quality, and service quality are the variables included in this study's information system success model. These factors should have an impact on use and user satisfaction. The system's net benefits will also rely on how frequently it is utilized and its users' satisfaction with it. (DeLone & McLean, 2003).

A successful information system has good System Quality, meaning that the system has reliable hardware and software capabilities to support ease of use which has an impact on improving individual and organizational performance (Tumarni, 2015). The system quality is always related to how easy the system is to be used by users (Akrong et al., 2022). Research that has been conducted by (Franque et al., 2021) also states that the quality system has a significant influence on use.

H1: *System quality has a significant effect on the use.*

Better system quality will result in higher user satisfaction (DeLone & McLean, 2003). Several previous studies stated the same thing that a good system quality will positively affect the level of user satisfaction (Kaniawulan et al., 2022), (Hendratno, 2022), (Hudin & Riana, 2016) and (Wang et al., 2019).

H2: *System quality has a significant impact on User Satisfaction.*

The better the quality of the information produced by the system, the better the level of use by the user (Purwanto & Pawirosumarto, 2017). Users want quality information generated by the system (Franque et al., 2021).

H3: *Use is significantly impacted by the information quality.*

A system producing quality information will make user satisfaction more positive (Franque et al., 2021). The information quality provided by the system can affect user satisfaction (Hudin & Riana, 2016).

H4: *User satisfaction is significantly impacted by the information quality.*

An important factor in estimating the level of use is the system's service quality (DeLone & McLean, 2003). The research results by (Purwanto & Pawirosumarto, 2017) and (Rahi & Abd.Ghani, 2019) confirm that the level of positive use of an information system will increase with improved service quality.

H5: *Service quality has a significant impact on Use.*

Service quality determines user satisfaction (Akrong et al., 2022). Users will feel satisfied if an information system provides good service for their users (Hendratno, 2022).

H6: *Service quality has a significant impact on User Satisfaction.*

An information system's net benefits will rise as it is used more frequently. (DeLone & McLean, 2003). The use is empirically proven to be a factor that determines net benefits (Hudin & Riana, 2016). The level of use affects user satisfaction and net benefits (Akrong et al., 2022). According to this explanation, the hypothesis is set up as follows:

H7: *Use has a significant impact on net benefits.*

The higher the amount of user satisfaction, the better the net benefits (DeLone & McLean, 2003). User satisfaction significantly affects net benefits (Hudin & Riana, 2016). User satisfaction has a significant and positive relationship between the intention to use the system and net benefits (Hasan & Al-Mamary, 2019). Based on this description, the hypothesis statement is structured as follows:

H8: *User satisfaction has a significant impact on net benefits.*

METHODS

This quantitative research uses data analysis methods using Partial Least Square Structured Equation Modeling (PLS-SEM). In this study, respondents were selected using purposive sampling, with the criteria being traders selling at the Slipi Market and having previously used E-Retribution in paying market retribution. The primary data was collected by distributing questionnaires directly to 96 traders.

RESULT AND DISCUSSION

The data collected from 96 respondents are traders in Slipi Market, West Jakarta, who have made retribution payments using E-Retribution. Descriptions of existing respondents can be seen in Table 1 Description of Respondents.

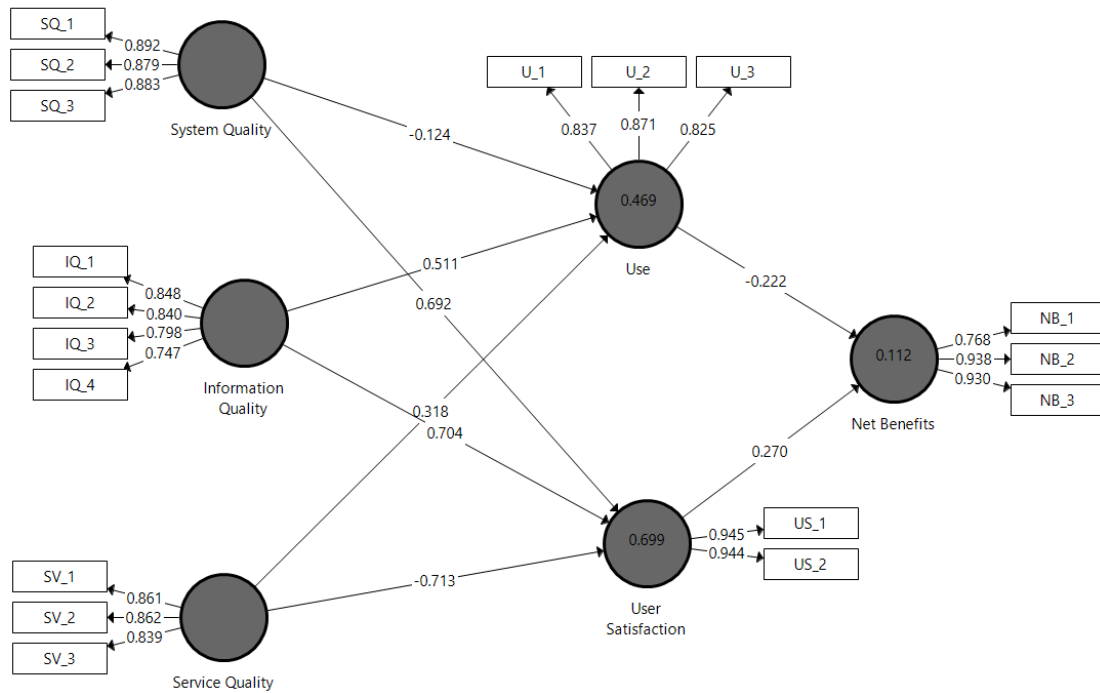


Figure 1. Outer Model

Figure 1 Outer Model shows the PLS-SEM model applied in this research. To ensure that the measurements used are feasible to be used as valid and reliable measurements, it is necessary to carry out an Outer model analysis. The test carried out is convergent liability by looking at the loading factor value on the latent variable with its indicators expected to be > 0.70 , then discriminant validity test. The intended construct must be greater than the loading value of other constructs (Hussein, 2015).

Based on the results, the value of convergent validity shows a value > 0.70 , see Table 2 Convergent Validity, and then the results of discriminant validity demonstrate how the desired construct has a higher value than the other constructs, see Table 3 Discriminant validity. So based on these results, the measurements carried out show valid results.

Table 1. Description of Respondents

No.	Description	Item	Amount	%
1	Gender	Male	48	50%
		Female	48	50%
2	Age	17 - 25 Years Old	28	29%
		>25 - 30 Years Old	17	18%
		>30 - 40 Years Old	35	36%
		> 40 Years Old	16	17%
3	Education	High School	56	58%
		Bachelor Degree	40	42%
4	Type of Merchandise	Fruits & Vegetables	15	15%
		Meat & Groceries	10	11%

Kids & Baby	17	18%
Houseware	5	5%
Watches	5	5%
Office Stationary	7	7%
Cosmetics	9	9%
Pharmacy	9	9%
Others	19	20%

Source: Author

Table 2. Convergent Validity

Variable	Indicator	Loading Factor	Result
System Quality	SQ_1	0.892	Valid
	SQ_2	0.879	Valid
	SQ_3	0.883	Valid
Information Quality	IQ_1	0.848	Valid
	IQ_2	0.840	Valid
	IQ_3	0.798	Valid
	IQ_4	0.747	Valid
Service Quality	SV_1	0.861	Valid
	SV_2	0.862	Valid
	SV_3	0.839	Valid
Use	U_1	0.837	Valid
	U_2	0.871	Valid
	U_3	0.825	Valid
User Satisfaction	US_1	0.945	Valid
	US_2	0.944	Valid
Net Benefits	NB_1	0.768	Valid
	NB_2	0.938	Valid
	NB_3	0.930	Valid

Notes. SQ = System Quality, IQ = Information Quality, SV = Service Quality, U = Use, US = User Satisfaction, NB = Net Benefits

Source: Author

Table 3. Discriminant Validity

	SQ	IQ	UQ	U	US	NB
SQ_1	0.892	0.105	0.428	0.079	0.373	-0.125
SQ_2	0.879	0.008	0.349	-0.042	0.389	-0.113
SQ_3	0.883	0.154	0.430	0.148	0.404	-0.158
IQ_1	0.079	0.848	0.396	0.565	0.424	0.008
IQ_2	0.061	0.840	0.415	0.431	0.487	-0.010
IQ_3	0.046	0.798	0.268	0.564	0.290	0.063
IQ_4	0.157	0.747	0.318	0.497	0.298	0.097
SV_1	0.275	0.423	0.861	0.392	-0.144	-0.263
SV_2	0.378	0.335	0.862	0.303	-0.099	-0.300

SV_3	0.491	0.347	0.839	0.498	-0.011	-0.321
U_1	0.204	0.595	0.372	0.837	0.302	-0.030
U_2	-0.059	0.577	0.439	0.871	-0.053	-0.210
U_3	0.067	0.433	0.409	0.825	-0.004	-0.257
US_1	0.405	0.433	-0.091	0.070	0.945	0.282
US_2	0.426	0.448	-0.084	0.095	0.944	0.191
NB_1	-0.088	0.004	-0.273	-0.102	0.219	0.768
NB_2	-0.174	0.106	-0.305	-0.159	0.195	0.938
NB_3	-0.135	0.018	-0.334	-0.240	0.244	0.930

Source: Author

For the reliability test, the following criteria are used, first, Composite Reliability. Data that has composite reliability > 0.7 has high reliability than the Average Variance Extracted (AVE) value. Expected AVE value > 0.5 . And the reliability test is strengthened by Cronbach Alpha. The expected Cronbach Alpha value is > 0.6 for all constructs (Hussein, 2015). Based on the results of data processing for all variables that have met the required criteria, see Table 4 Reliability Test.

The R2 ranges from 0 to 1, with higher levels indicating more predictive accuracy (Sarstedt et al., 2017). Based on the results of R2, the model can be used to predict, see Table 5 R Square. The Q2 value obtained is 0.858, which means that the model used has predictive relevance because the Q2 value is > 0 .

Table 4. Reliability Test

Variables	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)	Result
System Quality	0.862	0.916	0.783	<i>Reliable</i>
Information Quality	0.824	0.883	0.655	<i>Reliable</i>
Service Quality	0.818	0.890	0.729	<i>Reliable</i>
Use	0.800	0.882	0.713	<i>Reliable</i>
User Satisfaction	0.879	0.943	0.892	<i>Reliable</i>
Net Benefits	0.855	0.913	0.778	<i>Reliable</i>

Source: Author

Table 5. R Square

Variable	R Square
Net Benefits	0.112
Use	0.469
User Satisfaction	0.699

Source: Author

Hypothesis test results

A hypothesis test was carried out to determine whether the research hypothesis that had been determined could show the relationship between the variables being tested. A hypothesis test was carried out using the bootstrapping method and evaluating the path coefficient. In this test, the criterion used is a significance of 5% with a confidence level of 95% with P-Values < 0.05 , so the effect of the variable on other variables is considered significant. The hypothesis test results can be seen in Table 6, Hypothesis Test.

This study's results indicate no significant effect between System Quality and use; this is indicated by the P-Values of 0.239 or greater than 0.05. These results align with previous research (Franque et al., 2021) , stating that system quality is not an important part of influencing usage. It is contrary to the results of research conducted by (Hudin & Riana, 2016), and (Akrong et al., 2022), which state that system quality significantly influences the level of use.

Table 6. Hypothesis Test

Variable	Original Sample	Sample Mean	Standard Deviation	T Statistics	P-Values
SQ -> U	-0.124	-0.132	0.106	1.178	0.239
SQ -> US	0.692	0.697	0.089	7.766	0.000
IQ -> U	0.511	0.498	0.100	5.118	0.000
IQ -> US	0.704	0.700	0.072	9.784	0.000
SV -> U	0.318	0.335	0.100	3.181	0.002
SV -> US	-0.713	-0.713	0.075	9.497	0.000
U -> NB	-0.222	-0.228	0.096	2.307	0.021
US -> NB	0.270	0.273	0.109	2.484	0.013

Source: Author

The results of this study indicate that the H1 hypothesis is rejected, and it can be concluded that in the use of E-Retribution, the quality of the system is not a factor that can determine the level of use. The hypothesis test results showed that the P-Values of system quality for user satisfaction show a value of 0.000. So, the H2 hypothesis is accepted. The results of this study are in line with previous studies conducted by (Hudin & Riana, 2016), (Wang et al., 2019), (Kaniawulan et al., 2022), and (Hendratno, 2022). The quality of e-retribution, supported by a combination of quality information system tools, can increase e-retribution user satisfaction as a market retribution payment system.

Use is significantly influenced by the information quality. It is indicated by the P-Values of 0.000. These results also align with previous research from (Akrong et al., 2022) that a factor in determining the level of use is information quality. (Wang et al., 2019) state that information quality influences the use level. So, the H3 hypothesis is accepted. The use of an information system can be influenced by the quality of the information generated from the system.

Information quality on user satisfaction shows a P-Value of 0.000 or less than 0.05; it can be concluded that H4 is accepted. The quality of the information produced by E-retribution can increase user satisfaction. It is also the same with studies by (Franque et al., 2021) and (Hudin & Riana, 2016), which state the same thing, that the quality of the information produced can influence user satisfaction. Service quality has a significant effect on use. It is indicated by the P-Value of 0.002. So, the H5 hypothesis is accepted. These results are in accordance with previous studies by (Purwanto & Pawirosumarto, 2017). The service quality of a system can increase the level of use of an information system. Likewise, research by (Rahi & Abd.Ghani, 2019) states the same thing. The quality of service in E-retribution is important in determining the usage level.

Service quality significantly influences user satisfaction. P-Value shows 0.000 or less than 0.05; it can be concluded that H6 is accepted. The quality of service from e-retribution can determine the level of user satisfaction. These study results are in accordance with previous by (Akrong et al., 2022) and (Hendratno, 2022), which state that service quality can determine user satisfaction.

Use and user satisfaction both significantly impact net benefits. It is indicated by the P-Value of use 0.021 and user satisfaction 0.013. So, the H7 and H8 hypothesis is accepted. A rise in e-retribution usage and user satisfaction may boost net benefits. These study results are in accordance with previous by (Akrong et al., 2022), (Hudin & Riana, 2016), and (Hasan & Al-Mamary, 2019), The research affirms that the ability to influence net benefits depends on use and user satisfaction.

CONCLUSION

The findings of this study suggest that Information Quality and Service Quality can have an impact on e-retribution users' degree of use and satisfaction. At the same time, System Quality only affects user satisfaction. Besides that, both the level of use and user satisfaction significantly influence net benefits.

The implications of this study show that the most powerful factors influencing the success of e-retribution implementation are information quality and service quality, so in the future, the DKI government is expected to be able to improve the e-retribution system by focusing on these two factors.

The limitation of this study is the limited number of samples, only taking 1 market sample, so it cannot represent the entire implementation of e-retribution in DKI Jakarta. So that suggestions for further research can take a wider sample and also be able to add research variables using a modified model.

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